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It is, to say the least, disconcerting to be writing this preface while the COVID-19 health crisis remains in full flow. The pandemic has exposed the myriad interconnections between personal actions, society, the economy and ecology more starkly than in more ‘usual’ times. Finding a way for communities to flourish within the planet’s capacity to sustain human needs, and creating an economic system that produces sustainable and equitable outcomes, has become an even more crucial challenge for us all.

We were proud to launch our new *Journal of Behavioural Economics and Social Systems (BESS)* at the GAP 10th Annual Economic Summit at NSW Parliament House in September last year. The Summit discussed the need to retrain people in a changing skills environment and the impact of technology on the future workforce, and this edition of *BESS* continues to explore some of these issues.
Since the release of the inaugural edition, we have welcomed new members to our Editorial Board, increased our international database of contributors and created a social media presence on Facebook, LinkedIn and Twitter. We have broadened our research agenda beyond behavioural economics to embrace neuroeconomics – a relatively new and exciting field of study at the nexus of economics, psychology and neuroscience that analyses how people make economic decisions, process multiple alternatives and decide their course of action.

BESS is published by Global Access Partners (GAP), an independent non-profit institute for active policy that initiates strategic debate on the most pressing social, economic and structural issues facing Australia and the world today. GAP is a catalyst for policy implementation and new economic opportunities and, though its Second Track programme, fosters links between community, government and business. The institute has a proud track record of innovative, multidisciplinary approaches to problem-solving and an alumni network with over 4,000 members. It runs taskforces, forums, workshops, consultative committees, research and feasibility studies, online collaborations, executive consultancies, joint ventures and business missions, both in Australia and abroad. More than one thousand people are actively engaged in various GAP projects on a regular basis, supported by almost 120 sponsors.

Establishing and publishing a journal involves hard work by many people, and I pay tribute to BESS’ Founding Editor, Dr Peter Massingham, and its Editor-in-Chief, Prof James Guthrie AM, for their inspiration and support. I thank the authors of these papers for their commitment to making this project such a fulfilling and worthwhile endeavour. I especially welcome our European authors and new members on the Editorial Board. Appreciation is also expressed to the reviewers who graciously gave up their time to provide constructive, insightful and timely advice on this material.

Finally, I commend to you the eight articles in this issue. They examine the Second Track processes through the lens of complexity theory, explore the intricacies of stakeholder management in the commercial and academic sectors, and reflect on adaptive leadership, business strategies and human potential in times of uncertainty.

BESS is available online and in hard copy, and I am looking forward to sharing our next edition with the attendees of the GAP Annual Summit on National Resilience, scheduled for 5–6 November 2020.

Peter Fritz AO
Sydney, June 2020
EDUCATION IS THE ANSWER, NOT THE PROBLEM

As we finalise this paper, political and economic conditions in Australian society are still being challenged by the health impacts of the COVID-19 pandemic. Like other countries around the world, Australia has taken unprecedented steps to balance public health and economic risks in response to coronavirus. As a geographically distant island nation, with a small population and the ability to close its borders, this country avoided the death tolls suffered by other nations after measures were taken from mid-March. At the time of writing, Australian states are cautiously reopening again, with the virus mainly under control thanks to firm Federal and State action, and the public’s compliance with unprecedented control measures.

The crisis will undoubtedly open new lines of inquiry for interdisciplinary researchers, as it offers a fascinating case study in how different people, communities and countries responded to a sudden, major crisis in their midst. The pandemic accelerated trends towards the digital transformation of work, exposed a lack of national capacity in essential goods, significant breakdown in global supply chains and may well shape the future of society, economics and politics for a generation.
One of the initial impacts of COVID-19 was the closure of our borders to international students, and widespread school shutdowns forced a rapid pivot to online learning for most of our schools. There have been further upheavals in tertiary education, with the government looking to increase the cost of humanities and arts degrees. So this commentary will not only introduce the papers in this issue of the *Journal of Behavioural Economics and Social Systems (BESS)* but offer a defence of the social studies and public universities which helped produce them.

**IN DEFENCE OF THE SOCIAL STUDIES**

On 19 June, the Australian Government announced a range of measures under the Job-Ready Graduates Package which propose the most radical shake-up of higher education policy in decades. The government aims to shift the financial burden of higher education even further onto students, with a 15% cut in real public funding per student. There will be a 7% increase in average student contributions and a 6% fall in overall student-related income per EFTSL for universities. This comes on top of analysis by Universities Australia which predicts a revenue shortfall for the sector of $3–4.5 billion for 2020 and up to $16 billion by 2023 due to a decline in international student fee income.

The proposals will disproportionately increase fees for students in the humanities, management, commerce, economics, communications, creative arts and law. Fees for courses in management, commerce, law and economics will rise by 27.7%; in creative arts by 66.1% and in communications and humanities by an astonishing 113.1%. These startling price-hikes followed the government’s exclusion of university staff from JobKeeper payments and other government subsidies, plunging the higher education sector into crisis during the COVID-19 pandemic.

The Australian Association of University Professors (AAUP) responded with a robust defence of the humanities and public universities. It quoted words of former Liberal Prime Minister Sir Robert Menzies in 1958 that ‘Many tyrannical regimes have fostered science, but no tyrannical regimes have fostered those faculties of universities that deal with human affairs, sociology, and those fields of thought where criticism of tyranny is likely to emerge’.

Menzies also spoke at a time of international crisis and addressed the citizens of a smaller, poorer and more anxious Australia. However, Menzies understood that the hope and strength of Australia would lie a highly educated, creative and critical citizenry. He knew that education should not be the servant of workforce planning for current needs but should foster the talent and curiosity of young people to create brighter future possibilities. He understood that democracy and prosperity stem from the same source – freedom of thought – and that government should, therefore, support every student. Between 1958 and 1960, his government increased university funding by 300% and trusted them to choose their intellectual course.

The new fee structure presented by the current government operates in the opposite way to Menzies’ great legacy. It sheds responsibility and tries to enforce decisions. It reduces university funding to the sciences even more than to the humanities and attempts to manipulate students into disciplines that politicians think are good for them regardless of their wishes. It also forces universities into internally cross-subsidising these skewed decisions.

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1. National Tertiary Education Union, 2020
2. D. Hurst, 2020
3. AAUP, 2020a
Guthrie et al.⁵ argue that a decade and more of cuts to government funding forced universities to subsidise their research through students’ fees and by ‘selling’ education to foreign students. This overloaded our tertiary institutions with expenses of administration and real estate turned their energy towards marketing rather than academic excellence and replaced the duty of care they owe their students with indifference.

AAUP⁶ has called for the government to reassert its commitment to a first-class education and world-leading research by expanding funding to all disciplines as they complement, rather than compete against, each other. In the words of John Menzies: ‘Let us have more scientists and more humanists. Let the scientists be touched and informed by the humanities. Let the humanists be touched and informed by science, so that they may not be lost in abstractions derived from outdated knowledge of circumstances.’⁷

The current crisis offers the opportunity for a fundamental rethink and a fresh start. AAUP⁸ argued that the financial misery of the tertiary sector and the threat to academic employment are the inevitable results of the mistaken view that universities are just another source of income for the economy. Universities are so much more than a revenue stream. They stand at the centre of our modern knowledge-based democracy. They are bulwarks against misinformation in social media, the lure of demagogy, non-democratic foreign influences and the abuse of artificial intelligence through their ability to ‘vaccinate’ all members of society by education.⁹

Well-rounded university education also lays the groundwork for the innovation required to deal with global problems such as climate change, poverty and current and anticipated pandemics. There needs to be a revival of academic principles in Australia and beyond, and the ongoing commercialisation and degeneration of the higher education sector must come to an end.

We also need to consider that getting access to a liberal education goes beyond Australia’s borders and that impacts of the pandemic are also having a profound effect on those who are already the most vulnerable.¹⁰ Unfortunately, because of the focus on international revenue streams, there will be considerably fewer students able to afford a university education post COVID-19, and combined with the fact that the foreign students are banned from travelling to Australia, we expect to see a decrease in student numbers. However, these concerns are irrelevant to an aspiring student who is not allowed an education because they are in the wrong socio-economic situation as a result of the crisis¹¹. Yet, it seems that many university VCs are more concerned about the drop in income than not being able to provide education to those who really need and want it, regardless of their nationality.

The above is an example of what happens when only one particular group focuses narrowly on one specific problem such as loss of income. What gets left out of the equation are the other people affected by the crisis, and there is no involvement with them fixing the problem. This is where Second Track processes become more valuable in the close mindsets we have towards solving problems these days, and what is needed in this situation is more critical from all those affected so that new pathways can be found. Hence why in this issue we explore different in-depth ways Second Track processes can help resolve more complex and wicked problems. We now introduce the papers included in this current issue.

5. J. Guthrie et al., 2020
6. AAUP, 2020a
7. Ibid.
8. AAUP, 2020b
9. Ibid.
10. Dumay et al., 2020
11. Secundo et al., 2018
The second edition of BESS presents eight pieces of work, covering a broad range of issues. These articles explore the complexity of wicked problems and the potential of Second Track process to manage them by focusing on several specific examples, from mergers and acquisitions, responses to the pandemic and university-industry collaborations to Pacific development, disruptive technologies and workforce transformation. There is also a strong case made to establish a new Institute of Human Potential to help individuals and communities develop the ‘meta-skills’ required to thrive in an ever more volatile future.

The first article by Peter Massingham et al., titled Emergent Communities of Practice: A Complexity Theory Lens, reviews existing literature to suggest Second Track processes include several common features. They involve multiple stakeholders who reframe the issues at hand as a mutually shared problem or opportunity and proceed through outcome-focused initiatives. The authors argue that the power of the Second Track derives from the psychological and social dynamics of intergroup conflict and cooperation, with conflict resolution achieved through pursuing a task, rather than negotiating a therapeutic or development framework.

The article approaches Second Track processes as complex adaptive systems in terms of their organisation, interaction and intelligence. These informal social networks can find solutions to wickedly complex problems in innovative ways and, in an increasingly complex world, such social interaction between diverse stakeholders may be the most efficient way to achieve positive social, political and economic change.

In the second piece, Managing stakeholder relationships during the Tatts/Tabcorp merger, Simon Segal argues that mergers and acquisitions (M&A) are significant events with complicated and disruptive social, economic and political consequences for those involved. Over US$4 trillion in assets have been merged or acquired in each of the past two years. Segal's paper examines the complex balancing act of M&A stakeholder management through a case study of the mega-merger of Australia’s two most prominent lottery firms, Tatts Group Ltd (Tatts) and Tabcorp Holdings Ltd (Tabcorp) in 2016/17.

The article explores how Tatts and Tabcorp's stakeholder management influenced, and was affected by, the merger process. By implication, the Second Track could offer better ways to manage these conflicting stakeholder relationships to agree and secure mutually beneficial outcomes.

Florian Kragulj et al.'s article Revealing the Purpose of a Stakeholder Organisation: The case of a public university responding to the COVID-19 ‘Corona’ Crisis examines the impact of the COVID-19 lockdown in Austrian higher education. The research team analysed emails exchanged in one university to show how the shock helped its academics and administrators rediscover its core purpose. The work of Kragulj et al. could prove instructive in the ongoing debate around the purpose of Australian universities provoked by the government’s new funding measures.

The next article Are you ready to collaborate? Improving the quality of university-industry collaborations was authored by a Danish group of researchers and explored how university-industry collaborations can be developed. Universities around the world are under increasing pressure to produce commercial outcomes and socially
beneficial results, and this longitudinal study of 25 university-industry collaborations suggests that better communication between stakeholders is required at an early stage to align goals and achieve results.

Benjamin Blackshaw’s essay on The Second Track and talanoa: Implementation of the Pacific Connect programme in the Pacific Islands offers a case study of the Second Track in action by examining the work of the International Centre for Democratic Partnerships (ICDP). ICDP has combined Second Track methods and the Pacific tradition of talanoa in its implementation of the Australian Government’s Pacific Connect programme to encourage Australian-Pacific cooperation on a range of exciting new technology projects to solve local problems of product distribution, community education and service supply.

Les Pickett’s essay presents a management perspective on current economic issues, including globalisation, automation and the risks posed by social and economic uncertainty. Companies confronted by the new and unfamiliar competitive imperatives of ‘globotics’ cannot rely on traditional management capabilities. They must find new ways to rise to these challenges, generate new ideas and continuously reinvent their business.

Pickett again emphasises the importance of the humanities in understanding and overcoming ostensibly economic or scientific problems. ‘We need the academics, the creative thinkers and the dreamers,’ he writes, ‘we need books, magazines, and the internet to communicate theories, ideas, and practices’. He makes a case for research and the need to value human resources in every organisation as its most valuable asset, rather than its most expendable cost.

Dr Melis Senova then makes a compelling argument for the establishment of a new Institute for Human Potential to nurture the resilience, creativity and compassion we need to achieve sustainable planetary progress. She argues that human potential can only be understood and unleashed if education focuses on the ‘meta-skills’ which differentiate people from machines, and allows them to adapt and thrive in fast-changing circumstances.

In the final piece, Ian McAuley reviews the work of Ronald Heifetz on ‘adaptive leadership’, a quality our current times desperately need and sorely lacking. Heifetz defines adaptive leadership as the ability to mobilise groups of individuals to face and handle tough challenges successfully. He rejects the notion that heroic individuals can single-handedly generate results by enforcing their will, a reality which the current COVID crisis has exposed in all too many countries.

CONCLUSIONS

One issue that becomes abundantly evident after reading the various papers in this issue of BESS is that academics need to ensure they are part of the Second Track processes. Academia and its connection, social sciences, are by far the most sensible critical voice we can have. We academics must be a loud voice for social change, and it is our responsibility to use our academic freedom to address the broader issues of society. Should academics relegate themselves to becoming just bodies in front of chalkboards so that universities can make income and students can leave university job-ready instead of critical scholars? This is not a desirable or sustainable outcome for future education!
Developing job-ready students ignores the fact that many of the jobs that we will be doing in the future are not the jobs we are doing today. So instead of preparing students for the jobs of today, we should be preparing students for jobs of tomorrow even though we do not know what they are. Therefore, teaching students to be open-minded through critical scholarship is essential, rather than teaching them to crunch the numbers to find the one right answer, if it even exists. Hence, what we need now more than ever is people who can innovate and understand the job that needs to be done rather than the jobs that we were doing in the past.

However, coming to grips with the job that needs to be done today to help lift this out of the crisis requires Second Track processes. Universities cannot solve the problem on their own, especially if they have a focus on raising revenue first and providing education second. The pathway out of the COVID-19 crisis will be long and steep, therefore short-term fixes are not the answer. The answer will only be found through the collective involvement of all stakeholders, and the answer may not be apparent until we start climbing the track towards recovery.

Prof James Guthrie AM

Prof John Dumay

Sydney, June 2020

REFERENCES


Christensen, C.M., Hall, T., Dillon, K. and Duncan, D.S. (2016), ‘Know your customers’ jobs to be done’. Harvard Business Review, 94(9), 54–62


<table>
<thead>
<tr>
<th>Page</th>
<th>Type</th>
<th>Title</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>17</td>
<td>ARTICLE</td>
<td>Emergent Communities of Practice: A Complexity Theory Lens</td>
<td>Dr Peter Massingham, Catherine Fritz-Kalish &amp; Ian McAuley</td>
</tr>
<tr>
<td>37</td>
<td>ARTICLE</td>
<td>Managing stakeholder relationships during the Tatts/Tabcorp merger process</td>
<td>Simon Segal</td>
</tr>
<tr>
<td>65</td>
<td>ARTICLE</td>
<td>Revealing the Purpose of a Stakeholder Organisation: The case of a public university responding to the COVID-19 ‘Corona’ Crisis</td>
<td>Dr Florian Kragulj, Dr Florian Fahrenbach, Prof Alexander Kaiser, Clemens Kerschbaum, &amp; Lisa-Maria Baumgartne</td>
</tr>
<tr>
<td>81</td>
<td>ARTICLE</td>
<td>Are you ready to collaborate? Improving the quality of university-industry collaborations</td>
<td>Prof Erik Bjurström, Dr Morten Lund &amp; Prof Christian Nielsen</td>
</tr>
<tr>
<td>113</td>
<td>ESSAY</td>
<td>The Second Track and talanoa: Implementation of the Pacific Connect programme in the Pacific Islands</td>
<td>Benjamin Blackshaw</td>
</tr>
<tr>
<td>122</td>
<td>ESSAY</td>
<td>The Future Business Strategy: Technology and Profitability</td>
<td>Les Pickett</td>
</tr>
<tr>
<td>133</td>
<td>ESSAY</td>
<td>Meta-skills are the key to human potential</td>
<td>Dr Melis Senova</td>
</tr>
<tr>
<td>138</td>
<td>BOOK REVIEW</td>
<td>Leadership, not leaders: Reflections on Ronald Heifetz’s theory of adaptive leadership</td>
<td>Ian McAuley</td>
</tr>
<tr>
<td>144</td>
<td>List of contributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>148</td>
<td>BESS Guidelines for Contributors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>150</td>
<td>BESS Style Guide</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
INTRODUCTION

In this paper, we conceptualise a new type of external community of practice (CoP), called Second Track processes, that generates social intelligence as solutions to wickedly complex societal problems. CoPs have traditionally been viewed as opportunities for like-minded individuals to cooperatively create new knowledge to solve organisational problems.¹ The concept of CoPs began as autonomous self-regulating social systems driven by emergent processes. Over time, researchers have questioned the effectiveness of the voluntary nature of CoPs, particularly given the typical normative goal of requiring them to increase organisational performance,² suggesting need for management to guide CoPs. This control/autonomy debate has settled on the idea that CoPs require a careful balance between guided and self-directed modes, as too much pressure might destroy them.³ However, there is little understanding of the different driving forces inside CoPs which interact to balance the need for control and autonomy⁴ and sustain voluntary knowledge creation necessary to solve wicked problems.

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¹ Brown and Duguid, 1998
² Contu and Willmott, 2003
³ Anand, Gardner and Morris, 2007
⁴ Borzillo and Kaminska-Labbe, 2011

Second Track processes are an emerging type of community of practice (CoP) that offer a powerful way to generate innovative solutions to wicked problems. The core research team behind BESS proposes a theoretical framework to understand Second Track processes by approaching them as complex adaptive systems in terms of organisation (complexity), interaction (social) and thinking (intelligence).
There are many social systems that tackle complex problems, e.g., committees, taskforces, working groups, and so on. CoPs are different in the sense that they are not necessarily authorised, nor always identified groups in the organisation. CoPs’ defining characteristic is their voluntary nature. Their existence as non-mandated groups is both their strength and weakness. The strength is the enhanced cooperation and boundary spanning generated by the absence of management interference such as tasks and roles. This gives CoP members freedom to adapt and evolve and create. The weakness is that CoPs’ voluntary nature resists management control, making it difficult to monitor or capture positive outcomes from their social interactions. The current view in the literature is that management must exert some control because the knowledge CoPs create may be strategically useful. The literature uses four factors – knowledge objectives, leadership, collaboration, and boundary spanning – to understand how management may exert an appropriately balanced level of control on CoPs.

This paper contributes to our understanding of the driving forces inside CoPs which sustain voluntary knowledge creation necessary to solve wicked problems. We extend Borzillo and Kaminska-Labbe’s framework by using complexity theory to explain a unique type of CoPs called Second Track processes. Second Track involves principles of international diplomacy and conflict resolution which have been widely practiced as a diplomacy aid by the United Nations, departments of foreign affairs, and international legal firms for peace building, sustainable development, and conciliation.

Second Track involves cognitive and behavioural processes associated with stakeholder engagement in policy development and decision making to fast-track solutions to key societal problems. Complexity theory explains that problem-solving teams, such as CoPs, should form a learning network that stretches within as well as outside the organisation, to help their learning as well as the organisation as a whole. Second Track processes represent a crucial part of learning networks. In this current paper, we develop a conceptualisation of Second Track emergent forces used to solve wickedly complex problems. We turn now to complexity theory to begin our conceptualisation.

**COMPLEXITY THEORY**

**Complexity**

Complexity theory deals with the dynamic non-linear behaviour of systems. Complexity theory provides an ‘integrative and dynamic framework to understand the interaction patterns in networks of interdependent agents who interact and are bound by their common needs or objectives’. Complexity thinking lies somewhere between a belief in a ‘fixed and fully knowable universe’ and ‘a fear that meaning and reality are so dynamic’ that their discovery is delusional. According to Johnson, complexity seems to have its roots in ‘critical accounts of metropolitan space’. Wordsworth, Milton, Engels,
for example, all found the city overwhelming and
their works sought to understand its personality.\(^{17}\)
Johnson describes how complexity was initially
examined by Turing, Shannon, and Weaver leading
to the concept of organised complexity as a
‘constructive way of thinking about urban life’.\(^{18}\)

According to Davis and Sumara,\(^{19}\) Weaver was
among the first to distinguish between simple,
complicated, and complex events. Simple systems
involve the interaction of a few variables, e.g.
‘trajectories and collisions’.\(^{20}\) Complicated systems
use probability and statistics to examine patterns
that might involve millions of interactions of
variables, e.g. ‘molecular interactions, subatomic
structures, and weather’.\(^{21}\) According to Davis
and Sumara,\(^{22}\) ‘the behaviours of simple and
complicated systems are mechanical’ and may
be ‘described and reasonably predicted on the
basis of precise rules’. They can be broken up
and put back together exactly the same way.
The characteristics of complex systems, on the
other hand, are ‘destroyed when the relationships
among components are broken’.\(^{23}\)

Complex systems are not chaotic. Chaos theory
cannot explain the ‘structure, the coherence, the
self-organising cohesiveness of complex systems’.\(^{24}\)
Complex systems are organised by their self-
regulation and adaptability. The most elemental
form of complex behaviour is defined as ‘a system
with multiple agents dynamically interacting in
multiple ways, following local rules and oblivious
to any higher-level instructions’.\(^{25}\) The characteristics
of a complex phenomenon are: self-organised,
bottom-up emergent, short-range relationships,
nested structure, ambiguously bounded,
organisationally closed, structure determined, and
far from equilibrium.\(^{26}\) These properties find a
special balance between autonomy and control,
a point often called the edge of chaos, ‘where
the components of a system never quite lock into
place, and yet never quite dissolve into turbulence,
either’.\(^{27}\) The edge of chaos is where new ideas
are ‘forever nibbling away at the edges of the
status quo’.\(^{28}\) The processes of ‘nibbling away’
are explained by the theory of emergence.

**Emergence**
The beginnings of emergence may be found
in ‘higher-level patterns arising out of parallel
complex interactions between local agents’.\(^{29}\)
Johnson suggests the initial thinking about the
relationship between complexity, emergence, and
problem solving may be attributed to Selfridge
who announced that ‘a model of a process which
we claim can adaptively improve itself to handle
certain pattern-recognition problems which cannot
be adequately specified in advance’.\(^{30}\) Emergence,
therefore, involves complex interaction and
adaptation. Emergence is when ‘the whole becomes
greater than the sum of its parts’,\(^{31}\) or when the
individual agents interact in ways that ‘transcends

\(^{17}\) Johnson, 2001, p. 38-41
\(^{18}\) Johnson, 2001, p. 52.
\(^{19}\) Davis and Sumara, 2006, p. 8
\(^{20}\) Ibid., p. 9
\(^{21}\) Ibid., 10
\(^{22}\) Ibid., p. 11
\(^{23}\) Ibid.
\(^{25}\) Johnson, 2006, p. 19
\(^{26}\) Davis and Sumara, 2006, pp. 5–6
\(^{27}\) Waldrop, 1992, p. 12
\(^{28}\) Waldrop, 1992
\(^{29}\) Johnson, 2006, p. 19
\(^{30}\) Ibid., p. 54
\(^{31}\) Waldrop, 1992, p. 288
themselves and becomes something more’. The challenge is to discover how this happens. Waldrop argues that this may be understood by ‘connectionism: the idea of representing a population of interacting agents as a network of nodes linked by connections’. The emergent properties of complex adaptive systems are revealed in the connections themselves. According to Waldrop, ‘surprising and sophisticated outcomes emerge in how the nodes send messages like on and off switches’. In problem-solving groups, the messages are knowledge flows, and the decision to share (on and off switch) is explained by adaptive properties.

**Adaptive systems**

Adaptive properties explain the function of emergent complexity. This ability gives emergence the ability to change the world. Johnson explains that a system only becomes emergent when ‘local interactions result in some kind of discernible macro-behaviour’. This behaviour is the capacity to adapt. Johnson explains that emergent complexity is not just a ‘nice pattern of behaviour’. There are two main functions of system adaptability: recruitment and learning. Adaptive behaviour functions as recruitment ‘when the system interacts within a larger ecosystem assuming that it is in the interests of the system to attract new members’. Adaptive behaviour functions as learning through ‘dynamic self-regulation’. Waldrop explains that their dynamism is what makes ‘every one of these complex, self-organising systems... qualitatively different from other static objects like computer chips or snowflakes, which are merely complicated’. Johnson concludes that ‘emergence has always been about giving up control, letting the system govern itself as much as possible, letting it learn from the footprints’. Dynamism makes each system unique. Dynamic properties are revealed in how the system attracts and absorbs new knowledge (members) and adapts to their interaction with existing members to solve wickedly complex problems.

**Wickedly Complex Problems**

‘Wicked problems’ were first introduced by Rittel and Webber to describe societal problems that are inherently different from those associated with the industrial age. These problems are ‘quintessential social justice and social change problems’. Wicked problems ‘are complex and messy’ and ‘their solutions are unique to the circumstance’. These problems are difficult to solve, i.e., ‘stubborn’, and ‘tough to manage’. Wicked problems characterised the ‘social complexities and policy chaos’ in the United States at the time of Rittel and Webber’s paper which had created ‘relentless social challenges’. A dilemma emerged over whether it was the problem, or lack of competence to solve it; that made it wicked. Critics argue that there is no inherent incapacity to

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32. Waldrop, 1992, p. 289
33. Waldrop, 1992
34. Ibid.
35. Johnson, 2006, p. 21
36. Ibid., p. 19
37. Ibid., p. 20
38. Ibid., pp. 19–20
40. Waldrop, 1992, pp. 11–12
41. Johnson, 2006, p. 234
42. Rittel and Webber, 1973, pp. 155–169
43. Yawson, 2015, p.68.
44. Yawson, 2015
45. Rittel and Webber, 1973, p. 156
46. Camillus, 2008
47. Crowley and Head, 2017, p. 540
define social problems.\textsuperscript{48} The literature on wicked problems has focused on finding fault in the nature of social problems rather than in professional competence. Wicked problems are technically difficult to manage,\textsuperscript{49} but the focus has been on why they are so difficult rather than how to solve them. Rittel and Webber framed the topic by arguing that problem solving inherent in the industrial age was appropriate for what they call ‘benign’ or ‘tame’ problems, those that are simple or complicated.\textsuperscript{50} While NASA’s challenge to place a man on the moon was certainly not a simple task, it was achieved using the tools of scientific management inherent in the industrial age’s technological systems, such as ‘rationality, order and control’,\textsuperscript{51} and therefore may be described as complicated.

Rittel and Webber’s goal was to reject the rational-scientific approach to problem solving, and ‘replace the classical paradigm of science and engineering as a basis for framing social science and modern professionalism’.\textsuperscript{52} Rittel and Webber explained why these problems and how to solve them were too difficult for the rational-scientific approach. The difficulty of wicked problems lies in ‘the colliding of complex systems’.\textsuperscript{53} Rittel and Webber\textsuperscript{54} explained how wicked problems have ‘consequences for inequity’, and are the result of growing societal awareness of ‘pluralism’, ‘differentiation of values’, and ‘sensitivity to the waves of repercussions that ripple through’ ‘interacting open systems’. The theme of Rittel and Webber’s paper was to propose wicked problems as a new capability for ‘the cognitive and occupational styles of the professions’.\textsuperscript{55} This new capability requires a new type of knowledge that may be defined as ‘the ability to negotiate politically, under conditions of uncertainty, and to work effectively in networks and at the boundaries between science, stakeholders, and politics’.\textsuperscript{56} Wicked problems are created by complex social systems and are solved by people or groups that are able to navigate these systems with social intelligence which in itself is wickedly complex.

**Complexity and Communities of Practice**

Complex adaptive system (CAS) theory involves reflective feedback loops between individuals inside and outside the CoP,\textsuperscript{57} and helps the CoP evolve and survive. The exploration of Second Track processes, as an external CAS, which may sit on the boundary of an internal CoP sharing its social intelligence, may be an important contribution to the use of complexity theory for understanding CoPs.

A review of the literature on the four factors driving social interaction in CoPs.\textsuperscript{58} These factors explain:

- **Knowledge objectives**: encourage CoP members to participate more actively in the process of knowledge creation.
- **Leadership**: assigned roles motivate community members to form relationships necessary to share knowledge.
- **Collaboration**: actively sustain knowledge creation processes.
- **Boundary Spanning**: establish linkages beyond the CoP boundaries enabling knowledge to be shared with other CoP, internally and externally, perpetuating knowledge creation.\textsuperscript{59}

\textsuperscript{48} Crowley and Head, 2017, p. 542
\textsuperscript{49} Camillus, 2008, p. 100
\textsuperscript{50} Rittel and Webber, p. 160
\textsuperscript{51} Crowley and Head, 2017, p. 540
\textsuperscript{52} Ibid., p. 541
\textsuperscript{53} Yawson, 2015, p. 68
\textsuperscript{54} Rittel and Webber, 1973, p. 156
\textsuperscript{55} Ibid., p. 160
\textsuperscript{56} Crowley and Head, 2017, p. 540
\textsuperscript{57} Brown and Duguid, 1991, 1998
\textsuperscript{58} Borzillo and Kaminska-Labbe, 2011
\textsuperscript{59} Ibid., p. 355
However, Borzillo and Kaminska-Labbe argue that the theory fails to explain how these factors interact and combine to sustain knowledge creation.\(^{60}\) This current paper aims to extend Borzillo and Kaminska-Labbe’s research in this area.

**METHOD**

This is a conceptual paper that theorises about a new type of problem-solving social system called Second Track processes. The ideas presented in the paper emerged from discussions with the co-founders of Global Access Partners (GAP), Peter Fritz AO and Catherine Fritz-Kalish, over a period of 24 months. GAP initiates strategic debate on the most pressing social, economic and structural issues facing Australia and the world today.\(^{61}\) GAP acts as a catalyst for policy implementation and new economic opportunities. Since 1997, GAP has had more than 4,000 members, with 1,000 members actively involved in various GAP projects at any one time.

GAP has used Second Track processes to solve problems that are too difficult for the rational-scientific approach. The methodological challenge for this paper is to articulate what is a highly tacit process in conceptual terms. Alhadeff-Jones\(^ {62}\) explains that researchers trying to interpret a complex phenomenon naturally reject the normal order of knowledge and instead focus on disorder in the pursuit of knowledge. Conventional thinking about complexity and disorder considers the role of chance, dispersion, perturbation, accident, noise, or error.\(^ {63}\) These factors create tensions, paradoxes, and contradictions in the way knowledge is produced.\(^ {64}\) The research method adopted by this paper is to organise the heterogeneous forms of disorder in complex systems, following the definition above that complex systems are self-organised and adaptive.

The method used in this paper to examine heterogeneous disorder of Second Track processes adopts Alhadeff-Jones\(^ {65}\) three stages: (1) define the process and its subsystems (author, system of ideas, object), (2) introduce a model to represent the process using Le Moigne’s general system theory, and (3) conceive a strategic mindset focusing on the emerging and unpredictable path followed by the research itself.

**Stage 1 process:** GAP’s aim was to translate their tacit knowledge of Second Track processes into theory to make it more accessible for researchers and to encourage wider research in this exciting area. The researchers were also members of GAP committees and, therefore, had their own perspective about Second Track processes and how it works in practice. The researchers understood that GAP’s processes were unique and complex, making them unable to be explained by a single discipline and, therefore, they adopted a transdisciplinary approach to the conceptual development outlined in this paper.

**Stage 2 model:** The conceptualisation proceeded in this way. Discussions with GAP surfaced themes about how the external CoP was organised, how members interacted, and how they solved problems. These themes were then assessed by the researchers to identify characteristics which were different to traditional CoPs. The researchers then searched for theory across multiple disciplines to help understand these unique characteristics. This search laid the platform for the critical values (see Figure 1).

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\(^{60}\) Borzillo and Kaminska-Labbe, 2011
\(^{61}\) www.globalaccesspartners.org
\(^{62}\) Alhadeff-Jones, 2013, pp. i–vii
\(^{63}\) Alhadeff-Jones
\(^{64}\) Ibid.
\(^{65}\) Ibid.
**Stage 3 strategic mindset:** This platform was further discussed with GAP and this iterative process continued until the team agreed that their collective tacit understanding of Second Track processes was now translated into our codified conceptual model.

**SECOND TRACK PROCESSES: AN OVERVIEW**

Second Track processes invite thought leaders from the public service, industry, academia and civil society to discuss a pertinent issue in a personal capacity, rather than as representatives of particular interests. Members then suggest practical remedies and design, undertake, and oversee concrete projects or pilots to test their ability to generate tangible outcomes. Once their efficacy is proven on a limited scale, these solutions can be presented with confidence to public policymakers or larger organisations for wider implementation to benefit society.

Our conceptualisation of Second Track processes has three parts: complexity horizon, social horizon, and intelligence horizon.

**COMPLEXITY HORIZON**

This section establishes how Second Track processes establish a balancing point at the edge of chaos where new ideas are ‘nibbling away’ at the edges of the status quo established by conventional problem-solving social systems, i.e., first track processes. The Second Track balancing point is called the complexity horizon.

Second Track’s complexity horizon is a social system capable of creating new order (self-organisation) and producing new knowledge (emergence). The complexity horizon involves deciding on a topic, identifying who has the knowledge resources to tackle the topic, assembling the group, and determining how the group should work together to find a solution. There are two emergent forces which identify the ‘nibbling away’ properties of Second Track’s complexity horizon: adaptive tension and enabling leadership.

**Adaptive Tension**

Adaptive tension is an energy differential between the system and its environment. This differential is the gap between where the system is and where it wants to be. Second Track processes begin with a wickedly complex problem (where system is) and search for a solution (where system wants to be). Waldrop explains that ‘complex systems... just don’t passively respond to events... they actively try to turn whatever happens to their advantage’. Second Track processes’ advantage is the capacity to exploit the energy differential as a positive force. Adaptive tension is the system dynamics that explain the proactive search for balance within the systems’ larger environment. Second Track processes’ positive force is the unique way it uses adaptive tension to coalesce members around the search for a solution. Second Track processes’ adaptive tension has three critical values: boundary setting, dissemination effects, and weak ties. The emergent properties of these critical values use Second Track’s ability to attract and absorb new members and learn from collective experience to create value for the group and its members. This value builds and sustains the system’s creative momentum.

67. Nicolis and Prigogine, 1989
68. Waldrop, 1992, p. 11
Boundary Setting

Boundary setting defines what issues are to be included, excluded or marginalised in analyses (cognitive limits) and who is to be consulted or involved (social limits). Boundary setting is an important general cognitive perspective for CoP members in the recruitment of members and in their willingness to contribute. Adaptive tension may be balanced by employing critical systems heuristics exploring what CoP members believe the current situation is, and what, in their view, it ought to be. This method identifies whether there is a gap in members’ cognitive boundary setting in four areas:

1. **Motivation**: focuses on the purpose and beneficiaries of the system and whose interests are being served.
2. **Control**: establishes who has decision-making authority and what resources they have at their disposal.
3. **Knowledge**: describes what forms of knowledge are necessary, and where that knowledge resides.
4. **Legitimacy**: considers the worldview and potential sources of oppression inherent in a social system.

Conventional CoPs tend to allocate different importance to these four critical systems heuristics. Control tends to dominate, particularly perceptions of expert power, which then influences motivation, legitimacy, and finally knowledge. Second Track processes are able to avoid demarcation conflict within the group by focusing on knowledge and common attitude formation around the problem space. Second Track processes focus members’ boundary setting on the outcome, rather than the CoP itself, which resolves demarcation disputes about the problem space.

Dissemination Effects

CoPs involve informal social groups of people who participate voluntarily with no formal requirement to interact. This voluntary membership creates potential for problems which must be resolved. Organisation theory has recognised the challenge of integrating the separate efforts of multiple individuals who may have varying motivation and capacity to interact. This creates social group inefficiency because the scale economies of being an expert must be traded off against the time it takes to engage with others. Jun and Sethi explain that individuals choose one of two options: cooperate or defect. It has been suggested that the CoP trade-off decision involves cognitive assessment about the group’s knowledge integration, i.e., how well the group shares knowledge.

Individuals stuck in conventional CoPs often do not see the total system, and see only a reduced order, and then try to enforce this onto the bigger system. CoPs tend to restrict discussion within silos of policy issues for example. Silos of activity occur when social systems are unaware of other projects being conducted concurrently. There is greater impact if complex problem-solving groups work in tandem with other initiatives taking place in other sectors. Second Track processes enable the group to share the outputs of their work beyond the participants. Its dissemination strategies drive Second Track networks’ political and social change.

Dissemination strategies may be described as insider and outsider categories. Insider strategies include working with elite insiders who are close to decision makers and negotiators, such as experts and advisors. Outsider strategies seek to influence decision makers through a bottom-up approach, such as influencing public opinion by...

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69. Midgley, 208, pp. 467–479
70. Ulrich, 1983
71. Ibid.
72. Grant, 2002
73. Jun and Sethi, 2009, p. 385
74. M. Körner et al., 2016
75. Çuhadar and Dayton, 2012
mobilising peace campaigns. To what extent insider strategies have successfully disseminated the effects and outcomes of track two initiatives remains a major question facing practitioners.76 Second Track processes establish a functional role for the group with structural connections to other related Second Track groups and an insider strategy. The first connection generates redundancy (overlap) in informal social networks via overlapping participants enabling opportunities to interact both formally and informally and discuss similar issues. The second connection is the group’s capacity to develop insider strategies and connections with first track decision makers. These connections produce positive dissemination effects which increase participants’ motivation to interact because they know their contribution will make a difference. Second Track processes focus on the dissemination effects of its structural connections integrating mechanisms, which resolve their trade-off decision about whether to cooperate.

Weak Ties
The strength of ties, i.e., relationships, is traditionally seen as a positive force in network studies and is conceptualised as coherence.77 Coherence is a measure of network efficiency generated by establishing norms and relationships through mutual engagement, which ‘binds CoP members together by a sense of joint enterprise’.78 CoPs tend to develop strong ties built on like-mindedness and social interaction around common interests. However, CoPs characterised by strong ties are unlikely to transfer any novel information,79 because friends often know the same people and they know the same things. Therefore, conventional CoPs may not be effective problem solvers. Wickedly complex problems require CoPs with weak ties because they more likely than strong ones to access and share new knowledge across disconnected segments of social networks.80 Second Track processes focuses members on relationships with the problem, not the other participants, which makes strong ties redundant.

Enabling Leadership
Enabling leadership creates conditions that enhance the socialisation between individuals81 and protect CoPs from paralysing bureaucracy.82 Rather than the traditional command and control hierarchy; complexity leadership involves designing systems in which social intelligence can emerge.83 Whereas traditional CoP literature addresses leadership by trying to find a balance between control and autonomy and not placing too much pressure on the CoP; Borzillo and Kaminska-Labbe propose that complexity thinking accelerates social network dynamics by adjusting motivational activators.84 A system that is complex involves ‘a great many independent agents interacting with each other in a great many ways’.85 The ‘very richness of these interactions allows the system as a whole to undergo spontaneous self-organisation’.86 Johnson illustrates this point by describing the interaction of

76. Ibid.
77. Wenger, 1998
78. Wenger, 1998, p. 72
79. Granovetter, 1983
80. Granovetter, 2005
81. Nonaka, 1994
84. Ibid.
85. Waldrop, 1992, p. 11
86. Waldrop, 1992
billiard balls when struck on a billiard table. His argument is that the complex interaction of the balls, e.g., how they bounce off one another and where they end up on the table, is predictable; otherwise the system would be chaos. Second Track processes’ enabling leadership self-organises the system and its complex interactions. Second Track processes’ enabling leadership has three critical values: symmetry, mediation, and negotiation. The emergent properties of these critical values provide spontaneous self-regulation in real time. This self-regulation establishes the system’s cohesion.

**Symmetry**
Symmetry is lack of hierarchy or domination in participant relationships. Symmetry is necessary to maximise participation, collaborative, learning and change within the group. The opposite to symmetry is asymmetry. Asymmetry refers to status inequality, which means that participants are allocated different hierarchical positions, knowledge, or formal authority. In problem-solving social systems, socio-political power inequities can generate demotivation activators. Individuals who are sufficiently trusted to be invited to participate in these groups are often high achievers who have worked very hard to achieve a high level of technical mastery. Our natural desire is to impress others with our capability. This leads us to adopt a superiority role in the power relationships in problem-solving social groups. Asymmetry causes people to disengage from the process and their knowledge and contribution is lost.

Second Track processes generate adjusting motivational activators which focus members on their contribution to the solution, not their position, in relation to the problem. This focus enables symmetry because people are motivated by how their knowledge can help the group find a solution. This motivation avoids contests over who knows more, as Second Track self-regulates a focus on collective knowledge.

**Mediation**
Mediation is a conflict resolution process within the group. Disputes are neither good or bad, however, the way they are handled by the group can turn them into destructive events that can damage relationships and cause emotional stress, lost productivity, lost opportunities, and financial ruin. Social dilemmas emerge in circumstances in which individual interests are different to the group’s interests. When individuals form into formal social groups to solve complex problems, conflicts emerge between individuals and the socio-political systems they represent. These systems expect individuals to behave in a certain way, e.g., to support the platforms of their constituents. This requires individuals to defend a position even if they do not personally believe in it. Conflicts may then emerge as group members disagree over words, ideas, resources, processes, or solutions. At all levels, there is potential for dysfunctional behaviour and group inefficiency.

Second Track processes generate adjusting motivational activators by ensuring the parties involved can resolve their own dispute. This process enables the group itself to mediate in the act of doing, i.e., during meetings, which empowers the group as the collective owner of any disputes.

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87. Johnson, 2001, p. 21
88. Puutio, Kykyri and Wahlstrom, 2008
89. Ibid.
90. Senge and Scharmer, 2001
91. Maister, Green and Galford, 2000
92. Massingham, 2014
93. Fritz, Parker and Stumm, 1998
94. Ibid., p. 137
95. Jones, 2008
96. Fritz, Parker and Stumm, 1998
This collective ownership enables mediation because people discard their constituency positions to help the group find a solution. This collective ownership avoids social dilemmas, as Second Track self-regulates quick dispute resolution.

**Negotiation**

Negotiation is the process of enabling agreement within the group. Asymmetry generates dysfunctional behaviour because people adopt adversarial positions and make mistakes when dealing with those they perceive as adversaries in the group. This type of behaviour may be addressed by focusing people on interests not positions, and discovering mutual gain by focusing on what is wrong and what might be done. Managing relationships in any social group requires ongoing negotiation.

Second Track processes generate adjusting motivational activators by changing the system connections with two ways of learning. Waldrop explains the self-regulating nature of this learning by describing the economy, where individuals buy and sell without anyone being in charge or planning it, and ecosystems are formed by organisations constantly adapting to each other. Problem-solving groups form ecosystems around the problem space. The first way of changing the system is done by exploitation learning, which improves what you already have. Conventional thinking seeks to increase the connection’s strength. This thinking proposes that strong ties will build close relationships between group members and negotiation emerges as people learn more about one another and how to resolve conflicts. Second Track processes have a different approach.

This approach is to build close relationships between group members and the problem, and negotiation emerges as people learn more about possible solutions. The exploitation learning of Second Track processes focuses people on their common interest in the problem. The second way of changing the system is done by exploration learning, which risks the system failing against the chance to achieve significant success. This thinking changes the system structure by eliminating existing connections and inserting new ones. Second Track processes encourage fluid membership, and negotiation emerges as new people quickly adapt. The exploration learning of Second Track processes focuses people on their contribution to the problem. Second Track processes expand the negotiation space and find an overlap on interests rather than positions, minimising negotiation time. Second Track’s constant adaptation enables its self-regulated negotiation.

**SOCIAL HORIZON**

This section identifies the patterns of Second Track processes’ complex social interaction and adaptation as a problem-solving emergent system. The Second Track emergent system is called the social horizon. According to Johnson, the challenge is how to push the emergent system towards the desired behaviour. The unique emergent properties of Second Track processes are how it self-organises to be more adaptive in the dynamic pursuit of solving wickedly complex problems. The desired behaviour is effective and efficient knowledge flows: internally between members, and externally with first track processes.

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97. Ibid.
98. Fisher and Ury, 2011
99. Waldrop, 1992, p. 11
100. Waldrop, 1992
101. Ibid.
103. Waldrop, 1992
104. Ibid.
Second Track’s social horizon is how the group establishes its own culture, motivation, and social exchange rules. There are two emergent forces which drive the desired behaviour of Second Track’s social horizon: enhancing cooperation and boundary spanning.

**Enhancing Cooperation**
Knowledge management aims to improve knowledge sharing via increased teamwork and cooperation. In conventional CoPs, this implies regular meetings, workshops, and information technology support to allow its members to interact on shared platforms. In complex social systems, cooperation requires a collective intelligence system in a state of self-organised criticality, located at the edge of chaos. Second Track processes’ enhancing cooperation has three critical values: social contagion, social philanthropy and reciprocity.

**Social Contagion**
Contagion is a social network concept that explains shared attitudes, culture, and practice through interaction. It generates efficiency in knowledge flows within the group by increasing homogeneity as individuals interact and inform one another. Contagion may be explained as an emergent opportunity to increase connectedness. Research in this area looks at how thoughts and emotions spread from individuals to groups. Researchers distinguish between emotional contagion, behavioural contagion and social contagion; and how communication networks inform individuals and groups about others. The way contagion diffuses is complex and dynamic. Second Track processes generate a social experience with the group that becomes addictive and self-generating, that accelerates contagion diffusion.

**Social Philanthropy**
There is increasing interest amongst researchers and practitioners about corporate social responsibility (CSR). CSR is defined as a company’s discretionary involvement in business practices to further economic, societal, and environmental wellbeing. Most research in this area looks at macro-level of analysis and how organisations are embracing CSR. Recent research provides a different focus on the micro level of analysis and individual employees’ reactions to CSR. These researchers look at the attributional inferences about how employees assess and respond to CSR initiatives and, more specifically, how employees’ subjective interpretations of CSR-induced motives influence their feelings of job satisfaction. Second Track processes generate social philanthropy which increases motivation to share knowledge with no expectation of reward.

**Reciprocity**
Reciprocity theory is based on the concept of social exchange. In complex problem-solving groups, the desired reciprocity behaviour is that knowledge flows are two-way, from the individual to the group, and from the group to the individual. Conventional
thinking argues that network cohesion is generated by interconnectedness within and between social groups. Dense ties mean the group agrees on reciprocity, i.e., what the individual needs to give in order to receive.

Second Track processes make the normal rules of reciprocity redundant. In Second Track processes, relationships do not need to be dense. Second Track processes only require one-way knowledge flows from the individual to the group, increasing efficiency by negating the need for the second flow back to the individual from the group.

**Boundary Spanning**

Complexity theory also uses the CoP construct of boundary spanning. In conventional CoPs, boundary spanning encourages interaction with individuals and groups external to one’s network to bring diversity and novelty into the system. In complex social systems, boundary spanning tries to adjust network structure, i.e., its shape and size, for continual learning and renewal. Second Track processes’ boundary spanning has one critical value: structural holes.

**Structural Holes**

Structural holes are locations in social networks representing the only way knowledge may flow from one network sector to another. This point, sometimes referred to as a knowledge broker, has considerable power, because they are the only way others in the group can learn what others know. Others depend upon the broker for access because they do not know one another, or their relationship is not sufficiently close (i.e., strong ties) to enable knowledge flow.

Diffusion explains how knowledge is shared within and between social groups. Second Track processes’ diffusion generates insider and outsider structural hole effects. These effects are positive social behaviour related to knowledge flows. Insider effects are generated because the problem is the structural hole. The problem plays the broker role and, in doing so, it provides members with access to one another which negates the need to develop strong ties or dependence on any one individual. External effects are generated because the group is the structural hole. The group plays the broker role and, in doing so, it provides the connection to other groups. Therefore, external effects emerge at an inter-group level.

**INTELLIGENCE HORIZON**

This section identifies the outcomes of Second Track processes as a problem-solving emergent system. The Second Track emergent outcome is called the intelligence horizon. Waldrop describes the emergent outcomes of complex adaptive systems as ‘groups of agents... manage to transcend themselves, acquiring collective properties such as life thought, and purpose that they might never have possessed individually’. The unique emergent outcomes of Second Track processes are how
it transforms the individuals and the group. This transformation makes the individuals and the group better at solving wickedly complex problems.

Second Track’s intelligence horizon is how the group transcends the combined individual knowledge to discover solutions otherwise impossible and, in doing so, builds new problem-solving capabilities. There are two emergent forces which drive the transformation Second Track’s intelligence horizon: individual transformation and group transformation.

**Individual Transformation**

People must have the interpersonal skills and motivation to contribute to the group. Knowledge management aims to change individuals with organisational learning.\(^{126}\) Whereas in traditional CoPs, individual learning is motivated by personal gain explained by behaviourism and cognitive psychology;\(^{127}\) complexity thinking uses personal construct theory to examine how individuals utilise personal cognitive structures to make sense of their environment.\(^{128}\) Second Track processes’ individual transformation has two critical values: social identity (self-awareness, role identity, personal beliefs, and interpersonal efficacy) and personal-cognitive capacity (others awareness, learning motivation, personal construct theory).

**Social Identity**

Social identity theory explains motivational factors which influence social behaviours not explained by personal construct theory’s cognitive focus.\(^{129}\) Social identity theory explains how an individual decides whether to use their personal-cognitive capacity to help the group or not. Second Track processes allow participants to adopt a different role and identity. This is measured by changes in self-awareness, role identity, personal beliefs, and interpersonal efficacy.

Self-awareness is a process self-evaluation, self-reflection and internal state awareness.\(^{130}\) Measures of self-awareness include emotional intelligence, and alignment between self-report ratings of performance with ratings ascribed by others. Individuals whose ratings align with others are seen to have high self-awareness leading to better performance outcomes than those with lower levels of self-awareness.\(^{131}\) Second Track processes develop better self-awareness amongst members. Second Track processes develop better role identity for members based on collective self-esteem. Interpersonal efficacy assesses confidence to engage in a variety of interpersonal behaviours.\(^{132}\) Second Track processes develop better social confidence for members based on learning new interpersonal skills.

Second Track processes transform individual social identity by enabling positive change in these four areas of measurement. The process of identity altering causes individuals to re-interpret their interests about the problem. The group is now their identity.

**Personal-Cognitive Capacity**

Personal-cognitive capacity is a cognitive lens through which people interpret social situations and make inferences about others.\(^ {133}\) CoP members that are able to form interpersonal impressions which are more extensive or differentiated are considered more cognitively complex.\(^ {134}\) This measures the individual’s ‘cognitive dimensions for interpreting

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126. Massingham, 2015
127. Bruner, Goodnow and Austin, 1956
128. Kelly, 1955
129. Ellemers, De Gilder and Haslam, 2004
130. Ashley and Reiter-Palmon, 2012
131. Ibid.
132. Locke and Sadler, 2007
133. Burleson and Caplan, 1998
134. Delia, Clark and Switzer, 1974, pp. 299–308
and understanding the behaviour of others. Second Track processes increases members’ cognitive complexity by expanding awareness of others’ behaviour.

Second Track processes transform individual personal-cognitive capacity by enabling positive change in these three areas of measurement. The process of cognitive altering is more than realisation by the individual that the social horizon has gathered a clever group of people. Second Track processes’ development of personal cognitive capacity enables the group’s learning to motivate the individual to learn and to increase cognitive complexity. CoP members become increasingly aware of the learning behaviour of other members, this changes their curiosity, their learning increases, and this combines to grow the group’s learning. Each individual’s changing personal cognitive capacity makes them increasingly aware of the group’s growing learning, which then further increases their motivation, and so the cycle continues.

**Group Transformation**

The ecological model of complex adaptive systems (CAS) reflects the idea that organisms and their environments evolve together. For external CoPs, such as CARs, this model of CAS is measured by the group’s learning. Second Track processes heighten members’ sensitivity to external events and the group’s flexibility to adapt in a timely manner. This sensitivity is considered a measure of CAS evolution, i.e., a key success factor. Second Track processes’ group transformation has two critical values: group creativity and solutions.

**Group creativity:** Second Track processes influence members’ perception of the group’s creativity in terms of their entrepreneurial orientation. Entrepreneurial orientation is perceived as the key to growth and innovation. Members perceive changes in the group’s capability over time, and as it moves towards the solution, there is awareness that the group itself is better in these four entrepreneurial orientation components than when it formed.

**Solution:** The group’s transformation occurs because Second Track processes focuses on outcomes and not process. From the first meeting, the group becomes aware of the need for a solution and how this may be connected to first track and validated. As the group moves towards this validation point, it transforms, and members are increasingly sensitive to the group’s creative efficacy. While every intelligence horizon has its own unique set of goals and objectives, Second Track processes have three broad guiding principles which differentiate its solutions from conventional CoP:

1. **Evaluation of the social system:** meaningful dialogue through effective Second Track process.
2. **Evaluation of the solution:** coalitions of people leading responses to common challenges.
3. **Evaluation of sustainability:** new self-resourced partnerships which continue to operate after the group has finished its work.

In this way, Second Track processes transforms the group with its solution by connecting it with key decision makers who may take the solution and implement it, and by ensuring there is a diverse and relevant range of leaders, officials and civil society partners will be interested in the solution, have the capacity to be involved, and willingness to partner the solutions into the future.

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135. Delia, Clark and Switzer, 1974, p. 299–300
136. Espinosa and Porter, 2011
137. Ibid.
138. Hakala, 2013, pp. 102–118
The figure begins on the left with the complex adaptive system’s three domains: complexity, social, and intelligence horizons. Each domain involves two generative forces (see columns) adapting two of Borzillo and Kaminśka-Labbe’s\textsuperscript{139} complexity theory constructs. The third domain – the intelligence horizon – is a new domain not covered by Borzillo and Kaminśka-Labbe. Finally, there are fourteen critical values which represent the CoP emergent properties. The critical values interact and combine to generate and sustain knowledge creation necessary to solve wickedly complex problems. The critical values are colour coded to indicate linkages between them. Those critical values with the same shades of grey are proposed to involve direct connections. These connections explain how the critical values represent integrating mechanisms driving the CoP knowledge creation. Figure 1 is our conceptual model of Second Track processes unique capability as an external emergent CoP.

\textsuperscript{139} Borzillo and Kaminśka-Labbe, 2011

\begin{figure}[ht]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{SUMMARISES THE PAPER’S FRAMEWORK FOR UNDERSTANDING SECOND TRACK PROCESSES}
\end{figure}
CONCLUSION

The aim of this paper was to conceptualise about the emergent driving forces in communities of practice which sustain voluntary knowledge creation necessary to solve wicked problems. Existing theory on CoP continues the long tradition of perceiving them as voluntary emergent phenomena that develop from the bottom up, i.e., self-regulating, with more limited theory on managerial guidance. This paper extends research by Borzillo and Kaminska-Labbe using complexity theory to explain CoP interactions balancing the need for control and autonomy.

The paper introduced Second Track processes as a new type of complex adaptive social system. Second Track processes sit at the edge of chaos nibbling away at the status quo by finding solutions to wickedly complex problems. The unique emergent properties of Second Track processes are revealed in the adaptive connections themselves. Second Track’s dynamic properties emerge in how the system attracts and absorbs new knowledge (members) and adapts to their interaction with existing members. The adaptive properties transform the individuals and the group generating a collective intelligence that transcends the sum of Second Track’s parts. This intelligence is the solution to the wickedly complex problem, and the capacity to navigate colliding social systems to ensure the solution is implemented.

Our conceptual model of CoPs developed in this current paper makes three main contributions to our understanding of CoPs. The first contribution is to introduce an external CoP, Second Track processes, which represents an opportunity to bring together teams of diverse experts to solve wickedly complex problems. The second contribution is the three CoP domains: complexity horizon, social horizon, and intelligence horizon. These domains explain CoPs as complex adaptive systems in terms of their organisation (complexity), interaction (social), and thinking (intelligence). Our model extends Borzillo and Kaminska-Labbe’s theory of CoPs as complex adaptive systems in two ways. First, we develop a third domain not covered by Borzillo and Kaminska-Labbe – the intelligence horizon – which contributes understanding of cognition by CoP members and the group. Second, we explain how Second Track processes is driven by the self-directed mode, making the guided mode unnecessary (see first row in figure 1). The third contribution is fourteen critical values which represent the CoPs’ emergent properties. The critical values interact and combine to generate and sustain knowledge creation necessary to solve wickedly complex problems. The critical values are organised into six quadrants representing Borzillo and Kaminska-Labbe’s four complexity theory constructs, and the two new constructs which characterise the intelligence horizon.

This paper has developed a conceptual model contributing to our understanding of the different driving forces inside CoP which generate and sustain voluntary knowledge creation necessary to solve wicked problems. Further research might develop measures to empirically test the claims made in this paper, and represents an exciting opportunity for new research on CoPs.\textsuperscript{140}

REFERENCES


The Economist (2020), Conflict resolution relies increasingly on diplomatic back channels.


I. INTRODUCTION

As a massive global phenomenon, mergers and acquisitions (M&As) are complex economic, political, and social events with fundamental stakeholder management implications. Global M&A volume has been valued at slightly over the US$4 trillion for each of the past two years.1 M&As have dramatic and disruptive consequences on a firm’s organisational life;2 growth strategy;3 strategic renewal;4 forms of change;5 and ability to meet market challenges.6 Various stakeholder group relationships (referred to as stakeholder relationships in this paper) are affected by and affect M&As in different ways, often complementing, often conflicting.

Extending the context of M&A research to its stakeholder relationships helps broaden our understanding of the complexities, opportunities, and obstacles that surround M&As.7 Meglio

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1. Dealogic, 2020
2. Larsson and Finkelstein, 1999
3. Hitt, Harrison and Ireland, 2001
4. Bruner, 2004
6. Agrawal and Jain, 2015
and Risberg argue that ‘M&As are fraught with instabilities, ambiguities, politicisation, and fragmentation that traditional research approaches cannot do justice to’. Therefore, M&As can take place in the context of incidents, activities, and actions that continually unfold with implications for various stakeholders. The numbers-logic tradition in corporate planning cannot suggest stakeholder reactions to a significant organisational transition, such as an M&A. Yet the context of the M&A process, and the surrounding stakeholder relationships, are too often researched and managed in isolation. In this paper, I connect stakeholder research with M&A research.

From a previous analysis we found that research linking stakeholders and M&A research is fragmented and divergent. Although more and more varied stakeholders are increasingly being investigated through a diverse range of analytic approaches, research methods, and disciplines, the analyses in these studies are still unidirectional examinations of how M&As affect stakeholders, not how stakeholders affect M&As. They also fall short of investigating inter- and intra-group stakeholder relationships. Thus, we have gained little insight into the complex web of stakeholder relationships during an M&A process. Against such shortcomings, there remains a need to analyse context and relationships concurrently to understand how stakeholder relationships around a merger process are managed. I have undertaken this analysis task through a case study on the AU$11 billion mega-merger process between the Australian gaming groups Tatts Group Ltd (Tatts) and Tabcorp Holdings Ltd (Tabcorp) over 2016/17. (Note that, hereafter, all currency is in AUD unless specified otherwise).

The research question addressed in this paper is: How was Tatts and Tabcorp’s stakeholder management affected by, and how did it affect its merger process? I examine documents and use interview evidence from the case merger. I identify several key stakeholder relationships in this merger process that were disrupted and disruptive to offer insights into how this complex web of relationships was managed.

I draw on Heidegger’s philosophy of hermeneutics to make theoretical sense of the relationships between stakeholders and the M&A process. In Heideggerian terms, relationships refer to ways of assembling the parts of a phenomenon: a contextual phenomenon in which the parts are related to each other. Each stakeholder relationship is constructed through their relationship with different stakeholders, as well as to the whole (merger process). Gadamer explains: ‘It is a circular relationship... The anticipation of meaning in which the whole is envisaged becomes explicit understanding in that the parts, determined by the whole, themselves also determine this whole’. I find that managing stakeholder group relationships during the Tatts/Tabcorp merger process involved both balancing and disempowering key stakeholder groups.

With this analysis, I connect two research fields – stakeholders and M&As – helping to solve complex problems around managing stakeholder relationships during an M&A process. Viewing M&A processes in the context of fluid and dynamic relationships allows us to identify those relationships explicitly. The originality of this research lies in accommodating the complexity of M&A processes,

8. Meglio and Risberg, 2010, p. 90
9. Meglio, 2015, p. 165
10. Lamberg, Pajunen, Parvinen and Savage, 2008
11. Segal, Guthrie and Dumay, 2020
12. Heidegger, 1927
13. Segal, Guthrie, Dumay and Segal, 2019
which involve a web of defined stakeholder relationships that have to be managed to ensure the M&A proceeds.

The rest of this paper is organised as follows. Section 2 contains a literature review, which tracks progress towards a stakeholder perspective of M&A analysis leading up to the research question. Section 3 outlines the research methods used. The Tatts/Tabcorp merger case history is provided in Section 4. Sections 5 and 6 provide an analysis and discussion of the merger process. The paper concludes in Section 7 with a summary of the evidence and findings in response to the research question.

2. M&As AND THE STAKEHOLDER LITERATURE

This literature review tracks and explores the stakeholder perspective of M&A analysis to arrive at the research question. Segal, Guthrie and Dumay16 highlight that well before the first merger wave of 1895–1904,17 economists were aware of the social, political, and economic consequences of market concentration. For instance, Adam Smith18 saw economic concentration as a distortion of the market’s natural ability to allocate society’s resources optimally. Karl Marx19 outlined how concentrating production in fewer hands can only occur with the simultaneous creation of its opposite – the poverty and misery of many. While early conceptualisations were not specifically M&A-focused, they anticipate the broader societal consequences of market concentration as an outcome of what would evolve into corporate M&As.

These anticipations of the social, political, and economic aspects of M&As are consistent with contemporary conceptual understandings of a more stakeholder-engaged corporate and financial world. This is manifested in terminology like ‘socially inclusive’ economic growth that is developing around the Sustainable Development Goals set by the United Nations in 2015 for 2030.20 Stiglitz21 talks about ‘progressive capitalism’, based on an understanding of societal wellbeing in response to the ‘neoliberal fantasy’ (e.g., that unfettered markets will deliver prosperity to everyone). Yet M&A scholars seldom incorporate such conceptual understandings into their inquiries despite the broad consequences of M&A activities.22 An incentive related to M&A as to why business leaders are feeling pressure to rethink their societal role is research showing an overall positive association between an acquirer’s attitudes towards stakeholders and acquisition performance.23

Studies proposing stakeholder analysis in the context of M&A research have been undertaken from different perspectives,24 including corporate responsibility,25 process26 and stakeholder frameworks.27

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16. Segal, Guthrie and Dumay, 2020
17. Bruner, 2004
18. Smith, 2005
19. Marx, 2004
20. Sachs, 2015, p. 4
21. Stiglitz, 2019
22. Segal, Guthrie and Dumay, 2020
23. Bettinazzi and Zollo, 2014
24. Segal, Guthrie and Dumay, 2020
26. Lamberg et al., 2008; Meglio, King and Risberg, 2015
27. Anderson et al., 2013; Cording, Harrison, Hoskisson and Jansen, 2013; King and Taylor, 2012; Madhavan, 2005; Martirosyan and Vashakmadze, 2013; Meglio et al., 2015
A stakeholder approach to M&A analysis also has precedent in various case studies, which reflects the explanatory power of single-case research to M&A analysis. Case studies have researched: the suppression of growing tensions between shareholders and other stakeholders; how initial stakeholder relationships largely explain unexpected changes; the importance of stakeholder briefings in negotiating M&As; the influence of stakeholder concerns; the increasing importance of stakeholder interests compared to shareholder interests; the need for greater focus on weaker stakeholders; changes to inter-group dynamics between internal and external stakeholders; and the failure to consider neglected stakes put at risk by an M&A. Merger case studies also reveal stakeholder concerns as critical to the failed merger between United Airlines and US Airways and progressing Pernod Ricard’s acquisition of Vin & Sprit. A structured literature review (SLR) by Segal, Guthrie, and Dumay connecting stakeholders and M&A processes shows that few studies have been dedicated to examining the relationships between stakeholders and M&As, especially prior to the late 1990s. And, even though M&A research is now rapidly expanding to include diverse stakeholders, analytic approaches, research methods, disciplines, etc., accounting and finance publications are still mostly ignoring non-shareholder stakeholders in researching M&A. The literature is dominated by unidirectional analyses that primarily consider the effect M&As have on stakeholders, not the impact stakeholders have on M&As. The focus is on the close connections between stakeholders and the organisation under study, and inter- and intra-group relationships between stakeholders are generally ignored. Instead, stakeholders are treated as homogeneous and, therefore, undifferentiated. Thus, research falls short in more explicitly eliciting the complex web of relationships between an M&A process and the various stakeholders involved. Consequently, M&A research does not capture the implications of stakeholder management in the merger process.

These research gaps lead to the research question: How was Tatts and Tabcorp’s stakeholder management affected by, and how did it affect, its merger process?

3. RESEARCH METHODOLOGY: A SINGLE CASE STUDY

The case is a single case study method which combines a documentary analysis and semi-structured interview evidence.

3.1 Single case study

Yin notes that ‘the distinctive need for case study research arises out of the desire to understand complex social phenomena. A case study allows investigators to focus on a case and retain a holistic and real-world perspective’. He describes case studies as a social science methodology that can answer ‘how’ or ‘why’ questions about a contemporary phenomenon where the researcher has little control over behavioural events. I seek to understand how Tatts and Tabcorp’s stakeholder management was affected by, and affected, its merger process.

28. Lockhart and Taitoko, 2005
29. Lamberg et al., 2008
30. Konstantopoulos, Sakas and Triantafyllopoulos, 2009
31. Ciambotti, Aureli and Demartini, 2011
32. Borglund, 2012
33. Barone et al., 2013
34. Łupina-Wegener, Schneider and van Dick, 2015
35. Meglio, 2016
36. Lamberg et al., 2008
37. Borglund, 2012
38. Segal, Guthrie and Dumay, 2020
39. Yin, 2014, p. 3
The case is the merger between the Australian gaming groups Tatts and Tabcorp. Announced on 19 October 2016, the merger was to combine Australia’s two largest gambling groups into a diversified gambling entertainment group with a pro forma enterprise value of $11.3 billion. The analysis covers the period from when the merger was announced to its implementation in December 2017. This merger is an appropriate case to study stakeholder relationships in an M&A process because of its economic, political, and social significance; its size and complexity; the extensive data available from multiple sources (documentary and interviews); and the many stakeholders it involved.

3.2 Data collection
The evidence for the case was drawn from document analysis and semi-structured interviews. The documents provided essential information for understanding the events surrounding the case, particularly the stakeholder engagement processes. The interviews provided information to amplify the insights arising from the documentary research.40

Documentation
Given the intense public scrutiny surrounding the merger, there was extensive documentary material to draw on. The parties released merger announcements,41 the agreement,42 an information booklet and an independent experts report,43 as well as annual reports, press releases, and shareholder updates. The high profile merger also attracted extensive interest from the media, brokers, analysts, and proxy advisors, which generated further data. Most notably, the decision to authorise the merger, which would usually have been handed down by the Australian Competition and Consumer Commission (ACCC), was referred to the Australian Competition Tribunal (Tribunal), resulting in evidence from 84 witnesses and interested third parties. This was supported by expert economic and industry evidence commissioned by Tatts and Tabcorp.

A list of the documents analysed is given in Appendix 1 (see page 64).

Semi-structured interviews
Interviews can provide information to amplify insights found from documents.44 However, ‘the challenge of interview data,’ note Eisenhardt and Graebner,45 ‘is best mitigated by data collection approaches that limit bias’. This involves ‘using numerous and highly knowledgeable informants who view the focal phenomena from diverse perspectives’. Therefore, I conducted 32 semi-structured interviews with key decisionmakers in a range of stakeholder organisations, as shown in Table 1 (see page 42).

Nearly all of the interviewees had first-hand involvement in decision-making during the merger process. These included: executives (T1, T2); bankers (F1, F2), lawyers (L1–L4); and communications advisors (CA1); shareholders (S1–S8); racing industry representatives (Rac1, Rac2); regulators (R1); competitors (C1–C3); and licensed gaming venues (G1). The remaining interviews held with experts (E1–E5), an analyst (A1), and investment bankers (IB1, IB2).

The interviews were conducted via a 30–60-minute phone call and were recorded. They were semi-structured with a localist approach, defined by

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40. Barone et al., 2013
41. Tabcorp, 2016b
42. Tatts, 2016a
43. Tatts, 2017c
44. Barone et al., 2013
45. Eisenhardt and Graebner, 2007, p. 28
Qu and Dumay\cite{Qu and Dumay, 2011} as enhancing understanding of the interviews in a social context. This means the conversation can be treated as more than a tool for collecting data. As new data emerged, some interviewees were re-interviewed about the new evidence in an iterative process of going back and forth. This question-answer interview and response pattern built a dynamic narrative of the merger process, consistent with a hermeneutic approach to building understanding.

### 3.3 Data sorting

The stakeholder relationships involved in the Tatts/Tabcorp merger are listed in Table 2.

From the documentary and interview evidence, I identified six stakeholder relationships that could have disrupted the Tatts/Tabcorp merger process: the shareholders (Element A), Pacific Consortium (B), the racing industry (C), the regulators (D), competitors (E), and advisors (F). Further, some of these stakeholder groups comprise relevant subgroups, as highlighted in the third column. Column 4 shows the group’s initial reaction to the merger, followed by their concerns (Column 5), their final response to the merger process (Column 6), and the outcome of the merger process for them (Column 7). The last column of Table 2 draws on the typology of Savage, Nix, Whitehead, and Blair\cite{Savage, nix, whitehead and blair, 1991} to examine how the most potentially disruptive stakeholder relationships were managed during the merger process, which is discussed in detail in Section 5.2. Segal, Guthrie and Dumay et al.\cite{Segal, guthrie, dumay et al, 2019} apply Mitchell, Agle, and Wood’s\cite{Mitchell, agle and wood, 1997} typology of stakeholder salience to identify ‘who or what really counts’. However, Savage et al.’s typology\cite{Savage et al.} was specifically developed to help devise strategies for assessing and managing stakeholders, making it more appropriate for the stakeholder management focus of this paper.

### 3.4 Data interpretation

Following Creswell,\cite{creswell, 2013} this paper is ‘interpretive’ where researchers interpret what they see, hear, and understand ‘to make sense of (or interpret) the meanings others have about the world’. I adopted a hermeneutic form of interpreting what was read and heard from the literature and interview data. This involved seeing the parts of phenomena through their relationship with each other in a referential whole.\cite{Segal, 2016} An interpretative

<table>
<thead>
<tr>
<th>JOB FUNCTION/ REPRESENTATIVE</th>
<th>CODE</th>
<th>CODING</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analyst</td>
<td>A</td>
<td>A1</td>
</tr>
<tr>
<td>Communication advisor</td>
<td>CA</td>
<td>CA1</td>
</tr>
<tr>
<td>Competitor</td>
<td>C</td>
<td>C1–C3</td>
</tr>
<tr>
<td>Expert</td>
<td>E</td>
<td>E1–E5</td>
</tr>
<tr>
<td>Banker</td>
<td>F</td>
<td>F1, F2</td>
</tr>
<tr>
<td>Independent investment banker</td>
<td>IB</td>
<td>IB1, IB2</td>
</tr>
<tr>
<td>Lawyer</td>
<td>L</td>
<td>L1–L4</td>
</tr>
<tr>
<td>Licensed gaming venue</td>
<td>G</td>
<td>G1</td>
</tr>
<tr>
<td>Racing industry</td>
<td>Rac</td>
<td>Rac1, Rac2</td>
</tr>
<tr>
<td>Regulator</td>
<td>R</td>
<td>R1</td>
</tr>
<tr>
<td>Shareholder</td>
<td>S</td>
<td>S1–S8</td>
</tr>
<tr>
<td>Executive</td>
<td>T</td>
<td>T1, T2</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>
## TABLE 2 STAKEHOLDER RELATIONSHIPS DURING THE TATTS/TABCORP MERGER PROCESS

<table>
<thead>
<tr>
<th>ELEMENT</th>
<th>STAKEHOLDER</th>
<th>STAKEHOLDER SUB-GROUPS</th>
<th>INITIAL REACTION</th>
<th>CONCERNS</th>
<th>FINAL REACTION</th>
<th>OUTCOME</th>
<th>SAVAGE STAKEHOLDER TYPE¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Shareholders</td>
<td>Largely supportive</td>
<td>Largely supportive</td>
<td>Accepted merger</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Activists</td>
<td>Oppose</td>
<td>Doubts over synergies, undervalued Tatts</td>
<td>Oppose</td>
<td>Accepted merger</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Pacific Consortium²</td>
<td>Hostile proposals</td>
<td>Needed Tatts support</td>
<td>Proposals lapsed</td>
<td>Proposals rejected</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>Racing industry</td>
<td>Largely supportive</td>
<td>Largely supportive</td>
<td>Accepted merger</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Racing Victoria³</td>
<td>Oppose</td>
<td>Less competition for Vic Tab licence, anti-competitive leveraging through Sky, reduced industry funding, licence and retail outlet arbitrage, export revenue loss</td>
<td>Oppose</td>
<td>Dropped case at Tribunal appeal</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Racing Queensland</td>
<td>Oppose</td>
<td>Reduced focus on Queensland racing industry</td>
<td>Support</td>
<td>Commercial agreement</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Racing and Wagering WA</td>
<td>Concern</td>
<td>Less attractive for Tabcorp to pool with RWWA; remove bidder for WATAB wagering licence</td>
<td>Support</td>
<td>Commercial agreement</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>Regulators</td>
<td>Tribunal</td>
<td>Support</td>
<td>Merger in public interest</td>
<td>Support</td>
<td>Allowed merger</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>ACCC</td>
<td>Concern⁴</td>
<td>Harm competition in Queensland electronic gaming machine services</td>
<td>Oppose</td>
<td>Odyssey sold, lost Tribunal appeal</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>Competitors</td>
<td>CrownBet⁵</td>
<td>Oppose</td>
<td>Reduced competition; reduced output; lower growth; leakage to offshore betting operators</td>
<td>Support</td>
<td>Agreed access to Sky racing stream</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Racing.com</td>
<td>Oppose</td>
<td>Remove rival, more power to leverage wagering JVs</td>
<td>Oppose</td>
<td>Dropped case at Tribunal appeal</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>Advisors</td>
<td>Support</td>
<td>Support</td>
<td>Facilitated merger</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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1. Savage, Nix, Whitehead, and Blair (1991) typology identifying four different types of stakeholders, shown in Figure 1.
2. The Pacific Consortium comprised: First State Superannuation Scheme; Morgan Stanley Infrastructure Inc. as adviser to and manager of North Haven Infrastructure Partners ILP; one or more affiliates of Kohlberg Kravis Roberts and Co. L.P.; and Macquarie Corporate Holdings.
3. Joint Tribunal submission by Racing Victoria, Harness Racing Victoria, and Greyhound Racing Victoria.
4. The ACCC’s Statement of Issues outlined five further issues that ‘may raise concern’: removal of potential supplier of totalisator; pooling services; removal of bidder for totalisator and retail exclusivity rights; combining Sky Racing with Tatts’ retail wagering operations; potential foreclosure of competing suppliers of electronic gaming machine systems and services in NSW and Queensland; and reduced competition in the supply of electronic gaming machine repair and maintenance services in Victoria.
approach is appropriate because some aspects of the phenomenon require interpretation to learn about the sense-making process of its participants. As an interpretive analysis, this qualitative approach is interventionist research (IVR); it deploys theory to design and implement a framework, and the results are analysed from both a theoretical and practical perspective. ‘It is an applied discipline owing its existence to practice... IVR has remedial potential to address the research-practice-relevance gap. As Creswell highlights, interpretation in qualitative research can take many forms. It can be adapted to suit different types of designs and is flexible enough to convey ‘personal, research-based, and action meanings’.

3.5 Findings

In line with Yin’s case study method, the case findings were developed by triangulating aspects of the literature, theory, and the case evidence to improve the credibility of the conclusions. This was a non-linear iterative process where the findings informed and reinforced each other in a back and forth way. Creswell suggests working back and forth between the themes and the database (including interviewing and re-interviewing) until propositions are established.

Converging findings from different sources increases construct validity. More than that, Yin suggests this not only reflects the data but also helps to shape the data by sharpening what should be collected and analysed, which helps to organise the case study. Theoretical propositions stemming from ‘how’ questions can be beneficial in guiding case study analysis. This back and forth is also consistent with Eisenhardt and Graebner, who suggest ‘pattern matching’ between theory and data.

4. THE MERGER BETWEEN TATTS AND TABCORP

This section outlines the merger process between Tatts and Tabcorp, describing the background to the merger, the merging parties, the merger rationale and key risks around regulatory hurdles and rival bids. The merger took a longer-than-expected 14 months to close, mainly because of disruptions by regulatory issues and competing bids.

4.1 Background to the merger

In November 2015, Tatts and Tabcorp confirmed that talks to agree on terms for a nil-premium share-swap merger of equals (MOE) had failed. In 2016, negotiations resumed, and, in October of that year, the merger was announced. The agreement came on the back of Tatts’ struggling operating performance (S4, S6, S7, F1) and a higher Tabcorp share price that enabled Tabcorp to sweeten its offer premium (L1, L2). Tabcorp also backed their own more robust management, which was well regarded (E3, F3).

In addition to engaging with Tabcorp in 2015 about a potential MOE, the Tatts board had considered numerous business strategies to improve its performance. These included: discussions held with a rival bidder Pacific Consortium (Pacific); considering its strategic landscape and alternatives; an assessment of potential cost savings; demerging one or more of its businesses or selling assets; and maintaining the status quo. After weighing these alternatives, the Tatts board concluded that Tabcorp was the most attractive option.
4.2 Merging parties

Tatts

Tatts was itself the outcome of a 2006 merger between listed Australian gambling groups UNiTAB Ltd and Tattersall’s Ltd. At the time of the merger announcement, Tatts was an ASX-registered provider of gambling services with a $5.3 billion market capitalisation and around 2,350 employees across its lottery, wagering, and gaming businesses. Independent experts valued it at $5.4–5.9 billion.62 In FY17, Tatts reported revenue of $2.8 billion, EBIT of $386 million, racing industry fees of $190 million, and lottery and wagering tax payments of $1.15 billion to the state government and $217 million federally.63

Tabcorp

At the time of announcing the merger, Tabcorp was a gambling entertainment company with $4 billion market capitalisation. Independent experts valued the company at $3.8–4.3 billion.64 Tabcorp comprised three core businesses – wagering and media, Keno, and gaming services – and employed over 3,000 people. In FY17, Tabcorp’s revenue was $2.2 billion, and its EBIT was $102 million. It paid $406 million in gambling/general sales taxes, $46 million in income tax, and returned $813 million to the racing industry.65

4.3 Merger rationale

In justifying the merger, Tabcorp66 highlights three ‘significant structural changes’ in Australia’s wagering industry. These were the technology shift from retail sales channels to digital, the model shift from totalisator to fixed-odds betting, and the market shift from racing to sports. Tabcorp67 identified ‘substantial synergies’ that would benefit a range of stakeholders, such as state racing bodies, retail venues, sporting bodies, and governments. Tatts68 saw the merger as a way to create a larger, more efficient company offering improved products while reducing costs and increasing revenue. These efficiencies would also directly benefit the racing industry through existing revenue and profit-sharing arrangements.

The independent experts commissioned by Tatts found the merger would create a diversified gambling entertainment company spanning lotteries, betting, and gaming. Additionally, it would net a suite of long-dated licences (except in Victoria); a more balanced portfolio of businesses; and a depth of scale in the capabilities that underpin global competition and growth.69 Further, a unified TAB brand would provide ‘arguably the best opportunity’ to turn around Tatts’ wagering business and meet competitive challenges from corporate bookmakers.70 This strengthening of the company would be underpinned by aligning the product offerings, concentrating marketing on a single brand, consolidating technology expenditure and improving its capacity, better margins as a result of synergy benefits, and more robust racing industry as a result of increased funding and better products.

4.4 Key risks

Regulatory hurdles

There were conditional regulatory approvals for the merger. In March 2017, the ACCC released its Statement of Issues (SOI) with one concern and five other issues it identified that ‘may raise concern’.71 To address these issues, Tabcorp committed to

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62. Ibid.
63. Tatts, 2017b
64. Tatts, 2017c
65. Tabcorp, 2017b, p. 9
66. Tabcorp, 2017a, p. 29
67. Tabcorp, 2017a, p. 17
68. Tatts, 2017a
69. Tatts, 2017c
70. Ibid., p. 121
71. ACCC, 2017b
and ultimately divested from Odyssey Gaming Services (Odyssey), a Queensland poker machines monitoring company (aka slot machines, colloquially known as ‘pokies’). The ACCC’s concern was that the proposed merger was likely to substantially lessen competition in Queensland for the supply of pokies monitoring, repair, and maintenance services by combining Maxgaming and Odyssey (subsidiaries of Tatts and Tabcorp respectively). Notably, the ACCC’s five potential concerns were never satisfied. Four days after the SOI release, the merging parties decided to bypass the ACCC and applied directly to the Tribunal to authorise the proposed merger.

Besides Tatts, three other parties were granted leave to intervene in opposition to the transaction – CrownBet, Racing.com, and the Victorian racing industry (comprising Racing Victoria, Harness Racing Victoria, and Greyhound Racing Victoria as joint intervenors). Attention was placed on concerns surrounding the merger’s impact on the wagering market, the racing media, and the sale of exclusive state wagering licences.72

The Tribunal’s legal test is more comprehensive than the ACCC’s because it includes a ‘net public benefit’ assessment, whereas the ACCC’s test only evaluates the risk that a merger will substantially reduce competition. Focusing on concerns over the merger’s impact on the wagering market, the racing media, and the sale of exclusive state wagering licences, the Tribunal authorised the merger: ‘The benefits to the public... are substantial. The detriments identified by the ACCC and the interveners are unlikely to either arise or are not otherwise material.’73 Racing.com and the Racing Victoria dropped their case. CrownBet and the ACCC separately applied for judicial review of the Tribunal’s original authorisation. This application was upheld and remitted back to the Tribunal for further consideration but ended with approval for the merger to proceed.

The ACCC did not apply for further judicial review of the Tribunal’s decision,74 and CrownBet dropped the threat of taking the Tribunal decision to the full Federal Court for a judicial review when it reached an agreement with Tabcorp over access to the stream vision of Tabcorp’s Sky Racing channel.75 CI explains this was ‘very significant’ for its online operations and profitability, although concerns remained over some advertising restrictions.

Rival offers
During the merger process, Tatts received and rejected rival proposals from Pacific, a consortium of financial investors (see Table 2 for the consortium members). Despite three efforts by Pacific to improve its plan, the Tatts’ board continued to recommend Tabcorp’s proposal, deeming Pacific’s proposal inferior.76

With an understanding of the merger background, the merging parties, their rationale to merge, and the critical regulatory and rival bidder risks around the merger, I can now proceed with an analysis of Tatts and Tabcorp’s stakeholder management during the merger process.

5. ANALYSIS
In this section, I analyse how stakeholder management by Tatts and Tabcorp helped to overcome significant opposition from powerful stakeholders to the merger and ultimately succeed. I apply Savage et al.’s typology77 to examine how the most potentially disruptive stakeholder relationships were managed during the merger process, followed by a discussion of the findings.

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72. Tribunal, 2017
73. Ibid., p. 191
74. ACCC, 2017a
75. Tabcorp, 2017c
76. Tatts, 2016c
77. Savage et al., 1991
5.1 A stakeholder management approach from the beginning

Tatts and Tabcorp’s initial plan to managing their stakeholder relationships was explained in their merger proposal,78 with 5 of the 13 presentation pages devoted to the benefits of the merger to various stakeholders. These were identified as Tatts and Tabcorp’s shareholders, the Australian racing industry, business partners, customers, and ‘our people’ as stakeholders. Except for ‘our people’, each of these stakeholders had one page devoted to how they could expect to benefit from the merger. Tatts79 counted staff as its internal stakeholders and its external stakeholders as its investors/shareholders, customers, suppliers/business partners, government/regulatory agencies, industry partners/associations, and the community.

The day the merger agreement was announced, Tatts and Tabcorp launched ‘the mother of all charm offensives’ (F2) to entice stakeholders, which involved well over 100 meetings with shareholders, the racing industry, and other business partners (T1, F1, L3). All but one of the interviewees (Rac2) were impressed by the effort to overcome various stakeholder opposition. All interviewees acknowledge the critical role this offensive played in getting the merger implemented; none were able to cite precedent in the magnitude of the offensive in an Australian merger. Tabcorp knew its key stakeholders. It had always kept them close, and once the merger was announced, Tabcorp did the rounds to educate them and make it easier for them to understand the transaction (T2). ‘The length they went to in anticipating problems and getting broad stakeholder support was massive. They tried to arrange [it such that] each child had a toy, dealing with the self-interests of each stakeholder and removing key obstacles’ (E1).

It was also emphasised that Tabcorp’s day-to-day relationships with its key stakeholders were embedded in its corporate culture as ‘just the way of doing business’ (L4). Tabcorp, R1 noted, operated in a highly regulated market and so were well familiar with managing stakeholder relationships. ‘It is part of what they do. They know their way around.’ C1 describes the scale of the charm effort as ‘unprecedented’ despite stakeholder management being common practice where regulatory concerns loom large. Rac1 said it was ‘an enviable strategy that was effective’. C1 nevertheless believes Tabcorp could have won the support of the intervenors without going to the Tribunal. ‘Tabcorp was not flexible enough to pivot.’

Tabcorp was seen to have a more robust corporate governance record than Tatts (S7), which ‘treated stakeholders as a cost compared to Tabcorp treating stakeholders as assets – a different philosophical approach between the two companies. Tatts shared nothing with the racing industry. Tabcorp did’ (T2).

Announcing its decision to bypass the ACCC and lodge an application with the Tribunal for merger authorisation, Tabcorp80 highlighted how it had ‘actively engaged with stakeholders’. It noted that ‘it has become clear that many stakeholders are strongly supportive of the transaction and its anticipated benefits’. Also, its application will be supported by ‘substantive evidence from a wide range of industry participants and experts as to the substantial public benefits from the transaction accruing to the racing industry, venue partners, customers, shareholders and the broader community’. The application was endorsed by witness statements from the racing industry in every state/territory, other than Victoria, and

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78. Tabcorp, 2016a
79. Tatts, 2017b, pp. 34-35
80. Tabcorp, 2017d, p. 1
representatives from retail wagering venues, peak retail bodies, and associations representing jockeys and trainers.

Tabcorp argued this stakeholder approach was better suited to the Tribunal process, which tests the balance of public benefits resulting from the proposed transaction against the likely detriments, including reduced competition. In contrast, the ACCC’s informal merger clearance test is limited to assessing whether a proposed acquisition is expected to lessen competition substantially; it cannot consider countervailing public benefits.

5.2 Stakeholder management during the merger

This backdrop of stakeholder management by Tatts and Tabcorp during the merger process requires a more detailed analysis with a particular focus on the most potentially disruptive stakeholder relationships. Informed by the case evidence, the discussion draws on Savage et al.’s four generic strategies for managing four different types of stakeholders, as illustrated in Figure 1.

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81. Tabcorp, 2017d
82. Savage et al., 1991

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FIGURE 1 STAKEHOLDER POTENTIAL TO THREATEN THE MERGER PROCESS

Source: Savage et al. (1991, p. 65)
Savage et al.\textsuperscript{83} categorise stakeholders according to their potential to threaten or cooperate with an organisation. The four stakeholder types are supportive (Type 1), marginal (Type 2), non-supportive (Type 3) or mixed blessing (Type 4). Each type requires different strategies to manage. Supportive stakeholders (defined as a low potential threat and high potential cooperation) are best managed by involvement. Marginal stakeholders (neither highly threatening nor especially cooperative) are best managed by monitoring. Non-supportive stakeholders (high potential threat, low potential cooperation) are best managed by defensive strategies. Mixed blessing stakeholders (equal potential to threaten or cooperate) are best managed by collaboration. ‘Managers should attempt to satisfy the needs of marginal stakeholders minimally and to satisfy maximally the needs of supportive and mixed blessing stakeholders.’\textsuperscript{84} This section illustrates the different stakeholder management strategies during the Tatts/Tabcorp merger process using Savage et al.’s typology of organisational stakeholders.\textsuperscript{85}

Element A: Shareholders

In managing their shareholder relationships, Tatts and Tabcorp highlighted\textsuperscript{86} that the merger would benefit shareholders by creating: 1) a more diversified national portfolio of gambling licences, which would position the group to invest, innovate, and compete in an evolving marketplace; 2) synergies and business improvements; 3) a stronger balance sheet to pursue capital management initiatives; 4) a $500m buyback, and 5) a targeted dividend payout ratio of 90% of net profits after tax. This was ultimately persuasive. Shareholders overwhelmingly supported the merger, with 95.6% of shareholders voting in favour of the scheme, and 98.6% of votes cast in favour.\textsuperscript{87} Tabcorp shareholders never voted. Interviews with both companies and Tabcorp shareholders suggest strong support for the scheme from Tabcorp shareholders (F1, L2, T1, S3).

In the Savage et al.’s typology,\textsuperscript{88} these shareholders were mostly Type 1 stakeholders – either supportive (non-threatening, cooperative) and involved or marginal (neither threatening nor cooperative) and monitored. As shown in Table 2, by extensively involving their respective shareholders, Tatts and Tabcorp managed to contain potential opposition among shareholders to small activist shareholders. A Tabcorp institutional investor who sold out once the merger was announced (S3) highlighted that, even though Tabcorp shareholders overwhelmingly supported the transaction, his fundamental valuations estimated that Tabcorp had paid 15–20% too much. He also believed the transaction was too difficult to value given the opaque nature of disclosure around the benefits.

A few outlier shareholders can be classified as Type 2 stakeholders as they presented a low threat and required no need for cooperation. Two activist shareholders of Tatts, Sandon Capital and Hunter Green Institutional Broking (holding well under 1% in Tatts collectively) called for shareholders to reject the merger because the financial benefits of the proposed merger were skewed in favour of Tabcorp’s shareholders. Sandon Capital\textsuperscript{89} calculated that Tatts shareholders would be giving away almost $1.5bn in value. Charlie Green, the founder of Hunter Green Institutional Broking, called for the Tatts’ board to walk away from the merger given Tabcorp’s FY17 results diminished the value of the merger.\textsuperscript{90} S1 said their calls never

\begin{itemize}
  \item \textsuperscript{83} Ibid
  \item \textsuperscript{84} Savage et al., 1991, p. 72
  \item \textsuperscript{85} Ibid., p. 65
  \item \textsuperscript{86} Tabcorp, 2016b
  \item \textsuperscript{87} Tatts, 2016b
  \item \textsuperscript{88} Savage et al., 1991
  \item \textsuperscript{89} Capital, 2017
  \item \textsuperscript{90} The Australian, 2017
\end{itemize}
gathered momentum primarily because Tatts’ major shareholders were focused on the short-term risk of a sharp drop in the Tatts share price should the merger fail. He noted only one meeting was held with Tatts’ chief executive. ‘There was no point in having more meetings.’

The shareholder relationships held by both Tatts and Tabcorp can be characterised as ‘managerial governance’, where ownership rights are mediated by institutional investors. In turn, these institutional investors leave the strategic and operational control of the firm in the hands of salaried executives who serve as agents for widely dispersed shareholders.91 However, these shareholders played no small role in influencing management, most notably in pushing Tatts towards a merger with Tabcorp. They lent Tabcorp crucial support to proceed and supported Tatts in rejecting rival approaches from Pacific.

While the analysis only spans the Tatts/Tabcorp merger from announcement to implementation, the situation before the merger is instructive for stakeholder management. In Savage et al.’s terms,92 Tatts collaborated with its key shareholders who were Type 4 stakeholders, i.e., mixed blessing with potential to both threaten and cooperate with Tatts. Many interviews (L1, S1, S2, S4, S5, T1) reveal that, in the lead up to the merger, Tatts faced shareholder pressure to improve its performance and renew its strategy, including some consideration of demerging its wagering business. They argued this was a significant influence in getting Tatts to eventually agree on terms with Tabcorp. Tatts’ 2016 annual general meeting saw 22% of its shares voted against its remuneration report,93 the most common proxy for a protest vote (S2).

Tatts’ two largest shareholders at the time, Perpetual and AustralianSuper, signed confidentiality agreements and were ‘brought behind the wall’ by Tabcorp before the merger announcement to show Tatts they had shareholder support and to help bring target directors on board (L1, S2, S5). AustralianSuper went public with its support the day of the merger announcement.94 These large shareholders had been actively pushing the Tatts board for such a merger on the basis that both were losing market share. They cited Tatt’s historic slowness to move to digital platforms (S8), its synergies, limited other alternatives, and the difficulties of demerging its wagering business as reasons in favour of the Tabcorp merger (S5). There was no engagement with other shareholders due to the risk of information leaks before the announcement. Involvement with other shareholders started the day the merger was announced with a joint briefing led by the chairpersons of Tatts and Tabcorp, followed by extensive shareholder and roadshows. One Tabcorp shareholder (S6) said it was apparent that the merger would happen; the only question related to the merger ratio. A preference for not being informed beforehand was expressed to avoid binding confidentiality restraints.

Element B: Pacific Consortium

Rival bidder Pacific Consortium is classified as a Type 3 stakeholder (non-supportive). Pacific disrupted the natural flow of the merger with delays, distractions, and by generating shareholder pressure on Tatts to engage Pacific through altogether three indicative and non-binding proposals (L1, S1, S2, S4, S5). Tatts rejected all as inferior on the basis that they could not reasonably be expected to result in a superior proposal when compared to Tabcorp’s. Tatts adopted a defensive management approach to this Type 3 non-supportive) stakeholder and its potential to threaten the merger.95 C2 highlights that the constraints in Australia, where boards, management,
and shareholders unite, prevented any alternative action. ‘Pacific could get nowhere, only a handful of shareholders reached out to Pacific.’ Pacific’s problem was being unable to find a buyer for Tatts’ wagering business (S6, L1). Tabcorp was seen as ‘the natural buyer’ of the whole group (S6, S8), and there were also potential capital gains tax leakages for shareholders (S8).

For RI, Pacific saw no point engaging shareholders without an agreement with Tatts, which it could not get to participate. ‘It never got to that stage. Only a few Tatts shareholders reached out.’ For its part, Tabcorp was reminding Tatts’ shareholders that Tatts did not have a free option to grant Pacific due diligence given Tabcorp’s exclusivity agreement with Tatts (F1), and it also put the merger timeline at risk. ‘It was in the Tatts’ shareholders best interests that Tatts not engage.’

Element C: The racing industry
Described as a ‘mutually dependent eco-system’ (L3), Tabcorp’s relationship with the racing industry had to be carefully managed during the merger process, starting with significant industry engagement immediately after the merger was announced (T1, L3, E3). According to Savage et al.,96 this is an appropriate strategy for managing Type 4 (mixed blessing) stakeholders with the potential to disrupt and threaten the merger: T2 noted that not one licencing agreement with any racing body was the same, which created different relationships. ‘It was a case by case relationship and approach.’ The critical exception was the ‘absolutely crucial’ (T1) joint venture with Racing Victoria, described as the Manchester United of Australian racing (S1). Racing Victoria was a non-supportive stakeholder that had to be defended against.97

The racing industry is heavily reliant on Tabcorp as ‘a core part of the structure of Australian racing and the largest financial contributor to the racing industry’.98 Through its industry arrangements, licences, and taxes, it returned $813m to the racing industry in FY17, including $325m to the Victorian racing industry and $312m to the NSW racing industry. Tatts paid $190m to the racing industry in FY17 via product and race information fees.99

The merging parties also needed support from the racing industry for their anticipated complicated regulatory process, which was vulnerable to opposition from the powerful racing industry lobby (L2). There were statements to the Tribunal from 23 participants in the racing industry, which the Tribunal described as ‘overwhelmingly supportive of the proposed merger or did not actively oppose the proposed merger’.100 The evidence outlined how the extra funding would enable the industry to increase prize money, retain field sizes, improve racing and patron facilities, and improve animal welfare programs, all of which would benefit the industry as a whole.101 It was noted, however, that some racing bodies ‘relied on presentations given by Tabcorp propounding the benefits of the proposed acquisition, and this may well be the basis of their support’.102

Tatts and Tabcorp identified the benefits of the merger to the racing industry103 as an investment from a more substantial wagering operator to enhance customer experiences. Also identified were: at least $50m in additional annual funding for the racing industry; a pathway to national pooling for pari-mutuel wagering; and more effective competition for the supply of wagering products and services. The Tribunal found the greater scale

96. Ibid
97. Ibid.
98. Tabcorp, 2017b, p. 9
99. Tatts, 2017b
100. Tribunal, 2017, p. 37
101. Tatts, 2017a
102. Tribunal, 2017, p. 39
103. Tabcorp, 2016b; Tribunal, 2017
and lower costs would enable the merged group to compete more effectively than as individual companies. ‘As such, there will likely be greater competition than without the merger, particularly in online wagering, something that would add to the public benefits which would accrue to the racing industry and consumers.’

As highlighted in Element C of Table 2, all state racing peak bodies are classified as Type 4 stakeholders (mixed blessing), except for Victoria, and all, except Victoria, eventually supported the merger. In the cases of Racing Queensland and Racing and Wagering Western Australia (RWWA), acceptance came after they negotiated agreements with Tabcorp designed to protect their interests. Widespread racing industry support for the merger was largely based on higher funding, increased competition and revenue in the wagering market, and the benefits of a national tote.

The Victorian racing industry, a Type 3 (non-supportive) stakeholder, argued the merger would lead to a vertically integrated entity with increased market power when bidding for racing media rights. It would also reduce competition for the exclusive Victorian wagering licence, thus lowering returns to the racing industry. While Racing Victoria was expected to oppose the proposed merger, its level of aggression and vigorous pursuit surprised the merging parties. Historically, relations between Tabcorp and Racing Victoria, which wanted to leverage its position as the premier racing state, had been frosty – for example, Tabcorp’s blackout of Victorian racing vision in 2015. Racing Victoria sensed that their ‘joint venture is not joint in the traditional sense where each party contributes to strategy but a forced marriage under the government’s licensing framework. It is a funding and distribution agreement whereby Racing Victoria is reliant on Tabcorp for money. Tabcorp’s expansion disrupted the relationship by introducing conflicts of interest around competing businesses’ (Rac2).

Racing Victoria had a long history of opposing Tabcorp, including opposing Tabcorp’s proposed merger with UNiTAB in 2006 (L1). T2 noted that both Tabcorp and Racing Victoria like to dominate and control. ‘The relationship was always tense but, in the end, it was commercial despite the tensions.’ There was also a sense that Racing Victoria did not oppose the merger on principle, but rather to retain power (T2) and extract more leverage around its upcoming 2024 licence renewal, which ‘quickly became transparent’ (L3). ‘Racing Victoria faced the biggest risk due to the short-term nature of its licence coming up for renewal. It tried to engage with Tabcorp but [was] dismissed. It could never match their legal challenge at the Tribunal’ (Rac2).

Racing Victoria has also historically clashed with Australia’s second largest racing operator Racing NSW (T2, Cl, Rac1, Rac2), which has long been perceived as ‘tied to the hips’ of Tabcorp (AI). ‘Racing Victoria was not the highest order of business for Tabcorp, which earned more from NSW [and] wants to challenge the incumbency of Racing Victoria as Australia’s premium racing event provider’ (Rac2). Racing NSW was supportive of the merger as it would increase wagering competition, which, in turn, would benefit the NSW racing industry.

Racing Queensland’s initial concerns about the merger were around a reduced focus on Queensland with a shift from being the most prominent racing state under Tatts’ UBET to being one that was less commercially significant to the combined entity. Discussions with Tabcorp led to...
a confidential commercial arrangement that resolved Racing Queensland’s concerns. Racing Queensland’s eventual support for the merger was premised on better returns given Tabcorp’s stronger business when compared to Tatts, technology investments, and success in managing its yield on its fixed-odds book and TAB brand in the retail channel.110 Racing Queensland also saw the funding benefits, plus a potential pathway to national totalisator pooling, concluding the merger would be ‘meaningfully beneficial overall to Racing Queensland’.111 Victoria’s joint venture partnership with Tabcorp made it easier to play catch up with a new offer to Racing Queensland (L3).

RWWA, a public body corporate with the only licence to provide pari-mutuel services in Western Australia, had initial concerns about whether the merger would reduce the commercial attractiveness of Tabcorp continuing to pool with RWWA, given that the current Tabcorp/RWWA pooling agreement expires in 2024.112 Also, RWWA was reliant on the intellectual property rights in the TAB brand. And, as with the other states, removing one potential bidder (Tatts) could reduce competition for the WA TAB wagering licence. Discussions with Tabcorp led to a confidential agreement that provided RWWA ‘with a sufficient degree of certainty’ over these concerns. Subsequently, RWWA concluded that the merger was ‘broadly positive for the Australian wagering and racing industry and in particular for the racing industry and punters in current Tatts states and territories such as Queensland and South Australia’.113 Compared to the agreement with Racing Queensland, which only involved money and investment, RWWA won assurances around a single pool when it privatised (T2). For its part, Tabcorp provided no funding to RWWA to secure any advantage over future privatisation (T2).

Element D: Regulators

The merger was conditional on around 30 regulatory approvals (L2, L4), some more disruptive than others. All these regulators had to be managed but the focus, as highlighted in Table 2, was on the ACCC and the Tribunal. Both are Type 4 (mixed blessing) stakeholders with the potential to either threaten or cooperate with the merger. The Tribunal wielded absolute power to determine if the merger was in the net public interest and thus could proceed. Typically, the ACCC is the final arbiter of Australian mergers. If it determines that anti-competitive aspects of a merger proposal cannot be satisfactorily resolved through undertakings or restructuring the merger, the project collapses. There are legal avenues for the parties to appeal an ACCC final decision, but these are not commonly pursued.

The ACCC was surprised by the parties going to the Tribunal but, with hindsight, the ACCC saw Tatts and Tabcorp had started making contingencies for such a move well before the ACCC’s SOI, including lining up evidence and witnesses (R1). ‘They did a lot of work and lobbying.’ The merging parties ‘expected the ACCC to have negative views on the merger proposal and were far more confident of authorisation based on stronger public benefit grounds’ (L1). L3 added that it is ‘all very well having a sound competition process and legal arguments lined up’, but strong stakeholder support upfront was critical. ‘It was striking how quickly key stakeholders fell behind the merger with the exception of Victoria.’ There were also costs associated with going to the Tribunal, not least providing a platform that intervenors would not otherwise have had (C1).

110. Forbes, 2017
111. Ibid., p. 10
112. Burt, 2017
113. Ibid., p. 7
Adopting a collaborative approach to these Type 4 (mixed blessing) stakeholders, Tatts and Tabcorp poured enormous resources and effort into the Tribunal process. The proceedings were probably Australia’s most substantial merger clearance authorisation process, with over 1,900 documents comprising over 44,000 pages put before the Tribunal. In total, around 82 statements from 69 lay witnesses, an additional 15 third party submissions, and 12 expert reports from 7 different economists were filed in the proceedings.

The Tribunal lists 84 witnesses and interested third parties.

The merging parties acutely understood and meticulously went about preparing the merger case to satisfy the concerns of the Tribunal were they to short-circuit the ACCC – this is a point on which all interviewees agreed. These preparations involved not least rallying expert opinions and stakeholder support immediately after the merger was announced from well over 100 meetings with shareholders, the racing industry, and other business partners (T1, F1, L3). The ACCC’s concern around Odyssey was satisfied, but the five different issues it identified that ‘may raise concern’ were not.

Once the merging parties assessed their prospects for regulatory approval were more likely to come from the Tribunal, they abruptly ended their conversations with the ACCC. The ACCC was left as an opposer of the merger whose remaining concerns did not prevail with the Tribunal.

In addition to offering to divest from Odyssey, Tabcorp on its volition submitted conditions to the Tribunal. ‘No doubt, mindful of the Tribunal’s earlier suggestion that it would prefer to rely on conditions as expressed by participants’, these conditions related to: the supply of Sky Racing to the providers of retail channel wagering; the supply of pooling services to the RWWA; and any future rival pari-mutuel wagering operator in Victoria. Tabcorp also committed to dispute resolution mechanisms and compliance reporting.

Element E: Competitors

Corporate bookmakers and Racing.com are Type 4 (non-supportive) and Type 3 (mixed blessing) stakeholders, respectively. Tatts and Tabcorp successfully defended against them. There was a different outcome for CrownBet with whom Tabcorp collaborated to negotiate a commercial agreement. CrownBet, which led the corporate bookmaker opposition in the Tribunal process, was concerned about the merged entity’s bargaining power to acquire racing media rights, especially digital media rights. There was also the issue of the reduced bargaining power left to the racing media suppliers. It was felt the merger would make those suppliers more likely to sell their media rights to the merged entity than the bookmakers. Access to racing media content is a crucial component of providing wagering services and is where bookmakers would face direct competition with the merged entity. Hence, any threat to media access was an immediate threat to business operations. As shown in Table 2, Racing.com dropped its Tribunal intervention. CrownBet persisted longer, threatening to appeal the Tribunal’s decision before reaching an agreement with Tabcorp over its Sky Racing coverage, which was ‘very significant’ for its online operations and profitability (C1). CrownBet remained concerned, however, about advertising restrictions (C1).

Element F: Advisors

Financial and legal advisors were contracted and paid by Tatts and Tabcorp to provide advice and act in the interests of the respective boards. These are paragon Type 1 (supportive) stakeholders.
They were low threat and highly cooperative throughout the merger process. All interviewees agreed these advisors were a core component of stakeholder management during the process. Sitting in the decision-making ‘engine room’ of both Tatts and Tabcorp, they significantly influenced the strategies and tactics used throughout the merger process and extensively engaged other stakeholders, most notably shareholders, the racing industry, and the regulators.

The financial advisors fronted shareholders and the racing industry in explaining/defending the transaction throughout the process (T1, F2). They were heavily involved in strategising and negotiating commercial terms with CrownBet. They were also involved with the Pacific bid, helping to assess the proposal and devise Tatts’ responses. Towards the end of the merger process, the financial advisors were also responsible for corralling shareholder votes.

In addition to providing legal advice around the merger terms, the legal advisors further devised and led the legal strategies to win support from the Tribunal and, initially, the ACCC. Specialist competition and commercial litigation lawyers not only faced the Tribunal but provided advice, strategy, coordinated statements, and witnesses in building the case.

In developing the framework of stakeholder relationships during the Tatts/Tabcorp merger process shown in Table 2, this analysis reveals the approaches taken by Tatts and Tabcorp to stakeholder management. Their management of six stakeholder relationships during the merger process is explained by applying the documentary and interview evidence to Savage et al.’s typology for identifying a stakeholder’s potential to threaten an organisation.120

6. DISCUSSIONS

The evidence presented in Section 5 reflects the complex social, economic, and political consequences arising from the Tatts/Tabcorp merger process and the disruptions to numerous stakeholder relationships. By drawing out the implicit dynamics within these stakeholder relationships, a hermeneutic approach helps us to understand this complexity. The case evidence suggests different stakeholders played diverse, changing, and often conflicting roles throughout a merger process that both affected the outcome of the merger and was affected by the result. The Tatts/Tabcorp merger process was a hermeneutic web where the parts and the whole could not exist without each other. Like the threads of a network, the stakeholder relationships were enmeshed, mutually dependent, and dialectically imbalanced.

A merger induces varied responses to and from stakeholders, each having different interests and levels of power in the organisation. As Lamberg et al. state,121 such idiosyncrasies mean 'understanding the nature of an organisation’s environment, constituted by a set of stakeholders with acknowledged rights, obligations, interests and power, becomes a critical precondition for successful managerial decision-making'. Furthermore, stakeholder relationships evolve and constitute different episodes to the merger process that can be understood as both ethical and strategic, whose different interests become justified concerning the merger process.122 These findings were borne out in the Tatts/Tabcorp merger, where managing potentially deal breaking stakeholder relationships was crucial to the merger’s approval.

120. Savage et al., 1991
121. Lamberg et al., 2008, p. 5
122. Kujala, Heikkinen and Lehtimäki, 2012
6.1 Balancing and disempowering stakeholder interests

The stakeholder model contends that stakeholder interests should be balanced. Balance, in this context, is understood as managing a process and consideration in decision making rather than distributing financial outputs. Reynolds, Schultz and Hekman explain that balancing stakeholder interests is a ‘process of assessing, weighing and addressing the competing claims of those who have a stake in the actions of the organization’. This balancing process, they add, ultimately ‘includes behaviours that bring some kind of resolution to conflicting stakeholder needs or requests’. It is a critical stakeholder principle ‘as it represents the principal mechanism by which managers “pay attention to”, elicit, and maintain the support of stakeholders with disparate needs and wants’. Stakeholder theory does not give primacy to one stakeholder over another, ‘though there will surely be times when one group will benefit at the expense of others. In general, however, management must keep the relationships among stakeholders in balance’.

It cannot be argued that stakeholder interests can always be made to align. Non-supportive stakeholders are defended by reducing the dependencies that form the basis of their interest. Managing this is often done by allowing some key stakeholder relationships to override and weaken others, and even powerful stakeholders are not immune to being disempowered.

During the merger process, Tatts and Tabcorp adopted both approaches to stakeholder management. Some stakeholder interests were balanced; others were disempowered. The strategies used for each relationship are detailed next.

Shareholders: The merger was conditional on Tatts obtaining the support of 75% of the voting shares. The merger was approved by a massive majority, demonstrating that stakeholder management to balance shareholder interests was effective. Before the merger was agreed to, Tatts was under shareholder pressure to renew its performance and strategy. Such pressure played no small role in Tatts accepting merger terms with Tabcorp. Tabcorp faced weaker shareholder opposition, which was largely around its claimed synergy benefit claims. Tabcorp, too, was ultimately successful in managing such concerns, and ended up securing the support of its shareholders for the merger even though no vote was required.

Pacific Consortium: Tatts rendered Pacific’s hostile approaches ineffective from the start. The consortium comprised what was considered to be credible, serious, and powerful parties. However, Tatts was still able to withstand activist shareholder pressure to engage with Pacific primarily by regaining shareholder confidence after negotiating a merger with Tabcorp. Despite a monumental effort, Pacific was never able to attract support from Tatts’ shareholders. Therefore, it had no way to pressure Tatts to engage with its proposal (R1). The only support for the Pacific proposal came from a few minority activists (Sandon Capital and Charlie Green), which were easy for Tatts to fend off, given their small size.

The racing industry: While the merger was not conditional on racing industry support, the merged groups and the racing industry share a ‘mutually dependent eco-system’ that meant racing industry support was essential (E3). Such assistance was also critical for the parties to persuade shareholders and the Tribunal on the merits of the merger and weaken intervenor opposition. Management of
relationships with the racing industry — not least funding — made the benefits clear to the racing industry (L3). Such effective management was born out of the historical and mutually dependent relationship between Tabcorp and the racing industry. Where those historic relationships were weaker — notably between Tabcorp and RWWA and Racing Queensland — the parties were able to negotiate their conflicting interests (L3, T1). The outlier was Racing Victoria, where the power struggle between Victorian racing interests and Tabcorp/Tatts was not resolved. Instead, Victoria was forced to accept the Tribunal’s findings that Victoria’s conditions were unreasonable.

Overcoming concerns from RWWA and Racing Queensland through commercial ‘peace’ deals with Tabcorp and securing the support of the NSW racing industry allowed the parties to ‘bypass’ Victorian racing interests. This threatened the dominance which Racing Victoria wanted to leverage (L3, F2, T2). Left isolated as the racing industry’s only remaining objector, Racing Victoria was surprised at the ease with which RWWA reached an agreement with Tabcorp (Rac2). ‘They did well in rejecting and isolating Racing Victoria’ (E1), but ‘this left resentment within Racing Victoria which leaves trust difficult to restore’ (Rac2).

Regulators: The merger was also conditional on regulatory approvals. Management’s regulatory focus, as seen in the evidence, was on the ACCC and the Tribunal. While the ACCC forced the sale of Odyssey, it was outmanoeuvred and disempowered in the legal process when Tabcorp appealed to the Tribunal directly and, thus, became subjected to a different test. At the Tribunal, Tabcorp overwhelmed the intervenors by pouring massive resources into the legal case and preparing from the time the merger was announced in anticipation of circumventing the ACCC (L1, L3, E3, Reg1, Tab1). This included lining up expert witnesses and submitting its motions to satisfy the Tribunal’s potential concerns.

Competitors: CrownBet made extensive use of the Tribunal process as an intervenor, a mobiliser of other bookmaker opposition, and an appealer, before eventually navigating the process to reach favourable commercial terms with Tabcorp. CrownBet was the only competitor whose concerns were balanced. Tabcorp ignored the other competitors’ concerns and disempowered Racing.com in particular.

Advisors: While there are conflicts around fees, the nature of the advisory relationship is one of trust and, hence, balance. Advisors were paid to act in the interests of the respective boards. Beyond robust discussions and strategising, there is no evidence to suggest such relationships were unbalanced or materially conflicted during the merger process. Interests between advisors and the boards were mainly aligned, and so required little balancing.

6.2 Inter-group stakeholder relationships
Stakeholder theory is about managing potential conflicts stemming from diverging interests. Firms do not respond to each stakeholder separately but rather to the simultaneous demands of multiple stakeholders. Cording et al. refer to the concept of generalised exchange as an essential assumption in stakeholder theory, whereby a firm’s relationship with one stakeholder influences its relationships with other stakeholders. During the Tatts/Tabcorp merger process, balancing stakeholder disruptions also required managing conflicting inter-group stakeholder interests. I consider a few of these interests in the next sections.

128. Frooman, 1999
129. Rowley, 1997
130. Cording et al., 2013
Shareholders and racing industry: During the merger process, the conflicting interests of shareholders and the racing industry had to be managed. ‘Tabcorp pitched the synergy number at a sufficient level to appease shareholders and yet not alienate the racing industry and regulators. It was a stakeholder balancing act’ (S4). E1 and E3 likened the balancing act to one of trying to ensure that every child has a toy. S4 and S8 highlighted tensions around pitching sufficiently attractive synergy numbers to appease shareholders without alienating the racing industry. ‘Tabcorp knew it needed to share the spoils; shareholders accepted this to get the merger done’ (E3).

Shareholders and Pacific: Management of Tatts shareholders helped ensure that the only support for Pacific’s rival proposal came from a few minority activist shareholders. Despite their best efforts, Pacific was never able to attract much support from Tatts’ shareholders and, thus, no pressure built on Tatts to engage with Pacific (R1).

Racing industry and regulators: By extensively nurturing and negotiating commercial agreements in the cases of Racing Queensland and RWWA, the merging parties managed much of the racing industry support for the merger that was provided as crucial evidence to both the ACCC and Tribunal. Furthermore, opposition from Racing Victoria was a key instigator in Tabcorp using the Tribunal process (E2, Rac2).

6.3 Intra-group stakeholder relationships

Stakeholders are not monolithic, homogeneous groups; instead, they differ widely in terms of interests, involvement, sophistication, and their capacity to influence. By exploring large stakeholder groups, researchers ignore many differences within groups. Lamberg et al. argue that M&A research offers opportunities to re-examine existing frameworks and to develop more dynamic and realistic understandings of what happens within and between stakeholder ‘networks’ to influence organisational actions and outcomes. Evidence from the Tatts/Tabcorp merger process reveals that their stakeholders are not homogenous but a complex mixture of differing and conflicting interests in the merger. These intra-group stakeholder interests had to be managed.

Shareholders: Managing the divergent interests among shareholders was important to securing shareholder support for the merger. Valuations and investment motivations differed between the activists, those invested in both Tatts and Tabcorp, the long-term shareholders, and the retail investors. At the time, Tabcorp itself was a substantial shareholder in Tatts with a 9.99% stake, so Tabcorp was also protecting its interests, and these interests were not necessarily the same as the other Tatts shareholders. A bidding war with Pacific, for example, would have benefitted almost everyone other than Tabcorp. Against the interests of institutional and retail investors, as evidenced by their votes for the merger, the small activist Tatts shareholders provided the sole shareholder opposition.

Racing industry: Intra-group stakeholder dynamics in the racing industry were also managed. Balancing the initial concerns from RWWA and Queensland racing interests through negotiated agreements was crucial to disempowering the most potent industry player Racing Victoria. Racing Victoria was surprised at the ease with which RWWA, in particular, reached an agreement with Tabcorp (Rac2). Securing the support of the NSW racing industry, perceived as historically ‘tied to the hips’ of Tabcorp (A1), along with its well-known clashes with Racing Victoria (T2, C1, Rac2), further allowed the parties to bypass Victorian racing interests and threaten the dominance it wanted to leverage (L3, F2).
Regulators: Tabcorp weakened the ACCC by circumventing its merger review process with a direct appeal to the Tribunal and playing off their different roles. The Tribunal applies a net public benefit assessment, whereas the ACCC assesses the risk of substantially lessening competition. As such, these regulators arrived at different conclusions. The ACCC intervened to challenge the Tribunal’s decision, but never agreed with the final ruling.

Competitors: Tabcorp negotiated a deal with CrownBet that gave it significant advantages over other rival corporate bookmakers, even though they supported CrownBet’s Tribunal application. By reaching an agreement with CrownBet, Tabcorp also weakened Racing.com’s intervention at the Tribunal. Tabcorp was well aware that CrownBet was the most aggressive of the corporate bookmakers because of its unprofitability and small scale. Hence, CrownBet was under pressure to find a game changer. It needed scale and acquiring Tabcorp’s vision rights gave it just that (C3).

What emerges from the evidence is that managing stakeholders involves both balancing and disempowering vital stakeholder interests during the merger process. Tatts and Tabcorp balanced most of their key stakeholder relationships, including conflicting inter- and intra-group stakeholder interests and, in doing so, they were able to disempower the most potentially disruptive stakeholder relationships – most notably, Pacific, the ACCC, and Racing Victoria.

7. CONCLUSIONS
In considering how Tatts and Tabcorp’s stakeholder management was affected by, and how it affected, its merger process, I have viewed Tatts and Tabcorp’s stakeholder management in hermeneutic terms as a dynamic process of the whole (the merger process) and its parts (the stakeholder relationships) coming together through stakeholder management. The case evidence suggests that managing these stakeholder relationships during their merger process was far from static and smooth, but a process was ebbing and flowing through phases of disruption and interruption by multiple stakeholder relationships. This involved both accommodating and disempowering stakeholder interests. Balancing some stakeholder interests allowed the parties to weaken and ignore the concerns of other stakeholders. With substantial risks around the regulators, shareholders, the racing industry, and competitors, the merger could have fallen over. However, Tatts and Tabcorp’s management of the potentially disruptive stakeholder relationships was crucial to see it go through.

This paper paves the way for future research to investigate the multidirectional and dynamic, intra- and inter-group relationships between stakeholders that are characterised by a complex web of relationships between a merger process and its stakeholder parts. It is apparent that, while the merger affected stakeholder relationships, it was in no small part influenced by those very same relationships. The paper facilitates historical analysis, forward assessment, future planning and proactive responding, both for academics in devising theories and explanations and for practitioners in considering, designing, and implementing M&A strategies.
REFERENCES

ACCC (2017a), ACCC won’t seek review of Tabcorp-Tatts determination [Press release]


Agrawal, A. and Jain, P. (2015), Multiple Perspectives of Mergers and Acquisitions Performance, Systemic Flexibility and Business Agility, pp. 385-398, Springer


Baard, V. C. and Dumay, J. (2018), Interventionist research in accounting: reflections on the good, the bad and the ugly, Accounting and Finance


Capital, S. (2017), Tatts Group: Vote AGAINST the Scheme Resolution


Dealogic (2020), [Global M&A volume]


Evan, W.M. and Freeman, R.E. (1988), A stakeholder theory of the modern corporation: Kantian capitalism

Forbes, E. (2017), Statement to the Australian Competition Tribunal, Deagon, Queensland


King, D. and Taylor, R. (2012), Beyond the Numbers: Seven Stakeholders to Consider in Improving Acquisition Outcomes, *Graziadio Business Review*


Segal, S., Guthrie, J. and Dumay, J. (2020), Stakeholder and merger and acquisition research: A hermeneutic approach, paper presented at the Australasian Business Ethics Network (ABEN) Conference, Melbourne

Segal, S., Guthrie, J., Dumay, J. and Segal, S. (2019), Stakeholder and merger and acquisition research: A hermeneutic approach, paper presented at the Australasian Business Ethics Network (ABEN) Conference, Melbourne

Smith, A. (2005), Wealth of nations, University of Chicago Bookstore


Tabcorp (2016b), Tabcorp and Tatts to combine to create a world-class diversified gambling entertainment group [Press release], retrieved from http://www.asx.com.au/asxpdf/20161019/pdf/43c316m5l7hg5w.pdf


Tabcorp (2017d), Tabcorp to seek authorisation from the Australian Competition Tribunal [Press release]


Tatts (2017c), Tatts Group Limited Scheme Booklet [Press release]


Tribunal (2017), Australian Competition Tribunal decision on Tabcorp-Tatts merger


Yin, R. (2014), Case study research: design and methods (5th ed.), Sage Publications
## APPENDIX I  DOCUMENTARY DATA

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<td>Forbes (Racing Queensland CEO)</td>
<td>Statement to the Australian Competition Tribunal</td>
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<td>Merger Implementation Deed</td>
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<td>Recommended combination of Tabcorp Holdings and Tatts Group Limited</td>
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<td>V’Landys (Racing NSW CEO)</td>
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ARTICLE

REVEALING THE PURPOSE OF A STAKEHOLDER ORGANISATION: THE CASE OF A PUBLIC UNIVERSITY RESPONDING TO THE COVID-19 ‘CORONA’ CRISIS

Dr Florian Kragulj, Dr Florian Fahrenbach, Prof Alexander Kaiser, Clemens Kerschbaum & Lisa-Maria Baumgartner

In early March 2020, Austria declared a state of emergency due to COVID-19. Social life was put on hold, public and private organisations were largely shut down, and universities had to adapt their operations. A group of WU1 academics investigate how one of Europe’s biggest public universities in business and economics responded to the crisis and in the process rediscovered its core purpose.

INTRODUCTION

One morning, as Gregor Samsa was waking up from anxious dreams, he discovered that in bed, he had been changed into a monstrous verminous bug. – Franz Kafka2

In this paper, we report on similar experiences as Gregor Samsa in the famous novel The Metamorphosis by Franz Kafka – namely, the ad hoc change of operations of a public university that has been caused by the pandemic spread of the SARS-CoV-2 (‘Corona’) virus, which can be considered a crisis for the organisation. Crises can be characterised as ‘low probability/high consequence events that threaten the most fundamental goals of an organisation’.3 The first days of the event hitting the university provide a unique opportunity to investigate the initial phase of how the organisation responded to the crisis.

We analyse internal and external crisis communication concerning the organisation’s purpose. Considering the ‘what for’ question

1. Wirtschaftsuniversität Wien (German) – The Vienna University of Economics and Business
2. The original quotation reads as: ‘Als Gregor Samsa eines Morgens aus unruhigen Träumen erwachte, fand er sich in seinem Bett zu einem ungeheuren Ungeziefer verwandelt’. (Franz Kafka, Die Verwandlung, 1915)
of the organisation, we understand how the university reacts in this critical phase and how this corresponds to its purpose. Consequently, our research question reads as: ‘What impact does a low-probability-high-impact event have on the perception and enactment of an organisation’s purpose?’

We conclude that such a situation reveals the dominance of particular aspects of organisational purpose over others. It reflects a gradation (or hierarchy) among different ends of the organisation that is not explicitly salient in regular times. Our research contributes empirical evidence to the mostly theoretical debate on single- versus multiple-objective purposes of organisations. In particular, it reinforces the argument that organisations apply heuristics to balance divergent objectives. The low-probability-high-consequence event we draw on provides a singular opportunity to trace the implications of such a heuristic and to hypothesise on the underlying motives and mechanisms.

THEORETICAL BACKGROUND

Organisational Purpose and Components of Purpose

The fundamental dynamic of successful organisations is purpose. While productivity, quality, and customer service create profitability, the force that drives them all is the organisation’s purpose. An organisation encompasses both its purpose and the mechanism established to achieve that purpose. Although the purpose is decisive for organisations, most of them do not state their purpose explicitly. Instead, they communicate essential aspects of their purpose to the respective target group through a mission statement or vision. There is a hierarchical relationship between purpose, mission, and vision of an organisation. Although mission and purpose are often used interchangeably, there is a subtle difference between them. The mission answers the question ‘Why does the organisation exist?’ The purpose is somewhat more general and conceptualised as an object or end to be attained, whereas a mission is a specific task with which a person or organisation is charged. The vision of an organisation answers the question ‘What kind of a future do you, and your fellow employees want to create?’ In other words, we could argue that the commonly tacit purpose of an organisation is externalised through mission and vision. According to Nonaka et al., the externalisation from tacit to explicit is one of the critical concepts not only in knowledge management in general but particularly in the field of knowledge creation. Thus, the formulation of a mission or vision statement can be considered as a knowledge creation process.

Often, the purpose of an organisation is made up of components and is therefore multifaceted. The broader the scope of an organisation’s purpose is, the higher the number of objectives to achieve that purpose is. Moreover, the bigger an organisation is, and the more stakeholders it has, the greater the challenge is to balance particular divergent interests inherent to the purpose. As a consequence, a broad purpose and a large number of stakeholders

10. Thus, the formulation of a mission or vision statement can be considered as a knowledge creation process.
increase the probability that different stakeholders will focus on various components of the purpose. However, it seems crucial that the overall purpose drives the actions of an organisation and that the relation between the constituents of the purpose is transparent.

Unlike the mission and vision of an organisation, its purpose is relatively stable over time. Using the metaphor of a house, one could say that the organisational purpose is the foundation of the building and, on top of this stable foundation, the floors of the house can change, develop or be added depending on various influences and events. At the same time, the purpose is not completely static. Rather, it can be assumed that the purpose will become sharpened over time, which implies that the organisation’s ‘essential’ purpose becomes clearer and thus easier to communicate. Thinking about one’s own life, in most cases recognising one’s purpose in life, one’s own self, and the best version of oneself is a lifelong learning and ‘recognition’ process in which people become increasingly aware of what they are here for. Often, crises or unexpected situations foster this learning process. As we assume, this also holds for organisations. We argue that such a learning process, whether at the individual or organisational level, is closely linked to the creation and/or externalisation of knowledge about the purpose, knowledge about its components, and knowledge about the relation between these components. This specific knowledge is valuable as it enhances our ability to make decisions that are in line with and serve the purpose. Moreover, this knowledge allows for evaluating current and future possibilities for action.

The Case of Public Universities

Public universities can be considered as a prototypical example of a multi-stakeholder organisation. In contrast to private corporations, public universities are not owned by single individuals and, thus, are not intended to deliver on solitary objectives, i.e., shareholder value in a figurative sense. Instead, universities can be considered as an ‘invention of society’ serving its superordinate purposes. In other words, a public university is a ‘community of persons’ that reflects the different stakeholders in society. However, the role that universities should play in society, is subject to heated debates since several decades and has considerably changed in the so-called knowledge society. While universities were expected to produce and reproduce a leading class of intellectuals that served in the local administration in the past, their focus shifted towards vocational education, internationalisation, and increasingly offers mass education to produce and reproduce white-collar workers through the growing numbers of students. As ‘entrepreneurial universities’ or ‘enterprise universities’, especially business schools, are often measured by the economic utility they (and their graduates) produce. Together with the industrial complex

and the government, universities are seen as the ‘generative principle of knowledge-based societies’ and best serve this end in a configuration called a triple helix. Contemporary universities can be seen as purposeful actors who are expected to contribute to the society’s wealth – first, by producing valuable knowledge that serves as input for innovation processes and, second, by transferring this knowledge to society. Consequently, universities carry out three missions: teaching, research, and the so-called third mission (i.e., the entrepreneurial aspect), that is the interaction with the socioeconomic environment.

Crisis and Crisis Management in Organisations

It is inevitable that organisations face adversity and need to adapt to jolts from the environment. In line with the view of a crisis-as-event, we define a crisis as a low-probability-high-impact event that threatens the viability of the organisation and is characterised by ambiguity of cause, effect, and means of resolution. To cope with such a situation, crisis management aims at ‘coordinating stakeholders and resources in an ambiguous environment to bring a disrupted system (i.e., organisation, community, etc.) back into alignment’ and is usually conceptualised in three phases: prevention, response, and recovery. We suggest that the university perceived the SARS-CoV-2 virus crisis as having primarily event-like properties, and the crisis management of the university’s top-management can be summarised by actions to bring the organisation back in equilibrium in the response phase.

The way how people react to and interpret such events or crises may be referred to as sensemaking. It may be defined as the ‘process through which people work to understand issues or events that are novel, ambiguous, confusing, or in some other way violate expectations’. More related to communication, sensemaking refers to ‘processes of meaning construction whereby people interpret events and issues within and outside of their organisations that are somehow surprising, complex, or confusing to them’. These definitions stress the ambiguous and novel nature of an event that interrupts the organisational routines and confuses people who have to deal with the crisis. How the top management deals with the crisis may be referred to as sense giving. Sense giving is concerned with the ‘process of attempting to influence the sensemaking and meaning construction of others toward a preferred redefinition of organisational reality’ by ‘supplying a workable interpretation to those who would be affected’ by the top management’s actions.
Crisis, sense giving is partly accomplished through and accompanied by crisis response communication. Crisis communication often aims at the general public, but communication to internal stakeholders is essential as well. Crisis response communication includes 'conveying ongoing crisis events to stakeholders, decision making within the crisis management team, and organisational decisions regarding whether and what amount of information to share'. It is triggered by a crisis event and subsequently runs iteratively through four phases: observation of the event, interpretation (i.e., making meaning of the ambiguous situation through sensemaking), choice (deciding on an action plan), and dissemination (sense giving through communicating the action to the relevant stakeholders). For universities, crisis communication is necessary when its stakeholders experience physical and psychological harm through school shootings, bombings, sexual abuse, or natural disasters (e.g., hurricanes or wildfires).

**Crisis (Management) and Organisational Purpose**

In sum, we argue that crisis-as-events require crisis management and afford the enactment of sensemaking processes to deal with the ambiguous situation in stakeholder organisations. As a consequence of responding to a crisis, coping with ambiguous and novel situations, the top management of an organisation attempts to influence how stakeholders of the organisation make meaning of the crisis through sense giving, which is partly accomplished through its crisis communication. Therein, considering the purpose of an organisation is decisive and forms a standard for taking actions. We propose that a crisis by influencing processes of sensemaking and sense giving affords a crisis communication that makes the hierarchy between components of the organisation's purpose (in case of a large public university, its first, second, and third mission) more salient than communicated in regular times through the organisation's vision or mission statement. In other words, when multi-stakeholder organisations deal with a crisis, what they stand for becomes visible primarily through its communications.

In the following sections, we demonstrate that analysing the internal and external communications in the early response phase to a crisis (i.e., internal email communications and announcements to the general public) allows for making the enacted components of the organisation's purpose more salient.

**DESCRIPTION OF THE CASE**

**Description of the University**

The organisation subject to our analysis is one of Europe’s biggest public universities in the field of business and economics, hosting about 25,000 students who form the largest group, as well as a combined number of 2,500 academic and non-academic staff. The organisation is hierarchically organised, led by a rectorate consisting of one rector accompanied by four vice rectors for different duties and responsibilities – e.g., teaching and students, research and human resources (HR). There are eleven departments which again consist of a certain number of institutes. The single department subject to this research comprises five institutes, to one of which all authors of this article belong.

As in many organisations, there is no explicit purpose statement. But, as mentioned above, the mission statement can be seen as a written

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34. Hale, 2005, p. 113
35. Hale, 2005
36. Moerschell and Novak, 2020
manifestation of what comes close to the purpose of the organisation. The following mission statement can be found on the university’s official website:

**MISSION STATEMENT OF WU (VIENNA UNIVERSITY OF ECONOMICS AND BUSINESS)**

WU provides space for contemplation and creativity and is a pioneer in research and teaching, all with the goal of increasing economic capability and social prosperity.

WU’s faculty, staff, students, and alumni take social responsibility and are characterised by their expertise, open-mindedness, and eagerness to make a difference.

WU is a leading academic institution and one of Europe’s most attractive universities in business and economics.

True to its role as an open-minded institution, WU also sees itself as an international university, as an important hub for global exchange, and as a place where students and teachers work together. Open-mindedness and diversity were already among the university’s key values at WU’s founding in 1898. WU is committed to the principles of fairness and equal opportunities, scientific integrity, academic freedom, and especially plurality in topics and methodology.

WU is a responsible university.* This means that WU not only accepts responsibility for the quality of its performance in research, teaching, and third mission activities, but also that it acts in a socially responsible manner in all that it does.

As we can see from this mission statement, the communicated purpose of the university is to contribute to social prosperity and economic performance through both research and teaching. In so doing, it accepts its social responsibility and emphasises open-mindedness and diversity. The university acts upon values such as fairness, equal opportunities, scientific integrity, academic freedom, and plurality in topics and methodologies.

Interestingly, the mission statement on the official website does not entirely match with other self-descriptions published in different official university sources. For example, on LinkedIn the emphasis is placed much more on research than on teaching. It seems that the university communicates various aspects of its purpose to different audiences, apparently following the assumption that different stakeholder groups would be attracted by different aspects of the organisation’s purpose. According to our observation of the organisation’s different means of communication, the university would target students, the numerically largest group, with more teaching-related aspects of its purpose whereas the academic staff would be appealed mostly by research-related aspects of the purpose. The different communications of the purpose’s components lead to a certain ambiguity in the salience of the organisation’s purpose. This makes it difficult to judge what the answer to the single ‘what for’ of the organisation would be.

**Description of the Low-Probability-High-Consequence Event**

COVID-19, caused by the SARS-CoV-2 virus, emerged in China at the end of 2019. What was first thought of as a local epidemic, quickly spread around the globe and became a disease of pandemic scale. Gradually, other countries were facing serious, often exponentially growing infection rates that not only took healthcare systems to their limits, but also induced fierce countermeasures like closing public spaces, businesses, and educational

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*As based on the six Principles for Responsible Management Education (PRME)*

institutions in many countries. All of that also happened in the authors’ country of residence.

Our observation period started on a Tuesday morning in early March (Day 1). In the evening, 182 people in Austria were reported as infected.38 Rumours began to spread that some university councils in the same city have decided to close temporarily, while universities in other cities were said to be already shut down. During this day, the rumours turned out to be true. Almost simultaneously, various universities first announced to suspend their regular teaching activities and later communicated the possibility to switch to distance learning formats until the beginning of April, while the government announced a ban of events hosting more than 100 people. Border controls were set up at the borders to countries with an already higher SARS-COV-2 virus infection rate. Just the next day (Wednesday, Day 2), the national government decided to close all schools for the upcoming weeks. Only primary schools were allowed to open to provide childcare as the government wanted to avoid having young children be looked after by their grandparents, the most at-risk group. This measure aimed at slowing the spread of SARS-COV-2, since more than 200 people were infected by the virus at this time. On the third day of observation, the first death in Austria due to the SARS-CoV-2 virus – a 69-year-old man who had visited Italy – was announced. Already 302 cases of infection were confirmed, and only four people had recovered. Several borders were already closed by that time; many others were likely to follow. The university subject to his research was at that time only open for employees. The total shutdown of the university followed on Monday, three days after the end of our observation period. The US, Sweden and many other countries banned flights to Austria and Europe in general. Most shops in Austria ceased their operations during the next week and remained closed.

METHODOLOGY

To analyse how the university responded to this low-probability-high-impact event, we draw on two sets of data that reflect the internal and external audience of the organisation, more precisely, two groups of stakeholders – i.e., staff and the general public. Our primary source is internal email communications that were sent during the initial response phase of crisis management. Although this data is quantitatively limited, it is exceptional from a historical perspective, as after the end of World War II there has not been any large-scale shutdown of universities in Central Europe due to a pandemic. Also, we analyse external communications that were either directly (i.e., press releases and social media posts) or indirectly (i.e. print media, an announcement by the Federal Ministry of Education, Science and Research) addressing the general public. Our analysis starts with the very first public announcement of a neighbouring university to shut down and ends with the first release of comprehensive, though provisional, instructions of the university’s rectorate.

Internal Communications

In this period of roughly four days, 57 emails were sent to the university’s internal mailing lists to which the authors are subscribed. This allowed for analysing all messages that were sent from top management to all employees and all executives as well as communications that were (internally) sent to the mailing lists of the department, department heads as well as the institute and institute heads to which the authors belong. The analysis of email communications was two-fold. First, we analysed emails with respect to their subject and the type of message they disseminate. Second, we plotted the gathered information combined with metadata as a sociogram. This provided additional insights, as it illustrates the directed flow of messages among different hierarchical levels over time.

Content analysis
To inductively analyse the content of email communications, we adopted a text-driven approach.39 We analysed the email messages in two respects: (I) What is the main subject of the message? (II) What is the nature of the message? The content analysis resulted in four subject areas that reflect the main content of the email messages, and four categories on the different nature of messages. The latter reflect different intentions of the sender and imply different levels of obligation for the recipients. Table 1 presents the developed subject categories and different types of messages (i.e., nature of messages).

Table 2 summarises the results and gives the numbers of messages. On the one hand side, we see that the majority of messages addresses the topic of distance learning (58% of all messages). When we only consider the messages that relate to specific and active measures to respond to the event (i.e., distance learning and change in organisational procedures), the emphasis on

### TABLE 1: SUBJECT AREAS AND CONTENT OF THE MESSAGES ANALYSED

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<thead>
<tr>
<th>SUBJECT AREA</th>
<th>NATURE OF MESSAGE</th>
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<tr>
<td>Distance Learning</td>
<td>Discussion [D]</td>
</tr>
<tr>
<td>Messages on switch to distance learning, web technology, e-teaching didactics, e-teaching related software licencing issues</td>
<td>Members of staff exchange ideas, experiences, summarise collected information etc., most commonly in response to a question. These messages are not instructions; they may rather be seen as a collective search for best practices. They provide guidance one may follow.</td>
</tr>
<tr>
<td>Change in Organisational Procedures</td>
<td>Announcement [A]</td>
</tr>
<tr>
<td>Messages on changes organisational procedures and altered (internal) regulations (except learning/teaching), e.g., home office policy, care leave, change of opening hours</td>
<td>These messages inform recipients about upcoming changes in operations, which may (or may not) affect staff members. Although important, they are not necessarily work-related and have informative character, e.g., cancellation of events, closing of library, extension of medical services</td>
</tr>
<tr>
<td>Event Cancellation</td>
<td>Instruction [I]</td>
</tr>
<tr>
<td>Messages informing about the cancellation of (non-teaching) event</td>
<td>These messages give specific work-related instructions (to subordinates) how to behave, e.g., altered work procedures. These are mandatory directives.</td>
</tr>
<tr>
<td>General Advice</td>
<td>Question [Q]</td>
</tr>
<tr>
<td>Messages on how to deal with the situation in daily live, e.g., prevent an infection, psychological hints</td>
<td>Members of staff pose questions on how to proceed under the new circumstances, e.g., what software to use, how to contact students</td>
</tr>
</tbody>
</table>

39. K. Krippendorf, Content Analysis: An Introduction to Its Methodology, Los Angeles, SAGE Publications, 2018
distance learning becomes even more prominent. On the other hand, the nature of messages indicates a state of disorder in the department/institute: while only 28% of all messages give clear instructions (leaving unconsidered that some messages only relay and reinforce instructions), 37% of all messages reflect discussions among members on the operational level of the department/institute seeking for ideas and best practices on how to deal with the altered situation on distance learning.

**Sociogram**

As a second step, we combine the results of the content analysis with metadata of the email communications and conduct a network analysis. In Figure 1, we plot the resulting data as a sociogram, i.e., a systematic graphical representation of individuals as nodes and the relationships between them as edges. This graphical representation of email communications on the institute, department, and university level (from the restricted perspective of the authors) provides additional insights. It illustrates the directed flow of messages among different hierarchical levels over time and visualises how the interaction of actors is shaped and who plays a central role.

Table 2 presents a quantitative depiction of the results.

### Table 2: Quantitative Depiction of the Results

<table>
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<tr>
<th>Nature of Message</th>
<th>Number of Messages</th>
<th>Distance Learning</th>
<th>Change in Organisational Procedures</th>
<th>Event Cancellation</th>
<th>General Advice</th>
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<td>Instruction</td>
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<td>7</td>
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<td>1</td>
<td>–</td>
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<tr>
<td>Question</td>
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<td>–</td>
<td>–</td>
<td>–</td>
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<td><strong>10</strong></td>
<td><strong>9</strong></td>
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</tbody>
</table>

Figure 1 depicts the communication as an exchange of messages (edges) between staff members or groups of staff members (boxes). Each box represents an anonymised individual (e.g., Research and Teaching Assistant 3). The colours of the boxes represent the organisational hierarchy, black boxes represent top management executives, grey boxes represent middle management (department or institute level), and white boxes represent the operational level. Ellipses represent groups of people (on middle management or operational level); individuals represented by boxes may belong to these (and other) groups. Each directed edge represents an email message sent. The shape of the edge represents the subject of the message: Bold lines reflect distance learning; irregularly dashed lines represent change of organisational procedures, and all other subjects are represented by thin dashed lines. These lines are labelled with their relative timestamp (Day 1 to Day 4) and a code reflecting their nature (see Table 1). The start and the end of the observation period are indicated by additional labels on the respective edges (‘Day 1. 12:08 [A] {Begin}’ and ‘Day 4. 10:09 [I] {End}’).

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FIGURE 1: SOCIOGRAM DEPICTING THE EMAIL COMMUNICATIONS
Studying the sociogram (Figure 1), we can make several observations. First, we observe a predominant focus on a single topic. The vast majority of messages concerns distance learning. There are no messages on research or the university’s third mission. This holds particularly true for the messages sent by top management. The very first message sent by the rector was on distance learning, followed by two emails on the same topic sent by the vice rector for teaching and students on the same day. Compared to the rector and the vice rector for teaching and students, the vice rector for research and HR has only sent two messages. Only on day four, the vice rector sent an instruction on altered HR practices. Second, despite the direct communication of top management to operational level employees, there is considerable ambiguity. On the one hand, there are hardly any messages sent from top management to middle management. Top management directly addresses all staff members, which indicates a rather flat organisational hierarchy in terms of communication pattern and may avoid time lags in relaying important information via middle management. On the other hand, we see a considerable amount of communication classified as ‘discussion’ instigated by operational level staff on the department/institute level. All these messages are exclusively on the topic of distance learning and appeared after the initial messages of the top management. This indicates a state of ambiguity among staff. Third, we observe a division of tasks. We see that the Head of Department A sent instruction emails on short notice (three messages on the first day). At the same time, the Head of Institute A.A (i.e., a subunit of department A) engaged in the discussion on distance learning. There were five messages (including two ‘instruction’ emails) before the first statement by the top management.

External Communications
As we cannot rule out that internal communications are biased towards the expectations of internal stakeholders, we complement our analysis by considering the external communications to the general public. In so doing, we draw from four sources, i.e., print media, the information given by the Federal Ministry of Education, Science and Research, various social media channels, and press releases by the university. These address the general public in two ways. While the first can be considered as indirect channels of communication, the latter allow the university to directly approach the general public.

Indirect communications to the public
Daily updated Austrian media coverage during the observation period was gathered from the wiso-net.de database and a complimentary search on Google. In total, 26 relevant articles were found. Nearly half of all items concerning universities in the observation period were published on the first day. Almost as many were publicised the day after, however, from then on, universities were only mentioned rarely and parenthetically. Generally, all articles described the shutdown of universities and the changing teaching situation, and almost solely addressed its consequences. Notably, there was one exception that dedicated several sentences to the changes and efforts of universities’ employees. Also, we did not observe communications on the other two missions of the university.

Also, publicly available communications of the Federal Ministry of Education, Science and Research were gathered. A letter to all university and college administrations was published on the first day of the observation period. It mainly included information about teaching activities and upcoming events, but also mentioned that research should be maintained regardless of the measures taken.
Direct communications to the public
We also analysed the communication channels that the university uses to directly approach the general public. Accordingly, social media, including the university’s Facebook, Instagram and Twitter accounts, as well as press releases and entries on the organisation’s website, were scanned. Within the observation period, only two COVID-19 related post was published, containing information that teaching activities would be switched to distance learning. Despite social media, the university announced no public statement on the situation.

DISCUSSION OF FINDINGS
The analysis presented in the sociogram (Figure 1) shows that most internal communication messages sent during the observation period concern teaching-related aspects; research and the third mission were not mentioned. Together with the analysis of the external communications of the university, we can conclude that teaching-related issues were the main focus of communication at the beginning of the crisis. Thus, following our argument that an organisation’s purpose manifests itself in the organisation’s communication, we can conclude that teaching plays an important, if not the main role in the purpose of the university. Considered in isolation, that finding is not surprising. Naturally, teaching is a main pillar of the purpose of a university. What is interesting though is that the analysis of internal and external communication further reinforces the perception that the equilibrium of the university’s emphasis underwent a serious realignment towards teaching during the time of our observation. Facing the crisis, at least rhetorically, clarified some sort of hierarchy amongst the different aspects of the university’s purpose. It seems as if the single – or call it most relevant – ‘what for’ of the organisation emerged as a result of the organisation facing the low-probability-high-impact event of a pandemic crisis.

With this research, we contribute to theory in the following ways. First, based on the assumption that a multi-stakeholder organisation has a purpose which consists of several components, we demonstrate how a crisis, such as the outbreak of the SARS-CoV-2 virus, makes the hierarchical relationship between these components of an organisation’s purpose more salient. We find empirical evidence for this proposition in the email conversations of a large public university. In this regard, teaching was the main content of crisis communication (by the universities top management). The mechanism to explain this finding can be found in an evolutionary perspective. If an organisation faces an existential crisis, the top management has to make sure that the essential purpose remains in reach to ensure the organisation’s survival. As in this case, the funding of public universities often relies on the number of students they can train, which makes it important for them to reach the number of graduations negotiated with the government.

Second, we emphasise the role of a large public university as a multiple-objective organisation that needs to consider several stakeholders. While the university’s communication takes into account several stakeholders and communicates multiple components of the organisation’s purpose in normal times (e.g., underlining the third mission and the entrepreneurial aspect to acquire funding), in times of an existential crisis, the university’s communication focuses on the most important components of its purpose (which is, as the email communications analysed clearly show, not the entrepreneurial or enterprise aspect but the safety of students enrolled and the smooth continuance of
teaching to ensure negotiated number of graduates). Based on these findings, the imperative of the entrepreneurial or enterprise university may be rather seen as organisational rhetoric and as a figure of speech rather than as an existential part of the case university’s purpose. Even though the third mission and the entrepreneurial importance are stressed in normal times, this is not supported by the crisis communication analysed.

Third, adopting a knowledge and learning perspective, we may argue that the externalisation of the organisational purpose, its components, and the hierarchy between these components creates organisational knowledge that can be further utilised.

**IMPLICATIONS FOR THEORY AND PRACTICE AND FURTHER RESEARCH**

Based on our findings, we draw several implications for practice and theorising on organisational purpose, not only in universities but also in other organisations.

Paradoxically, it seems that a crisis, such as the one we have been going through, has some positive effects on organisations, particularly if we study their purposes. A crisis helps to shape the purpose, to uncover the different components of a purpose, and to make the hierarchy between these components visible. Furthermore, a crisis forces an organisation to adapt their products, practices, or strategies quickly. Such a change may help redefine the existing purpose of an organisation and, thus, to uncover the core purpose of an organisation. If a decision maker utilises the window of opportunity that a crisis provides, the implications mentioned may have a positive effect on the future development of the organisation.

However, a crisis also has severe adverse effects. For many organisations, a crisis is critical to their existence and may even result in their collapse. Therefore, further research is needed to examine how to exploit the above-mentioned opportunities that a crisis provides, without threatening the organisation’s existence. One possibility could be to induce a kind of ‘monitored crisis’ that is well accompanied. According to Nonaka and Takeuchi, creating a ‘creative chaos’ is one out of five enabling conditions for creating new knowledge in organisations. ‘Creative chaos’ stimulates a sense of crisis and change. However, benefits of creative chaos are only possible, if members can reflect on their actions. Otherwise, chaos leads to destruction.

Based on these potential implications and challenges, future research may cover the following areas:

- Investigating the concept of purposing which refers to a ‘continuous stream of actions by an organisation’s formal leadership that has the effect of inducing clarity, consensus, and commitment regarding the organisation’s basic purposes’.
- Investigating how an organisation could unlearn those aspects of the purpose that are not part of its core.
- Based on the assumption that organisational learning creates organisational knowledge, it can be argued that shaping and clarifying the organisation’s purpose could be a result of a continuous organisational learning process. Therefore, further research is needed on how organisational learning processes need to be designed in order to generate knowledge about the organisation’s purpose and its components.

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In terms of uncovering the different components of a purpose, it is also important to consider the possibility that achieving the different components may have conflicting effects. In this regard, an organisation faces some kind of optimisation problem at the level of its purpose. Further research shall, therefore, investigate whether existing multivariate optimisation methods could also be used at the level of organisational purpose.

Further research should investigate the substance of the debate on the ‘enterprise’ or ‘entrepreneurial university’, and whether the third mission defines and shapes the core purpose of public universities.

This research endeavour carries several limitations. First, besides very limited connections with evolutionary change, we do not uncover the mechanisms and motives that cause one component of the purpose becoming more salient over others in times of crisis. Second, the data obtained came from a very limited timeframe, i.e., from when the university started crisis communication to the point when a preliminary new ‘normal’ was established. As a result, we do not know whether the communications analysed are performative, i.e., whether they will translate into actual behaviour and concrete actions in the long run. Third, although we diversified the data source we relied on, we cannot rule out that the university communicated what stakeholders and societies expected to hear. Further longitudinal research should analyse other means of crisis communication and triangulate this with in-depth data of the perception of stakeholders.

REFERENCES


Cornelissen, J.P. (2012), Sensemaking Under Pressure: The Influence of Professional Roles and Social Accountability on the Creation of Sense, Organization Science, vol. 23, no. 1, 118


Moreno, J.L. (1934), Who Shall Survive?: A New Approach to the Problem of Human Interrelations, Nervous and Mental Disease Publishing, 1934


Universities are under ever-increasing political and commercial pressure to engage with industry to convert their research into viable value-adding products and services. A longitudinal study by the Scandinavian researchers examining 25 university-industry collaborations suggests that aligning goals and creating a flexible setup between partners in the early stages of engagement is crucial for its success.

INTRODUCTION

This study examines the dynamics of university-industry collaboration (UIC) from a micro-level perspective. Emanating from policy considerations, UIC research has predominantly been conducted from a macro-perspective, leaving a dearth of more detailed accounts of the dynamics behind the success and failure of UICs, especially during the initiation phase. We thus explore the processes underpinning the criteria for UIC success. Adopting a dilemma approach, which is commonly used to address complex problems, we focus mainly on the early phases of UIC in a longitudinal study of UICs established between researchers and students at two Scandinavian universities, namely Aalborg University in Denmark and the Norwegian University for Life Sciences in Oslo, Norway, and the respective business communities situated in and around the two universities and the separate science parks.

1. Bjerregaard, 2009; Jones and Coates, in press
2. De Wt-de Vries, 2019; Mascarenhas et al., 2019
3. Suomi et al., 2019
There is a long history of scientific research as the basis for technology, economic growth, and national security, at least since the birth of the semiconductor industry in Silicon Valley in the mid-20th century. However, Bush had the somewhat romantic idea that free, basic research could be combined with the demands of capitalists and the welfare state. Machlup broadened the scope to other domains, marking the start of a discourse on a knowledge society, in which universities also played a central role. In its modern form, UIC typically takes place within the context of theory-and policy-driven expectations of a triple helix model of innovation or Mode 2 research, which both suggest collaboration between universities, industry, and public organisations that goes beyond the mere application of scientific knowledge to societal problems and instead implies different kinds of research efforts, with all parties involved in the process. A frequently cited source is Perkmann and Walsh who remarked that external resources for innovation are increasingly important to organisations and suggested a research agenda from an ‘open innovation’ perspective for exploring the characteristics of university-industry relations.

Orienting UIC in the broader field of open innovation (OI), Bogers et al. explored the OI field and the need for more permeable boundaries between different levels of analysis to address critical topics. One such example is to address OI strategies and OI design in light of behaviour and cognition. This highlighted, on the one hand, intersections between intra-organisational issues of how individual-level behaviours and attributes are adopted concerning OI and, on the other hand, the inter-organisational topic of how new constellations combine value creation and value capture. Suomi et al. questioned the oversimplified explanation of a ‘shotgun wedding of industry and academia’ and instead suggested a dilemma approach to understand the dynamics of the interactions that occur with UIC.

The once savoured values of academic freedom and researcher autonomy that have traditionally been associated with the scholarly output of universities are changing drastically, generating notions such as research impact, value for money, and output measurement. In the past two decades, this has resulted in discussion about what constitutes universities’ main activities. In the past, the two main activities were teaching and research, but a third core activity has been added, namely engagement with society, also called UIC. As such, research and the increasing focus on external research funding are currently transforming universities from ivory towers to knowledge brokers. According to Friesike et al., the traditional gap between research-driven universities and application-driven private companies is diminishing rapidly.

5. Bush, 1945; 1960
7. Etzkowitz, 2005; Leydesdorff and Etzkowitz, 1996
8. Gibbons et al., 1994; Novotny et al., 2001
10. Bogers et al., 2017
11. Suomi et al., 2019
13. Kok et al., 2010; Van Dierdonck et al., 1990
15. Bruneel et al., 2010; Hughes and Kitson, 2012
16. Barnes et al., 2006; D’Este and Patel, 2007; Rasmussen and Rice, 2012
18. Friesike et al., 2015
Presently, universities play a role in society not only as transmitters of knowledge through their graduates and academic research papers produced but also as co-producers of knowledge and even co-inventors of knowledge and new technologies. Governments worldwide are actively encouraging collaboration between universities and private companies in their quest to ramp up innovation. Many national governments have aimed to increase the research productivity of universities. This has spurred a growing trend in projects and collaborations between industry and universities, which has brought with it challenges related to these new types of interaction between the academic and business worlds.

Many universities are working to strengthen their ties with industry, as the sharing and combination of information between academic science partners and industrial science partners are regarded as vital parts of the modern university’s knowledge creation process. Some universities, for example, Stanford University and Massachusetts Institute of Technology in the United States, have longstanding traditions of intense collaboration with industry and have successfully done so for decades. However, other universities are at the beginning of this journey and are facing the challenge of integrating the separate efforts of multiple individuals who may have varying motivations and capacities to interact.

The UIC literature has grown considerably during the last decade. The field of research has been described as multifaceted and ambiguous, and fragmented and lacking a comprehensive view. This scenario has led to the inclusion of a broad range of concepts. For example, in their review of the field, Sjöö and Hellström mentioned ‘academic entrepreneurship’, ‘mode 2’, ‘outreach’, ‘third mission’, ‘triple helix’, ‘university-industry interaction/collaboration/cooperation’, ‘public private partnership’, ‘co-production’, and ‘technology transfer’ as expressions of UIC. At times ‘the surrounding society’ is used as a broader notion than ‘industry’ and the ‘third mission’ is more broadly understood as ‘all activities concerned with the generation, use, application and exploitation of knowledge and other university capabilities outside academic environments’. In addition, widespread concepts such as the ‘triple helix’ have evolved, thus altering definitions of concepts and their connotations as well as their relationships with each other. In response to this state of the field, many systematic literature reviews and bibliometric studies have recently emerged, suggesting clusters of topics within UIC research.

While these efforts will likely contribute to greater coherency and understanding in the overall field, helping to avoid the anecdotal motivation of further research, there are shortcomings and questions.

20. Barnes et al., 2002
21. Lewis, 2014
22. Thursby and Thursby, 2002; Thursby et al., 2009
23. Wessner, 2013
24. Grant, 2002
25. Skute et al, 2019
26. Ankrah and Al-Tabbaa, 2015; Perkman et al., 2013
27. Sjöö and Hellström, 2019
30. Galvao et al. 2019
31. cf. Ankrah and Al-Tabbaa, 2015; Galvao et al., 2019; Mascarenhas et al., 2018; Secundo et al., 2019; Sjöö and Hellström, 2019; Skute et al., 2019
left unanswered, notably on the micro-level. As Sjöö and Hellström\textsuperscript{32} remarked, meta-studies tend to gloss over details of the main variables at play, and factors are not always conceptualised causally, leaving unanswered questions about the direction and combinatorics of influence between factors. In a similar vein, Mascarenhas et al.\textsuperscript{33} pointed out that it remains unclear whether universities’ and companies’ strategies are balanced and whether outcomes are effective for all stakeholders. Furthermore, there are many unanswered questions about how collaborative links initially develop, including partner selection, the way partnerships function, and the types of interaction that comprise different constellations.\textsuperscript{34} Rajalo and Vadi\textsuperscript{35} accentuated the persistent research gap regarding the understanding of the underlying mechanisms of UIC, including enablers and barriers. Earlier research often addressed the ‘cultural divide’ between UIC partners and highlighted that different institutional norms, trust, and prior knowledge of partners were critical, as well as the organisational and managerial skills required to handle these challenges. Both Ankrah and Al-Tabbaa\textsuperscript{36} and Skute et al.\textsuperscript{37} concluded from their literature reviews that there is a need for longitudinal studies on UICs to capture the nuance and depth of their complexity.

Research that can improve the probability of achieving success with the effort and resources currently invested in this sphere globally is thus both critical and timely, not only for the university sector but also society as a whole. The objective of this article is to contribute micro-level insights for the improvement of UIC by studying enablers and barriers during the early phase. Activities in this phase typically include partner searches, the establishment of partnerships, and the initiation of projects. By studying the early phases, particularly partners’ motivation for participating in UICs and how to initiate UICs, this research contributes by improving UIC practices.\textsuperscript{38} The results can also help partners achieve the best possible outcomes by providing timely and valuable insights\textsuperscript{40} that will help improve innovation outputs. This objective motivated this qualitative and explorative micro-level study to address fundamental questions about the characteristics of these dynamics:

\textbf{RQ:} How should we understand the processes underpinning the criteria for success during the early stages of UIC?

The remainder of the article is structured as follows: ‘Theoretical underpinnings’ provides an account of earlier research and the theoretical assumptions of UIC based on two subdomains of early collaboration phases: 1) enablers and barriers to finding the right partner and the formation of collaborations and 2) enablers and barriers to the initiation and implementation of UICs. We also present the dilemma approach and Second Track processes to challenge conventional thinking about the norms and challenges associated with UICs. ‘Methodology’ explains the methodology applied, including data collection and analysis. ‘Empirical findings’ presents the empirical data, followed by discussion and concluding remarks that address potential avenues for future research.

\begin{thebibliography}{99}
\bibitem{32} Sjöö and Hellström, 2019
\bibitem{33} Mascarenhas et al., 2018
\bibitem{34} Ibid.
\bibitem{35} Rajalo and Vadi, 2017
\bibitem{36} Ankrah and Al-Tabbaa, 2015
\bibitem{37} Skute et al., 2019
\bibitem{38} Pertuzé et al., 2010
\bibitem{39} Lazzarotti et al., 2016a; 2016b
\bibitem{40} Nielsen, 2016
\end{thebibliography}
THEORETICAL UNDERPinnings

Our research is underpinned by several recent systematic literature reviews and bibliometric studies of the UIC literature as well as studies on specific sub-topics of interest.

Literature review

Many of the topics addressed during the maturation process of the still-emerging field of UIC have informed the current study. While there have been interesting findings in the field, they are often somewhat anecdotal. The field also suffers from a lack of theoretical consistency in many new and some well-known, older studies as well as recently identified research gaps. At the most basic level, Rajalo and Vadi remarked on the dominance of macro- and meso-level studies and welcomed more micro-level studies. However, while qualitative micro-level studies may have poor statistical validity given the few or even single cases they often consider, they can contribute deeper insights on the dynamics of the interplay between already acknowledged factors in UICs (i.e., contributing insights about conceptual validity). The validity of that considerably limited number of cases can also be enhanced through better theory and the consistent design of single-topic studies, embedding these in the theoretical context of earlier findings.

UIC research can be improved by studying successes and failures or, as we prefer to say, by studying friction, complexities, and contradictions (i.e., by focusing on dilemmas and paradoxes). This can deepen the understanding of important known factors. Rajalo and Vadi suggested that a crucial research gap lies in ‘the limited understanding of implicit key factors that affect the collaboration process’ (p. 43) and operationalised the challenge by focusing on two key preconditions on both sides of UIC, namely ‘motivation’ and ‘absorptive capacity’. Based on their bibliometric review of the UIC literature, Skute et al. argued that new success factors should be studied by evaluating failure at different stages of UIC, as the governance mechanisms may vary by stage. Furthermore, the heterogeneity of UIC partners is a topic that is rarely addressed. All these issues point at considerable complexities that have been only rarely addressed by UIC research.

Among the factors motivating UIC and contributing to the success or failure of individual collaborations is complementarity. This factor is prominent, as the complementarity of competences, rather than their redundancy, is the main argument for UIC. Although it is the main motivation for UIC, it remains unclear as to how complementarity is identified by UIC partners and how the actual matchmaking process occurs. Skute et al. noted longstanding calls for research on the selection processes employed in UIC. Further, Perkman and Walsh addressed the need to understand firms’ strategies for identifying and selecting academic partners. While this article is well cited, the call for further research has not yet been answered. Link echoed this call for research, arguing that the industry’s criteria for the choice of specific academic partners in UICs is an underexplored topic. In addition, Skute et al. suggested that future research should focus on the strategic and cultural fit between partners to understand how the organisation and management of UICs can become more successful.

41. cf. Ankrah and Al-Tabbaa, 2015; Galvao et al., 2019; Mascarenhas et al., 2018; Secundo et al., 2019; Sjöö and Hellström, 2019; Skute et al., 2019
42. Rajalo and Vadi, 2017
43. Rajalo and Vadi, 2017
44. Skute et al., 2019
45. Ibid.
46. Perkman and Walsh, 2007
47. Link, 2015
48. Skute et al., 2019
In their systematic review of the UIC literature, Sjöö and Hellström concluded that one of the strongest predictors of UIC was prior experience and commented that boundary-spanning is likely to create a basis for collaborative experience. This could take the form of industry-funded PhD students, temporarily hired researchers in the industry, or the transfer of research results. Hence, personal relationships that cross boundaries between university and industry can build familiarity, trust and a shared history and can facilitate understanding of other parties’ perspectives, which, in turn, is associated with the institutionalisation of collaboration. Just like the notion of ‘culture’, ‘prior experience’ is a container for many interesting aspects of UIC that have not yet been explored. After examining aspects of universities’ OI capacity, Huggins et al. concluded: ‘The focus of future developments should be on furthering our understanding of the nature of “openness” in a more holistic sense, and which more broadly encompasses the plethora of interactions and relationships that members of universities engage in’. 

In theoretical speculation about which factors help partners identify complementarity and determine the right fit between partners, previous experience with collaboration, network centrality, and proximity have been suggested as related physical and cognitive concepts. As part of their recommendation for further research, Skute et al. pointed at how the central partner in UICs affects the generation of innovative outcomes. They also suggested further research into other factors complementing or mediating the impact of the proximity of partners, such as the availability of research resources, complementarity, and absorptive capacity.

The issue of the formalisation of routines and the management of UIC is a topic of recent controversy and perhaps reflects normative views as much as empirical observations. For instance, Rajalo and Vadi insisted that ‘the relevance of joint structures cannot be overstated’, and Leichnig and Gegenmüller suggested universities’ alliance management capabilities (alliance proactiveness, alliance transformation, interorganisational coordination, and interorganisational learning) are decisive for UIC success. Sjöö and Hellström remarked that university conditions such as their specific organisational structures and funding-characteristics are likely to affect boundary-spanning processes, at least to some extent, and that crossing organisational boundaries is, in turn, likely to affect formal structures. However, their review did not identify these effects. Further, Ankrah and Al-Tabbaa argued in a literature review that UICs are managed rationally while de Wit-de Vries et al. concluded that UICs are managed informally or even irrationally. In contrast, Skute et al. proposed that UICs may need goal-oriented management and that, from the firm perspective, control mechanisms may be beneficial while researchers’ demand for autonomy may generate a balance between a control-based and a more hierarchical governance style.
An additional complexity regarding the degree of formalisation of UIC management is the consideration of the different phases of collaborative efforts. Skute et al. suggested a possible need for formal governance mechanisms to reduce uncertainty at the initiation of a project, while later phases may allow partners to emphasise informal mechanisms such as trust as the UIC gradually develops. This may explain the success or failure of UICs, as neither the goals nor the respective contributions of partners can be fully defined in advance. The researchers thus suggested more cross-stage studies to shed light on these needs. In a similar vein, de Wit-de Vries et al. suggested that the differences between their own and Ankrah and Al-Tabbaa’s findings may lie in their focus on different stages in the UIC process. Nevertheless, de Wit-de Vries et al. argued that this difference taps into a broader debate in which UICs were found to have a more informal irrational management style than often assumed. They thus concluded that there is a need for increased understanding of the use of informal or formal management in different conditions.

There is room to contribute to fundamental insights about collaborative processes to flesh out the logics and relationships behind the superficially determined success factors and expectations of ‘one-size-fits-all’ recipes for best practices. There are strong indications in the literature that UICs rely on emergent processes that are still poorly understood. Such insights and speculations about the underlying logic are reflected in Sjöö and Hellström’s summary of the reasoning behind UIC and Skute et al.’s reflection on the state-of-the-art in UIC research and the promises of a process view:

‘Over time, a number of individuals may accumulate experience in university-industry collaboration to such an extent that it affects university or corporate culture. As researchers and industry representatives build collaboration experience, an understanding of each other’s routines and time horizons will increasingly be based on actual experience rather than preconception. Working together may also settle concerns about losing control over academic freedom or trade secrets. When such obstacles are overcome, a collaborative culture may develop. A collaborative culture implies long-term, stable intentions to collaborate. However, it may also lead to a form of social stratification based on status centrality, where the most reputable, successful and well-connected researchers at the highest-ranked universities attract the most R&D-intense firms as collaborating partners’ (Sjöö and Hellström, 2019, p. 281f).

‘The process perspective (interaction process and knowledge transfer cluster) of U–I collaborations is not a core research stream; however, there is a strong need for future examinations, especially if we want to understand the complex processes of interaction between academia and industry ... What is the U–I collaboration journey, when has this journey started, when has this journey concluded, does it require particular interactions to progress; and what remains constant and what changes throughout the process of interaction between U–I partners?’ (Skute et al., 2019, p. 938).
A fundamental aspect of viewing UIC as a process is to acknowledge the reciprocity of interaction. In their literature review, de Wit-de Vires et al.\(^70\) found a significant focus on academic partners but very limited attention on the role of industry in UIC, which risks underestimating the crucial role of companies’ efforts to absorb knowledge and communicate needs to their partners. Hence, there is a need for further exploration of the role of companies and how they manage their partnerships. Furthermore, as the exchange is bidirectional, there is a need to understand better what academics gain from their interactions with firms that provide valuable results and meet the needs of industry partners. In addition, current research has often overlooked the management of problems during the initial phases of UIC and has instead favoured the implementation phase.

In a similar vein, there may be bias towards looking for solutions rather than using problems and areas of friction as a basis for examining the conditions necessary to meet the ambitions of UIC in real-life settings. In their systematic literature review of the triple helix, Galvao et al.\(^71\) remarked that few studies have shed light on the barriers to UIC from researchers’ perspective, which contrasts with de Wit-de Vries et al.’s\(^72\) findings. However, these reviews agree on the need to study problems with UIC as well. Absorptive capacity, ambiguity, and cognitive distance are delicate challenges to overcome, as well as uncertainty about the role of experience and management capabilities as facilitators of UIC.\(^73\) A more conceptual challenge lies in exploring the underlying aspects of ‘cultural differences’, which are often referred to, but seldom explained, for example, in terms of differences in goals, organisational and managerial differences, and epistemic norms. Without further specification, the broad concept of culture runs the risk of overshadowing the causal relationships among different aspects and factors. For instance, the disadvantages of partners’ differing logics may be outweighed by the benefits of collaboration, just as trust may outweigh threats, hence leaving room for further exploration.\(^74\)

As the lion’s share of UIC studies has been focused on success factors, research has explicitly or implicitly assumed what UIC means for one or several stakeholders. Echoing Link,\(^75\) Skute et al.\(^76\) concluded that while studies have indicated firms’ and universities’ motivations for engaging in UIC, research on the nuts and bolts of the determinants of respective gains is in a nascent stage. However, many recent studies have looked into some of the more intricate aspects of UIC, such as obstacles, dialectic tensions,\(^77\) dilemmas,\(^78\) barriers to knowledge transfer,\(^80\) company motivation,\(^81\) trust and learning,\(^82\) and, last but not least, autonomy.\(^83\) Additionally, de Wit-de Vries et al.\(^84\) pointed out the need for more knowledge about the motivation for UIC, especially for companies.

\(^70\) De Wit-de Vires et al., 2019
\(^71\) Galvao et al., 2019
\(^72\) De Wit-de Vires et al., 2019
\(^73\) Ibid.
\(^74\) Ibid.
\(^75\) Link, 2015
\(^76\) Skute et al., 2019
\(^77\) Mascarenhas et al., 2020
\(^78\) Dooley and Gubbins, 2019
\(^79\) Suomi et al., 2019
\(^80\) Alexander et al., 2020
\(^81\) Giones, 2019
\(^82\) Kunttu and Neuvo, 2019; Oliver et al. 2020
\(^83\) Zalewska-Kurek and Harms, 2020
\(^84\) De Wit-de Vries et al., 2019
When considered as a while, this situation indicates a general need for a research-based discussion about how to define, operationalise, and measure success in UICs. A common, but in our view underdefined, description of UIC success is Leishing and Geigemüller’s\textsuperscript{85} notion of success as the perceived performance of bilateral interorganisational relationships between partners. This definition runs the risk of reducing the meaning of success to a frictionless collaboration between partners rather than focusing on potentially problematic interactions with non-redundant partners that could generate valuable outputs in many dimensions and time horizons.

Ankrah and Al-Tabbaa\textsuperscript{86} discussed the problem of defining success, remarking that parties may define the concept differently and that it would be desirable to put in place more objective measures of the effectiveness of UIC in addition to the subjective measures currently employed. They added that there is little evidence that any single dimension of evaluation, such as financial gain or rate of survival, is superior. They also noted the impact of academic engagement in the process, such as the consequences of teaching and learning from experience being overlooked, thus addressing the potential intangible value of UIC. On the other hand, there is a need to move from the resource complementarity approach to the actual leveraging of companies’ competitive advantage, including the value of intellectual exchange and the contribution of academic collaborators’ fresh perspectives to firms’ research capabilities, which can, in turn, affect companies’ motivation for UIC. Hence, there is a need to develop an understanding of the circumstances of such valuations. These valuations are based on insights into causal dynamics, which helps assess the value of the full range of long- and short-term outcomes.\textsuperscript{87} In a similar vein, Mascarenhas et al.\textsuperscript{88} addressed the issue of whether UIC constitutes an innovation strategy or a research strategy, pointing out the possibility that it is a mutual strategy, a topic that has not yet been fully explored, particularly regarding its efficiency for stakeholders.

In summary, in their literature review, Skute et al.\textsuperscript{89} noted that while UIC literature has expanded in the last two decades and identified tremendous potential for economic and social development, the complexities of UIC are still not well understood. In a similar vein, Mascarenhas et al.’s\textsuperscript{90} review of the UIC field highlights the need for greater conceptualisation and development of research. With an integrative ambition, de Wit-de Vries et al.\textsuperscript{91} suggested that closing the gap between qualitative and quantitative streams of research would bring the field forward. While both studies identified important factors, their results have not been integrated. Wit-de Vries et al.\textsuperscript{92} lamented this state of affairs, arguing that such an integration could increase the understanding of the underlying mechanisms and add qualitative research to the theoretical underpinnings of UIC, which is often based on descriptive research. Commenting on the methodological limits of literature reviews, Sjöö and Hellström\textsuperscript{93} expressed humility regarding their theoretical speculations, as the proper identification of direction and the combinatorics of the influence between factors would require a deeper scrutinisation of the literature and the

\textsuperscript{85} Leishing and Geigemüller, 2020  
\textsuperscript{86} Ankrah and Al-Tabbaa, 2015  
\textsuperscript{87} Ibid.  
\textsuperscript{88} Mascarenhas et al., 2018  
\textsuperscript{89} Skute et al., 2019  
\textsuperscript{90} Mascarenhas et al., 2018  
\textsuperscript{91} De Wit-de Vries et al., 2019  
\textsuperscript{92} Ibid.  
\textsuperscript{93} Sjöö and Hellström, 2019
incorporation of additional layers of complexity in the analysis. However, they argued that their (humble) speculations may stimulate further research on UIC.94

Despite the attention to the third mission of universities, Hughes and Kitson95 argued that there remain gaps in understanding as to the why, how, and impacts of UICs. Collaboration between universities and industry is full of challenges and potential conflicts96 related to the creation of value and the transfer of intellectual capital between partners,97 often resulting in the poor realisation of potential benefits.98 This is because these types of collaboration and interaction are highly complex problems and must thus be interpreted as Second Track processes.99 Prior UIC studies have identified several critical success factors, including aspects such as time planning, mutually agreed-upon objectives between partners,100 and choosing the appropriate partner by matching the levels of the preconditions that must be met.101 Further, several studies have found that many problems in UICs can be overcome if they are managed properly from the beginning.102

The early phases of university-industry collaboration

This section discusses the theoretical foundation on which the existing understanding of UIC, especially during the early phases, is based. In the subsections, frames of reference concerning the identification of partners and related aspects of the initiation of UICs are constructed for later application and structuring of the empirical contributions. Recent contributions by Rajalo and Vadi103 and Bogers et al.104 outline the importance of expanding current knowledge and contemporary understanding to improve UIC outcomes. UIC and partnerships between universities, companies, and public institutions are expanding from industrial economies to developing countries,105 with the intention of fostering growth and innovation, meaning that the agenda raised here is essential for universities, funding agencies, and governments worldwide. The research objective of this study is thus to contribute micro-level insights that can improve UIC by explicitly studying the enableers and barriers encountered during the early phases of UIC as well as how to improve the chances that such collaboration will lead to innovation and growth.

Initiating university-industry collaboration

Several studies have emphasised the importance of choosing the right partners for the success of UIC.106 Among the advantages of being the initiating stakeholder in a given collaboration is the ability to choose the initial partners. The ability to choose the ‘right’ partners has attracted attention in previous research.107 According to Rajalo and Vadi,108 this can be understood as an expression of absorptive capacity. The realisation

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94. Ibid.
95. Hughes and Kitson, 2012; 2013
96. Bruneel et al., 2010
98. Barnes et al., 2002
99. Massingham, 2019
100. Nielsen et al., 2013
101. Rajalo and Vadi, 2017
102. E.g., Barnes et al., 2002, 2006; Ruuska and Teigland, 2009
103. Rajalo and Vadi, 2017
104. Bogers et al., 2017
105. Guimon, 2013; Marotta, 2007
106. Barnes et al., 2006; Goduscheit and Knudsen, 2015; Mora-Valentin et al., 2004
108. Rajalo and Vadi, 2017
of the scarcity of a competence as a strategic resource is a prerequisite for collaboration, which, per definition, requires absorptive capacity. Here, absorptive capacity is the dynamic capability to evaluate and utilise outside knowledge based on prior related knowledge.

Santos and Eisenhart suggested that organisational boundaries, in terms of competence and identity, may trigger the initiation of collaboration. Among prior studies of how organisations identify partners and form collaborations, Gulati and Gargiulo found that organisations, in general, tend to seek partners that have ‘complementary resources and capabilities’ and can be regarded as reliable counterparts, while Freitas et al. argued that complementary modes of governance are influential in partner selection. Further, Carayol found that researchers are focused on identifying exploitable synergies between their interests and corporate interests and tend to accept or refuse to collaborate based on whether the proposed project fits their current research agenda. Complementarity, therefore, is a variable in the initiation phase.

Carayol further examined the reasons companies provided for selecting a given academic partner and the factors that would lead the chosen academic partner to accept or refuse a proposition to collaborate. In line with Gulati and Gargiulo, Carayol found that companies were focused on avoiding uncertainty, and this led them to choose academics with good reputations. Reputation, therefore, is also a variable in the initiation phase.

Mora-Valentin et al. found that choosing former collaboration partners or partners with vast collaborative experience improves the chance of success for projects. This is in line with Thune, who found that companies tend to collaborate with research partners with whom they had established prior relationships. On this matter, Gulati and Gargiulo argued that the tendency to enter ‘secure’ partnerships (e.g., by choosing former collaboration partners) may be problematic as this could cause partners to fail to realise the potential of alternative alliances. Thune argued that the tendency to choose former collaboration partners is often related to the goal of building mutual experience before undertaking larger projects. This indicates that trust is a key dimension in UIC, in an identical fashion as in the general literature on inter-organisational relationships. The tendency to connect with prior collaborators or, at best, partners with prior experience with UIC is an important variable in the initiation phase.

Thune and Barnes et al. both emphasised the importance of identifying committed partners and underlined that commitment and trust are essential dimensions in a university-industry (UI) context. However, it is important to note that stakeholders
in different sectors of the economy and different fields of science interact differently. Commitment among partners is thus an important variable for achieving UIC success.

Finally, prior work has emphasised the importance of the thorough assessment of potential partners from both the university and industry stakeholder perspectives with the aim of identifying committed partners with more or less complementary objectives. Mora-Valentin et al. provided evidence that the assessment of aims and competences is important for ensuring the success of UIC projects, while Perkmann and Salter accentuated that sufficient preparation is a crucial factor for ensuring active participation in a UIC. Perkmann et al. furthermore stress that if policy is to successfully increase the impact of academic research through fostering engagement, then both academics and firms need to be skilled in initiating and maintaining such collaborations, but also need to recognise that collaborating with academia presents challenges that are distinctly different to those of customers or suppliers. Therefore, the assessment of partners is an important variable in establishing sound UIC. The identified variables relate to the initiation phase of UIC. Our empirical probing helps to identify enablers and barriers to achieving these aspects. Next, we turn to the specifics of UIC implementation.

Launching university-industry collaboration

UIC faces several essential factors during implementation, including the need for good management. Good management is perceived to be of vital importance to improving the probability of success in collaborative projects involving private, public, and academic partners. Barnes et al. argued that clearly defined and mutually agreed-upon objectives and realistic aims are essential for ensuring the proper management of UI projects because, without defined objectives, projects tend to become unfocused. Further, Ruuska and Teigland argued that the co-development of a clear project plan is essential for establishing a common understanding among partners. Furthermore, they stressed the importance of the project leader and effective communication for the continuous balance of ambitions and expectations.

Likewise, Anderson et al. in an examination of how projects involving private, public, and academic partners are managed, stressed the importance of clearly identifying and explaining the motives and goals of each partner. They also found that it is vital for all partners to be allowed to influence decisions affecting the partnership. However, in most cases, the literature provides little guidance on how to establish such UIC objectives and how to implement good planning and management in practice, leaving a significant gap to be filled. Hence, planning, management structures and explicit objectives are essential variables for improving the implementation of UIC projects.

125. Schartinger et al., 2002
126. Barnes et al., 2002
127. Mora-Valentin et al., 2004
128. Perkmann and Salter, 2012
129. Perkmann et al., 2013
130. Philbin, 2008; Ruuska and Teigland, 2009
131. Barnes et al., 2002
132. Ruuska and Teigland, 2009
133. See also Barnes et al., 2002
134. Anderson et al., 2012
Rajalo and Vadi\textsuperscript{135} emphasised the development of projects over time during the implementation phase, leading to the classification of ‘excellent’, ‘promising’, and ‘modest’ collaborators. The claim made in this classification is that the reasons behind the variety of UIC projects can be explained through motivation and absorptive capacity. The researchers concluded that collaborators are engaged in a constant bilateral learning process and that the preconditions of both sides should be of equal value. Likewise, Thomas et al.\textsuperscript{136} suggested a series of action points to improve the functioning of the project team, stressing the importance of developing relationships among partners, including teambuilding, formalising the collaboration, and communicating. Merely ‘planning’ may be insufficient for ensuring the success of a UIC project. The literature suggests that the quality of the project team responsible for the implementation and execution of a project is also important. This may create tension in the form of social group inefficiency because, from the perspective of the researcher, the scale economies of being an expert must be traded off against the time it takes to engage with others. Participants’ continual review of this trade-off decision influences their contribution to the group. Second Track processes provide integration mechanisms based on dissemination effects that can resolve this trade-off decision.\textsuperscript{137} Therefore, mature and formalised collaborations, high-performance teams, and excellent internal communication are expected to improve UIC.

**Challenging conventional thinking**

A dilemma is a difficult choice, or a situation in which a choice must be made between two or more alternatives. The prisoner’s dilemma is a classic example of the choice between collaborative or non-collaborative action.\textsuperscript{138} A false dilemma is instead an either-or situation in which a choice is required without considering all relevant possibilities (i.e., a fallacy). A paradox is a self-contradictory situation or statement that seems impossible or difficult to understand as it contains two opposite facts; it can be true only if it is also false. In both cases, theoretical as well as everyday assumptions play a role in how situations and alternatives are perceived and enacted. Mintzberg\textsuperscript{139} remarked that both strategy and theory are simplifications, necessarily distorting reality – they are to organisations what blinders are to horses. Research into paradoxes debates whether paradoxes should be seen as inherent, socially constructed, or both; as entities or processes; and through a normative or a descriptive lens.\textsuperscript{140} In the context of UIC, it is possible and likely that theory, strategies and normative expectations can create both (true or false) dilemmas and (apparent) paradoxes that can be transcended or redefined through broadened perspectives and interactions within the UIC.

With their unique dilemma approach to UIC research, Suomi et al.\textsuperscript{141} pointed at two classic dilemmas of UICs, namely ‘highlighting intrinsic value of research vs. highlighting instrumental value of research’ and ‘focusing on international...”

\textsuperscript{135} Rajalo and Vadi, 2017
\textsuperscript{136} Thomas et al., 2008
\textsuperscript{137} Massingham, 2019
\textsuperscript{138} cf. Kuhn, 2019
\textsuperscript{139} Mintzberg, 2009
\textsuperscript{140} Smith et al., 2017
\textsuperscript{141} Suomi et al., 2019, p. 81
publications vs. focusing on the popularisation of science’. Departing from Hampden-Turner’s\textsuperscript{142} definition, they saw dilemmas as mutually exclusive (un)desirable options that are often as the result of conflicting values, generating tension and dispute. Viewing dilemma reconciliation as a strategic process, the researchers emphasised dilemmatic situations as opportunities for avoiding collision, either-or solutions, and mere compromise.

In a similar vein, and quite contradictory to, for example, Rajalo and Vadi’s\textsuperscript{143} focus on the formalisation of UIC, Massingham\textsuperscript{144} proposed Second Track processes as a better way of understanding the mechanisms behind successful UIC projects. Rather than taking general assumptions behind administrative theory as a starting point, the concept is inspired by principles of international diplomacy and conflict resolution, emphasising a focus on the common problem rather than the similarity of the involved stakeholders. Hence, this approach amounts to an entirely different paradigm in the notion of what constitutes UIC collaboration. It is participants’ relationship with the problem, rather than with each other, that makes collaboration effective. In this perspective, shaping the environment of collaboration is crucial, not in terms of matchmaking between partners but rather in terms of all participants being connected to the same third parties and the problem at hand. This creates mechanisms that, over time, transform both individual and group cognition, establishing a common understanding of the problem. Thus, the mental models that facilitate collaboration are not dependent upon a perfect exchange and instead encourage sharing without the expectation of payback. Second Track processes hence embrace higher levels of complexity and are thereby capable of transcending apparent paradoxes in UICs.

**METHODOLOGY**

A case study approach\textsuperscript{145} is applied to the study of UIC. The case study approach is used in studies concerned with gaining insights on the dynamics of new fields and theory building.\textsuperscript{146}

**Data collection**

The empirical foundation of this paper is built on 38 semi-structured research interviews conducted with participants in 25 UIC projects from 2011 to 2012. Cases were selected using convenience sampling to study different types of UICs and a mix of projects with collaborations between companies and researchers and between companies and students. Company/researcher constellations were identified using the official database of Aalborg University’s contracting unit for the Danish collaborations, while the identification of the Norwegian collaborations was achieved by directly contacting university departments. The respondents were selected to provide balanced insights into the different academic fields, stages of collaboration, and project sizes involved in UIC. When looking for enablers and barriers to the success of UIC, it is important to note that there are limitations as to the validity of the results because of the impossibility of studying UICs that never made it to the table, so to speak. Table 1 shows the distribution of the 38 interviews across the 25 UIC collaboration projects.

\textsuperscript{142} Hampden-Turner, 1990
\textsuperscript{143} Rajalo and Vadi, 2017
\textsuperscript{144} Massingham, 2019
\textsuperscript{145} Yin, 2013
\textsuperscript{146} Eisenhardt, 1989; 1991; Yin, 2013
### TABLE 1: UNIVERSITY-INDUSTRY COLLABORATIONS STUDIED

<table>
<thead>
<tr>
<th>INTERVIEWS</th>
<th>PROJECT FIELD</th>
<th>PROJECT TYPE</th>
<th>COMPANY RESPONDENT</th>
<th>UNIVERSITY RESPONDENT</th>
<th>STUDENT RESPONDENT</th>
<th>PROJECT PHASE</th>
</tr>
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<tbody>
<tr>
<td>Collaboration A</td>
<td>Engineering and technology management project</td>
<td>Student project</td>
<td>R&amp;D manager</td>
<td>Undergraduate</td>
<td></td>
<td>Terminated</td>
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<td>Collaboration B</td>
<td>Compliance with customer needs for commercialization</td>
<td>Research project</td>
<td>HR manager</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
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<td>Collaboration C</td>
<td>Gamification of queue waiting time</td>
<td>Student project</td>
<td>Market coordinator</td>
<td>Undergraduate</td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration D</td>
<td>Construction development project</td>
<td>Trainee position</td>
<td>Department manager</td>
<td></td>
<td></td>
<td>In process</td>
</tr>
<tr>
<td>Collaboration E</td>
<td>Research in new communication technology</td>
<td>Research project</td>
<td>1) Founder 2) CEO</td>
<td>Associate Professor</td>
<td></td>
<td>In initialization</td>
</tr>
<tr>
<td>Collaboration F</td>
<td>Developing new engineering technology</td>
<td>PhD project</td>
<td>Department manager</td>
<td>External lecturer</td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration G</td>
<td>Utilization of mobile technologies in media</td>
<td>PhD project</td>
<td>Head of digital markets</td>
<td>PhD student</td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration H</td>
<td>Commercialization of newly developed technology</td>
<td>Research project</td>
<td>Technical manager</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration I</td>
<td>Customer experience research</td>
<td>Research project</td>
<td>Department manager</td>
<td>Associate Professor</td>
<td></td>
<td>In process</td>
</tr>
<tr>
<td>Collaboration J</td>
<td>Developing a strategy for growth</td>
<td>Research project</td>
<td>1) CEO 2) Manager</td>
<td>Associate Professor</td>
<td></td>
<td>In initialization</td>
</tr>
<tr>
<td>Collaboration K</td>
<td>Company overview project</td>
<td>Student project</td>
<td>CFO</td>
<td>Undergraduate</td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration L</td>
<td>Medico-technology development</td>
<td>PhD project</td>
<td>Statistician</td>
<td>PhD student</td>
<td>Undergraduate</td>
<td>In process</td>
</tr>
</tbody>
</table>

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<table>
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<tr>
<th>INTERVIEWS</th>
<th>PROJECT FIELD</th>
<th>PROJECT TYPE</th>
<th>COMPANY RESPONDENT</th>
<th>UNIVERSITY RESPONDENT</th>
<th>STUDENT RESPONDENT</th>
<th>PROJECT PHASE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collaboration M</td>
<td>Costing and profitability project</td>
<td>Research project</td>
<td>Head of technologies</td>
<td></td>
<td></td>
<td>Terminated</td>
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<tr>
<td>Collaboration N</td>
<td>Concept development for ICT services</td>
<td>Research project</td>
<td>Project leader</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration O</td>
<td>Service quality calculations</td>
<td>PhD project</td>
<td>R&amp;D manager</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration P</td>
<td>Company overview project</td>
<td>Research project</td>
<td>CEO</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration Q</td>
<td>Computer programming</td>
<td>Research project</td>
<td>Technical manager</td>
<td></td>
<td></td>
<td>In process</td>
</tr>
<tr>
<td>Collaboration R</td>
<td>Improving administrative procedures</td>
<td>Trainee position</td>
<td>Department manager</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration S</td>
<td>Development of logistics systems</td>
<td>Research project</td>
<td>CEO</td>
<td>Professor</td>
<td></td>
<td>In process</td>
</tr>
<tr>
<td>Collaboration T</td>
<td>Business and market development research</td>
<td>Research project</td>
<td>Head of quality assurance</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration U</td>
<td>Development of plant seeds</td>
<td>Research project</td>
<td>Communications assistant</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration V</td>
<td>Developing equipment for horse stables</td>
<td>Research project</td>
<td>Professor</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration W</td>
<td>Developing technical analyses for biogas</td>
<td>Research project</td>
<td>Assistant Professor</td>
<td></td>
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<td>Terminated</td>
</tr>
<tr>
<td>Collaboration X</td>
<td>Developing production systems for the dairy industry</td>
<td>Research project</td>
<td>Coordinator</td>
<td></td>
<td></td>
<td>Terminated</td>
</tr>
<tr>
<td>Collaboration Y</td>
<td>Developing equipment for forestry mapping</td>
<td>Research project</td>
<td>Professor</td>
<td></td>
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<td>Terminated</td>
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</table>
Data were collected through semi-structured, face-to-face interviews with participants. The researchers prepared an interview guide but allowed the conversation to flow to interesting topics, following the recommendations of Kvale and Kreiner and Mouritsen. All interviews were recorded and transcribed. The interviewers were aware of the need to probe continuously for examples to illustrate the stories told by the respondents and to avoid getting representative answers, instead seeking to acquire practical answers. Two interviewers were present during each interview to strengthen the data collection and ensure a coherent understanding of the impressions. Likewise, the interviewers had clear roles, with one researcher talking and providing productive interaction with the respondent and the other taking notes and ensuring that all main topics were covered, in line with Yin's recommendations.

The interviews probed several themes reflecting the purpose of the study. These included expectations and ambitions for the formation of the collaboration, the search for partners, making contact with potential partners, initiating the project, satisfaction with the overall cooperation, and perceived success at the current stage of the project. Identical interview guides were used for both university and industry participants in the same manner as Rajala and Vadi. An advantage of this approach is that the respondents provided insights based on their perspectives regarding what is crucial for improving UIC.

**Analysing the data**

The data were validated through the implementation of what Yin called a case study protocol. Following each interview, both interviewers created a summary of the interview, noting critical points raised and indicating whether anything happened that the voice recorder could not document, in line with Eisenhardt. The entire interviews were transcribed, and a structural coding approach was applied to analyse the content, along the lines of Krippendorff's recommendations. Manual analysis was used, since automation for this type of analysis is still somewhat questionable. Furthermore, considerations were taken in the decision to use structural coding as this method has been criticised in several papers. The main critique revolves around the use of codes based on context that is not present in the data and, as such, forces patterns to emerge from data that were never meant for the determination of such patterns. This challenge is addressed here as data collection was aligned with the purpose of the paper, and the coding, while a time-consuming process, yielded reliable results.

The coding tree was based on the full interview guide and the scope of the theoretical setting. The codification of the interviews created a list of the barriers and enablers related to the factors identified concerning 1) finding the right partner and forming a UIC and 2) initiating and implementing a UIC. Subsequently, the data analysis began with searching for similarities in the list containing the
codes and patterns found in and between the different cases. From this analysis, a set of working propositions was generated. These propositions were compared to the existing theory and data, creating an iterative process to develop an explanation/theory that fits both the data and the findings of the existing literature.

EMPIRICAL FINDINGS
Concerning the initiation of UIC projects, several factors were identified in the data. First, an analysis of complementary competencies illustrated that the companies looked for researchers with unique theoretical competences. Interestingly, researchers successful in UIC had strong skills related to project management. However, on both side of collaboration, reputation did not play a significant role in the search process between universities and industry, although experience in collaboration was assessed as necessary. The assessment of partners on both sides was typically not done before a project, especially in cases where there was prior knowledge or former engagement.

Our empirical data indicate that contact is primarily initiated from the university side through, for example, students asking a company for access when writing a paper or researchers informing a company of a potential collaborative research project. A large proportion of the respondents mentioned several networking initiatives in which the universities were engaged, for example, employing intermediaries for creating fruitful matches between companies and researchers. ‘We almost always receive queries about collaboration through this (matchmaking) network and quite seldom directly from the researchers or students’, stated a company respondent from Collaboration I. As several respondents expressed difficulty in finding points of contact at the universities (both physically and virtually), and concurrently finding the right partners in the universities nearly impossible, this can be considered an important element going forward. Local marketing through, for example, the media, executive seminars, and conferences aimed at practitioners and entrepreneurs are good examples of communication channels that can potentially lead to such contacts and that were being tested at both universities and their affiliated science parks. In terms of activities aimed at corporate managers, it was suggested that researchers could be more open or, expressed alternatively, ‘more aggressive’ about communicating the types of companies they would like to contact and which problems they would like to study in these companies.

The search process is often characterised by the use of informal connections. This accentuates the often limited assessment of potential partners because collaborators tend to be trusted, longstanding partners. The company respondent from Collaboration O noted: ‘We’ve really had many collaborations with the university and so the assessment was not vital. Even though the selection process may spread through the companies’ or researchers’ networks, this lack of formalisation and assessment continues to be the case’. Respondent 1 in Collaboration J noted, ‘Having those established relationships just makes contact much smoother’. In time, this could be problematic because new and potentially even more fruitful constellations are not tested.

Establishing trust between the parties was seen as important for creating and maintaining commitment. Likewise, the notion of shared initiative was found problematic in several instances. Among the remarks made by respondents was that the universities were not prepared to appraise their commitments to business partners. On the other
hand, respondents from the companies admitted finding it difficult to commit to UIC projects during busy periods, as paying attention to customers always comes first.

A major hurdle to be overcome is that much of the knowledge about who works with which problems and technologies in which departments is tacit. The company respondent in Collaboration G agreed, stating that ‘because the contacts are not organised and formalised, we tend to identify the researchers we know in advance’. Hence, this tacit knowledge is built up around the partners participating in concrete research projects known by the companies and the universities’ administration offices supporting UIC. This is accentuated by the finding that partners with extensive collaboration experience tend to conduct more successful projects, which, in part, is due to the fact that there is a steep learning curve for identifying complementary competence. This was confirmed to be a major criterion of value from the perspective of the companies.

Concerning UIC implementation efforts, planning projects, defining projects’ objectives, and formalising collaborations were emphasised. Companies’ tendency to establish formal deadlines presents an interesting challenge; students live with such deadlines throughout their programs, but researchers do not necessarily feel comfortable with them. This insinuates that researchers need to pay more attention to the return on investment (ROI) for companies in collaborations. This was noted by respondents that milestones must be agreed upon from the beginning. However, some projects tended to discard the initial milestones and change scope, which could result in both good and bad outcomes. Objectives were sometimes communicated and aligned from the beginning, but projects were not always carried out in accordance with these agreements as a result of limited or poor communication, as stated by respondents from Collaborations H and J. For some companies, it is problematic that objectives and milestones are established that may not be entirely in accordance with the company’s goals, meaning that alignment of expectations and terms is insufficient and there has been a lack of follow-up meetings. It is evident that problems arise when the theoretical ambitions of the researchers and the practical aspirations of the company are not aligned, for example, when the company’s ideas and objectives are merely fitted to researchers’ ambitions and objectives retrospectively.

The respondents noted some barriers to the formalisation of collaborations. Our empirical probing found no explicitly stated positive effects of formalising collaborations through actions such as drawing up legal contracts and contracting rights to the potential outputs of the UIC. In the words of some respondents, ‘the registration process works very slowly’, so potential problems concerning intellectual property rights are prone to arise. A company respondent from Collaboration N stated, ‘We might sometimes actually start the collaboration before the administrative forms, including NDAs, are finalised, and that might, of course, be problematic. Our lawyers generally don’t like that’. Accordingly, an informal and agile collaboration style seems to be an advantage.

In this regard, one respondent from Collaboration N argued that ‘aligning goals and expectations is a well, innovative and interactive process where the overall objectives might be in place, but sub-goals are added during the process’. On the other hand, much of the respondents’ expressed dissatisfaction was related to a lack of commitment to the plan from the side of the researchers. ‘The problems arose because they had no clear plan regarding how this collaboration should function’, stated a
respondent in Collaboration H. It was explicitly noted that, at the beginning of a collaboration, researchers tend to propose a research design but tend to drift away from it as early as the initial negotiations, thus leaving open to debate whether the objectives of the company has been sufficiently incorporated. The company respondent of Collaboration J noted, ‘Let’s just be frank, the university has its own objectives and way of working, and we need to make sure there is room for our needs’.

The final perspective raised in the empirical enquiry concerned communication. There were indications that well-functioning UICs typically form a project management group with the presence and activity of all relevant partners. Likewise, communication is adjusted during this period, with intensive communication in the early stages and less communication in the later stages of the project. In several instances, the common project management group helped introduce the researchers to the company, promoting mutual understanding of the objectives of each stakeholder group, including anticipated time horizons for measuring success, and any related culture gaps.

Our findings indicate several anomalies that cannot be readily explained by established theory and conventional wisdom about how UIC should work. There is no doubt that the initiation phase could be developed further and that the selection of partners matters, but it is uncertain whether formalisation is the problem. Further, reputation does not seem to matter; instead, the establishment of the interaction itself, building trust, and commitment, which is, to a large extent, based on tacit knowledge, are important. Remarkably, UIC seems to work, although researchers should perhaps pay more attention to the ROI for companies and the lack of follow-up after a collaborative project. Indeed, there also seems to be no demand for formalising collaborations as the process appears to be interactive and emergent. While such deficiencies can be addressed with an expectation of formalisation and more precise goals and follow-ups, there seems to be an acceptance of these conditions. We thus conclude that there are differences in how different UIC projects work, as well as different normative expectations about how they should work. What stands out in our findings is rather strong deviations from norms of formalisation and tight alignment and the acceptance of emergent processes that represent a less-than-perfect exchange between parties. This indicates that to understand how UIC works, we need not only to look at actual cases at the micro-level but also to consider equally meso/macro-levels of specific contexts and institutional norms influencing expectations and performance.

DISCUSSION
This longitudinal, explorative, micro-level study of the early phases of UIC was rewarding as we were able to contribute to several aspects of present knowledge about UIC, respond to earlier calls for further research, and add more insights into many central topics in the field. On a general level, our findings support Bogers et al.’s conclusion regarding the need to break the impermeable boundaries between levels of analysis to examine the interplay between intra- and inter-organisational factors influencing UIC on the individual as well as the organisational level. We also concur with Rajalo and Vadi’s view that micro-level studies have clear potential to add nuance for a better explanation of the variety of UIC characteristics and outcomes. The nuance behind this variation was apparent during both the initiation and implementation phases. Another takeaway message from this study is that during the initiation phase of UIC, stakeholders need to trust the emergent process.

162. Bogers et al., 2017
163. Rajalo and Vadi, 2017
Accordingly, formalisation and structure may not be decisive for matchmaking.

One of the biggest and, to a great extent, implicit issues in this study is the aspect of complementarity, which not only plays a central role behind the curtain for superficial dramas such as everyday expressions of cultural differences but also represents the main motivator for the acceptance of deficiencies in the UIC process. Our main finding is the remarkable fact that UIC seems to work despite researchers’ lack of attention to companies’ ROI and other administrative shortcomings such as follow-ups, thus suggesting that the benefits from complementarity, rather than redundancy, may outweigh the drawbacks of cultural differences, which are often discussed but rarely specified, to shed light on the actual value and costs of collaboration.

Reputation does not seem to play a significant role in the search processes employed by universities and industry. This is contradictory to existing theory.164 This finding can potentially be explained by the unique setting of the two universities in this particular study. Both are rather large institutions in their respective business ecosystems,165 and, further, most of the collaborations studied are with small and medium-sized companies166 that do not have aspirations of working with universities in other continents, countries, or even regions. Despite this knowledge, it was expected that there would be some evidence that the choice of researcher/company contact could be explained by reputation at the individual level. As this was not supported, this indicates that the respondents were unbiased at the beginning of the collaboration and instead assessed potential partners during the contact phase.

This goes against current theoretical expectations. Our findings are in stark contrast with Rajalo and Vadi’s167 insistence that ‘the relevance of joint structures cannot be overstated’. They also concluded that ‘the ability to make the ‘right’ choice of partner before the initiation phase is dependent upon the prior levels of preconditions’.168 This statement demonstrates the ‘come as you are’ attitude found during our empirical observations, suggesting that partners rely on actual interactions rather than prior expectations. Consequently, the problem should perhaps not be stated in terms of a blind date arranged through common acquaintances but rather as a real-life meeting where becoming the right partner is as relevant as picking the right ‘other’. The contradictions in these findings illustrate Skute et al.’s169 remarks on the lacking responses to longstanding calls for research on the selection process for UIC.170

It was also expected that structural arrangements or formalised processes and procedures to enable the smooth search and selection of partners and thus increase the chances of a productive collaboration would be found, possibly even asserting the influence of research and technology officers, as found by Goduscheit and Knudsen.171 While potential partners’ reputation was not found to matter, it was obvious that partners with extensive experience tended to be involved in more successful projects. On the one hand, this finding confirms the findings of Sjöö and Hellström’s172 literature review, allowing the conclusion that prior experience is one of the

164. See, e.g., Gulati and Gargiulo, 1999
165. cf. Clarysse et al., 2014
166. Marinetti et al., 2007; Collinson and Quinn, 2002
167. Rajalo and Vadi, 2017, p. 50
168. Ibid.
169. Skute et al., 2019
170. cf. Link, 2015; Perkaman and Walsh, 2007
172. Sjöö and Hellström, 2019
strongest predictors of UIC. On the other hand, it suggests a nuanced understanding of the character of the relationship, namely that it may have more to do with actual interaction rather than more distant ‘word of mouth’.

In our empirical findings, it can be noted that tacit knowledge is built around partners. This suggests that network centrality plays a role at the micro-level in terms of individual interaction rather than at the meso- or macro-level of organisations and institutional spheres. Our data illustrate the importance of the contact phase of UIC but generated somewhat contradictory findings on the need for formalisation. On the one hand, the management of UIC is important; on the other hand, formalisation of UIC relations was not seen as desirable. This confirms Martinelli et al., who found that academics without external relationships perceived involvement with industry as risky to the values of the scientific community. Hence, they may need to be exposed to such collaboration gradually. The viewpoints expressed here indicate the potential usefulness of structuring the contact zone between researchers and industry, as well as educating researchers on the benefits, do’s, and don’ts of UIC, but also suggest a limit to formalisation should be imposed.

An adaptive understanding of project collaboration poses potential problems and advantages. The latter are related to flexibility in outcomes and the ability to optimise a project’s focus during its course. Concerning the former (i.e., potential problems), the predicted result is that when projects go wrong, they tend to go very wrong. The analysis suggests the need for a greater emphasis on the formalisation of content and contracts in such a manner that partners do not feel overly bureaucratised. Concerning the early phases of UIC, planning was found to be an important instigator for perceived success during initiation and thereby is also used for evaluation of the early phases of collaboration. The company respondents, in general, appreciated the use of milestones and deadlines and the alignment of expectations and objectives, but researchers did not. However, they did admit that technical, organisational, and legal boundaries were important. The arguments posed here relate to an important point from this study, namely that flexibility should be incorporated into project planning. However, this generally requires better communication between the partners involved, than was evident in the UIC projects studied here. Our findings suggest that UIC projects in the initial phase should be understood in terms of an emergent process of interaction between partners rather than as an object for administrative over-ambition.

Our findings tap into a broader debate in the field of UIC that goes beyond practical discussion on the appropriate level of formalisation in different phases to the more fundamental question of how we should understand the very character of the processes involved, especially during the early phases of UIC. For instance, Rajalo and Vadi emphasised that the importance of joint structures cannot be overstated, while Leichnig and Geigenmüller suggested that management capabilities should also embrace flexibility, particularly regarding alliance transformation. Our contradictory findings also reflect the discrepancy between Ankrah and Al-Tabbaa’s and de Wit-de Wries’ respective literature reviews, with the

173. cf. Huggins et al., 2020
174. Martinelli et al., 2008
175. See also Nielsen, 2016
176. Rajalo and Vadi, 2017
177. Leichnig and Geigenmüller, 2020
178. Ankrah and Al-Tabbaa, 2015
179. De Wit-de Wries, 2019
former assuming rational management from an administrative perspective and the latter suggesting that UIC is mainly informal or even irrational. Skute et al.  took a more balanced view, which our findings support, namely that while goal-oriented UIC management is important, it should also be balanced with researchers’ need for autonomy.

Our data present a somewhat paradoxical picture of simultaneous friction within and contentment with the UIC projects studied. The processes detected appear to be, if not irrational, then at least informal. Further, the knowledge needed to navigate the early phases appears to be tacit and built around the partners rather than explicit, formalised, and existing among the partners through formal communication and intermediaries. There is little assessment of potential partners before the interaction starts, and, consequently, ‘word of mouth’ and general reputation do not seem to be tools that are actively used in the process. However, as earlier literature has shown, prior experience is among the strongest predictors of UIC.  We also found that prior experience seems to be a strong condition for successful interaction. Further, as tacit knowledge is built around project partners, the capability for actively managing or taking part in the interaction that is part of UIC projects increases over time, as does the range of the respective actors’ spheres. This is in addition to well-known and documented frictions and frustrations normally discussed in terms of cultural differences.

A possible explanation of the lack of formality during the early phases of UIC is the focus of collaboration. Thereby, the contents and actions of a collaboration should continuously evolve and is not necessarily determined at the beginning of a UIC project. This was captured by a respondent from Collaboration O who stated, ‘It is rather an ongoing dialogue with the purpose of understanding each other’s agendas and objectives’. Therefore, sharp distinctions between the initiation and implementation phases, as depicted by Rajalo and Vadi,  should be questioned. This leads to the argument that in the relationship between micro-processes and the meso/macro environment, a discovery step will lead to formalisation, which, in turn, will push collaboration another step further. Hence, our findings suggest that the initial phase is part of a highly innovative, interactive process and that it is the interaction within the process, rather than prior analysis and formal, administrative structures, that is at play. This reflects what Skute et al.  addressed as the strategic and cultural fit between partners. This should be further examined in future research, specifically further specification of the proximity that Huggins et al.  suggested.

Consequently, a good implementation of UIC may turn out to be a hen-or-egg situation. It is safe to say that formalising collaborations is relevant and has positive effects. However, it is less certain what the effects may be in different phases. There is a gap concerning the positive impacts of formalising the collaborations, such as drawing up legal contracts and contracting rights to the potential outputs of UIC. This is interesting as it contradicts administrative common sense as well as some of the existing knowledge in the field, including Rajalo and Vadi’s  findings, as noted above. However, it currently unclear which comes first – collaboration or formalisation. Formal agreements and non-disclosure agreements (NDAs) have been found to help build trust between partners. However, the collaborations studied here tended to be

180. Skute et al., 2019
181. Sjöö and Hellström, 2019
182. Rajalo and Vadi, 2017
183. Skute et al., 2019
184. Huggins et al., 2020
185. Rajalo and Vadi, 2017
186. cf. Tomkins, 2001
implemented before formal agreements were made, as one participant’s comment about the registration process at the contract unit of one of the universities illustrated. According to de Writ-de Vries' literature review of the field, the most delicate challenges to UIC seem to be absorptive capacity, ambiguity, and cognitive distance. These issues do not lend themselves to analysis, simply because of the complexity and their centrality to interaction and communication.

Hence, rather than analysis, the process itself may be the remedy for ambiguity regarding understanding partners’ interests and ambitions, how to communicate across cognitive distance, and how to generate absorptive capacity without losing the focus on the common interest that, at the end of the day, makes all this possible, namely relevant complementarity in very specific areas of knowledge.

The above insights amount to a reconsideration of how we should understand and measure UIC success. In our empirical examples, there was no lack of friction and, at times, frustration, despite project management’s attempts to promote mutual understanding to overcome cultural differences. Researchers were not comfortable with tighter and more formal management of processes and were described as not paying enough attention to companies’ ROI. Further, they tended to drift away from plans and agreements over time, fostering debate on whether companies’ objectives are sufficiently incorporated in UIC projects. These findings are reflected in many recent studies addressing challenges and friction in UIC projects.

However, what truly stands out in our study is the acceptance of such imperfections in UIC. As noted above, these findings are in contrast to the administrative imperative to meet such challenges with stricter formalisation, strategy formulation, and control mechanisms to ensure alignment and compliance with agreements. While such initiatives may be accepted and even appreciated in some constellations under some conditions at some stages of the process, we feel confident to conclude from our results that administrative logic is not necessarily a solution. Hence, besides practical variation in different UIC projects, there is also normative variation.

This raises the following question: Should we assess the success of UIC in terms of outcomes or low friction? Some companies in our study seemed to have no problem with researchers not delivering results on time or in a professional manner. This stands in contrast to the conventional understanding of value transfer. A related aspect brought up by Rajalo and Vadi is that of the minimal level of individual investment required for successful collaboration and their conclusion that the preconditions of both partners are of equal value. Our findings instead suggest that low expectations or acceptance of varying degrees of equality may be a factor for the success of UIC in practice, as it reflects acceptance of making room for tolerance in a collaboration before it is deemed unsuccessful.

Related to this question are more methodological considerations about the validity of notions of UIC success. From Rajalo and Vadi, the idea of UIC success (i.e., the selection of a ‘best practice’ case) is judged in terms of a low level of friction in interactions or mutual dependence in daily work. Consequently, all excellent cases relied on joint structures and mutually understood language as well as anticipated and reframed interests. This is also what constitutes their higher degree of overlapping. However, this means that the learning
potential was lower than in less successful UIC projects, according to this definition of success, as these cases were less redundant. This leads to the possibly false paradox that the most successful collaborations also have the least learning potential, which seems intuitively self-contradictive, as the most successful cases would have too much absorptive capacity, reflecting redundancy.

This paradox calls for the further consideration of UIC success: Is it risky to measure low friction rather than high (potential) value creation? Philosophically as well as practically, having a common language is not as much a prerequisite for efficient communication and/or joint value-creation/action as shared interests (albeit varying in intensity over time). As McKernan\textsuperscript{191} put it, the ability to communicate across communities relies less on initially shared understandings than an imaginative awareness of human interests, attitudes, and concerns: ‘We could not communicate with a creature that shared none of our interests and consequently did not respond to the world’s features in ways that made patterns we could make sense of’. In a similar vein, Boland and Tenkasi\textsuperscript{192} suggested a balance between perspective making and perspective taking is necessary for cross-community interaction. This begs the question of whether we can conclude that the less friction in UIC, the better the practice of collaboration. An alternative would be to focus on the outcomes of UIC and its future (and thereby unrealised) potential for value creation through the complementarity rather than redundancy of knowledge, understanding, practices, and language. Consequently, what may seem a modest or promising collaborator in terms of friction may turn out to be high performing in terms of outcomes over time. It would be a rewarding task to explore further these dynamics and the conceptual validity of UIC success and best practices. Such considerations may be of even greater importance when considering the rising pressure for exploitation in both industry and academia.

Thus, our findings have given us reason to extend Ankrah and Al-Tabbaa’s\textsuperscript{193} discussion based on their literature review, namely the definition of UIC success. This discussion is valuable not only for the specification of a valid or commonly agreed-upon definition of UIC success but also for more explicit discussion about norms and assumptions in the field and, ultimately, a better understanding and specification of UIC phenomena themselves as well as the complexities of their interaction.

The apparent paradoxes and anomalies observed in this study may also be resolved by shifting the paradigm to Second Track processes. Indeed, it seems that the challenges presented in our research cannot be solved by clearer administrative order in UIC. Instead, what works seems to work despite such shortcomings and what does not work is not likely to be resolved by increased administrative order. Rather, the dimensions of trust, tacitness, and emergence are of great importance. Remarkably, it seems that collaboration continues despite a lack of reciprocity between partners. While partner selection is important, becoming the right partner is even more urgent, and UIC seems to be more of a hen-or-egg situation rather than one that requires analysis per se. These findings point at a potential need to shift the paradigm in UIC research, in line with the Second Track approach.

One of the strengths of the Second Track approach is that it can integrate micro-level analysis with meso- and macro-approaches to explain how the local context becomes interlinked with the societal level. Furthermore, the Second Track framework is capable of explaining why reciprocity in exchange is not always necessary and how UIC

\textsuperscript{191} McKernan, 2007, p. 172
\textsuperscript{192} Boland and Tenkasi, 1995
\textsuperscript{193} Ankrah and Al-Tabbaa, 2015
can transform individual cognition. It can also explain group dynamics, as different partners focus on the common denominator (i.e., the problem at hand) rather than on differences between partners. Not least, Second Track processes are capable of explaining why further formalisations and plans may not lead to the creation of efficient UICs. This alternative perspective on UIC amounts to an ontological question of what UIC is, and what essential qualities characterise it. We conclude that there seems to be greater diversity in the functioning of UIC than previously assumed by established theory and that the norms for UIC success may differ as much as the actual empirical examples.

CONCLUDING REMARKS AND FUTURE RESEARCH

If anything, our study illustrates, in line with recent literature reviews of the UIC field, not only the richness of future research opportunities and their breadth and depth but also the fundamental aspects of what makes potential partners ready to collaborate across boundaries, what constitutes a successful collaboration, and what normative ideals and theories best reflect the character of the phenomenon at hand. There is still much room for further research on many of the topics touched in this study.

It is essential to understand the drivers of a successful UIC launch from a micro-perspective and to acknowledge that there is always reciprocal ROI in good collaborations. Advantages should go both ways. However, the present literature on UIC is unclear about the actual content of this exchange, and there is an urgent need for further exploration. Our results indicate that there is greater openness to what the process may bring as well as higher expectations for the outcomes of the collaborative process rather than the smoothness of the process (i.e., eliminating friction due to differences in culture and interests). Our study results indicate that a stronger link between UIC and what is expected in terms of innovation outcomes is essential.\textsuperscript{194} However, innovation systems are currently under pressure from the focus on commercialisation and thus so is the university sector. This raises the question of how this pressure for exploitation will be handled.

A surprising finding was that companies seemed to accept researchers not delivering ROI in a professional manner, which stands in contrast to the conventional understanding of the unproblematic transfer of value. While we appreciate existing macro/meso studies, they have been unable to capture the problems on the floor, and these can have more significant effects than first realised. Hence, we question and seek to understand in a more nuanced way the usefulness of structures for successful UIC. Indeed, there is room for fundamental contributions clarifying the role and importance of formalisation and administrative management on the one hand and the complex interactions of co-creation on the other, reflecting the disagreements and differing conclusions from literature reviews in the field.

This study provides empirical evidence of overcoming barriers during the early phases of UIC at the micro-level. For example, the commitment of both parties is important, as is the communication between them, which eases the pressure of non-conformance to the agreements made at the beginning of a collaboration. Apart from visualising specific culture gaps, communication of the expectations regarding administrative procedures within the university was also critical. Goduscheit and Knudsen\textsuperscript{195} suggested that while universities perceive industry as a significant collaboration partner, the same sense of importance is not shared by industry regarding collaboration with universities.

\textsuperscript{194} cf. Nielsen, 2020
\textsuperscript{195} Goduscheit and Knudsen, 2015
The present study did not find this same imbalance, and the UIC literature is also inconclusive in its findings. However, there were indications that researchers had problems understanding the value of UIC as seen from the perspective of industry partners, in turn potentially prompting them to miscalculate the incentives of industry partners in UIC. This misunderstanding ranged from time horizons to application possibilities. A limitation of the present study is a lack of detailed data on these perspectives, which could be a topic for future research.

The objectives of each partner should be identified and communicated from the beginning of a collaboration or a specific project. In doing so, the involved partners would have a basis for negotiating the alignment of expectations and objectives. Hence, the use of formal, but non-contractual, agreements that explicitly state the roles and responsibilities of each partner and clarify the value that each partner derives from the collaboration are also suggested in this context.\(^{196}\) While this is currently the general practice in industry, the study findings indicate that it may comprise new ground for many researchers. There is additional evidence of a distinct culture gap between universities and companies. This is not necessarily a problem, but it must be recognised and managed. This would entail agreeing on expectations and planning the UIC process from the beginning of a project. Finally, there is the problem of differences in the time horizon of outcomes between universities and industry, which must be considered at the outset of UIC. All these aspects deserve further attention in future research. Given the observed anomalies and the tentative contributions of the analysis of Second Track processes, further investigations into this potential paradigm shift in UIC studies is recommended, especially when the findings seem contradictory at first glance.

REFERENCES


\(^{196}\) cf. Freitas et al., 2013


Czarniawska, B. (2001), Is it possible to be a constructionist consultant?, *Management Learning*, 32: 253–266


Grant, R.M. (2002), The knowledge-based view of the firm. In Choo, C.W. and Bontis, Nick (Eds.), *The Strategic Management of Intellectual Capital and Organizational Knowledge* (pp. 133–148), Oxford University Press.


Nielsen, C. (2016), Getting value for money from your science park, Public Money and Management, 36 (7): 539–546

Nielsen, C. (2020), From research to business: Guiding the exploitation process of innovation, Meditari Accountancy Review, in review


BJURSTRÖM, LUND & NIELSEN, IMPROVING UNIVERSITY-INDUSTRY COLLABORATIONS


Thursby, M.C., Fuller, A.W. and Thursby, J. (2009), An integrated approach to educating professionals for careers in innovation, Academy of Management Learning and Education, 8 (3): 389–405

Tomkins, C. (2001), Interdependencies, thrust and information in relationships, alliances and networks, Accounting, Organisations and Society, 26: 161–191

Van Dierdonck, R., Debackere, K. and Engelen, B. (1990), University-industry relationships: How does the Belgian academic community feel about it? Research Policy, 19: 551–566


ESSAY

THE SECOND TRACK AND TALANOA: IMPLEMENTATION OF THE PACIFIC CONNECT PROGRAMME IN THE PACIFIC ISLANDS

Benjamin Blackshaw

The Second Track and talanoa – a Pacific term for conversation – share many common traits. Both are based on a foundation of mutual trust and offer a comfortable forum to share ideas. Both appreciate the importance of listening as well as talking and value other people’s experience and insights. ICDP’s communications coordinator Benjamin Blackshaw explains how Second Track methodology has been applied to pursue idealistic goals through realistic steps as part of the Pacific Connect programme.

INTRODUCTION

Modern technology is empowering seamless communication, limitless commercial opportunities and positive social change across the world. However, some developing countries still fail to reap these ‘digital dividends’ and the broader socio-economic benefits generated by digital technologies.1 In the Pacific Islands, where digital transformation remains one of the vital developmental priorities, the improvement of social and economic standards through technology will require stronger cross-regional cooperation and multinational collaboration.2 Policymakers in Australia and the region itself are still grappling to find the best ways to help Island nations overcome a raft of challenges they face and empower local communities to make the most of emerging technologies.

1. The World Bank, 2016
2. Digital adaptation a priority for the Pacific, ICDP blog featuring C. Sampson’s submission to the Pacific Islands Forum, 29 Nov 2018
Increasing geopolitical competition is shrouding genuine gestures in the Pacific Islands, while traditional methods of engagement, such as the Track One mechanisms of representational diplomacy, can create additional barriers. Second Track processes, which bring together diverse participants in informal discussions to solve common problems, could be another way to tackle complex issues facing the region.

While they are diverse in their cultures, histories and circumstances, many Pacific Islands share common issues including their geographic remoteness, lack of economies of scale, limited skilled human resources, and a social hesitance to embrace ICT-enabled education and health care. The problems caused by these long-standing developmental challenges are compounded by the rapidly increasing threat of climate change. The accelerated and agile nature of Second Track processes may offer a more rapid, as well as more effective, collective response.

The following article explores the potential of Second Track approaches in the Pacific by examining the work of the International Centre for Democratic Partnership (ICDP) and the unique combination of Second Track methods and Pacific talanoa in its implementation of the Australian Government’s Pacific Connect programme.

TRACK TWO DIPLOMACY AND GAP’S SECOND TRACK PROCESS

Traditional diplomacy may be defined as the ‘primary peacekeeping tool of a state’s foreign policy’. Track One engagement aims to manage conflicts between nation-states. Still, the defence of entrenched public positions can turn it into a stumbling block rather than a pathway to conflict resolution. Furthermore, ideological disparities, power imbalances and competing self-interest can hamper its effectiveness in producing mutually agreeable outcomes to common problems. Over time, informal avenues between public officials or private citizens of the countries involved have proved more valuable in building trust and have often led to startling success stories of engagement.

The practice of private, unofficial mediation between citizens and groups was conducted for centuries before the concept of Second Track diplomacy was coined by Joseph Montville, an American diplomat, in 1981. He defined Track Two diplomacy as ‘unofficial, non-structured interaction’ which is ‘always open-minded, often altruistic and strategically optimistic. Its underlying assumption is that actual or potential conflict can be resolved or eased by appealing to common human capabilities to respond to goodwill and reasonableness.’

Track Two discussions have fostered many successful outcomes in seemingly intractable conflict situations, including mediation between FARC rebels and the Colombian Government, and back-channel dealings in South Africa during negotiations to dismantle apartheid. The approach also extended beyond international peacekeeping to encompass a wide range cultural, technical, and structural contexts, including the Dartmouth and Pugwash Conferences which improved cultural and scientific links between the East and West at the height of the Cold War.

Global Access Partners (GAP), an independent Australian policy institute, has been applying and developing this approach since its creation in 1997, to allow stakeholders in domestic social, economic

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3. Information and communications technologies.
4. B. Hogeveen, The changing dynamics of internet governance in the South Pacific, Australian Strategic Policy Institute, 12 Sep 2018
5. J. Mapendere, Track one and a half diplomacy and the complementarity of tracks, Culture of Peace Online Journal, vol. 2, no. 1, 2006, p. 67
8. The Revolutionary Armed Forces of Colombia (FARC, after the initials in Spanish)
9. Conflict resolution relies increasingly on diplomatic back channels, The Economist, 21 Jan 2020
10. Ibid.
and structural issues cooperate across traditional boundaries in the search for common solutions.\textsuperscript{11}

Promoted as ‘the Second Track process’, GAP’s method assembles multidisciplinary groups of individuals from public sector, commercial and academic backgrounds to hold non-attribution discussions on specific challenges. The Second Track is a two-step process, with the frank discussions between individuals from stakeholder groups being followed by the group itself implementing its recommendations, launching commercial offerings or creating permanent bodies to cement long-term relationships between members.\textsuperscript{12}

\section*{OVERVIEW OF ICDP AND PACIFIC CONNECT}

To complement Track One engagements undertaken by Australia in the Pacific Islands, GAP established the International Centre for Democratic Partnerships (ICDP) in 2017. ICDP is a not-for-profit, non-governmental organisation that builds on GAP’s 20 years plus experience in operating successful Second Track taskforces and projects and applies it in the Pacific developmental context.

As part of the ‘people-to-people’ pillar outlined in Australia’s 2017 Foreign Policy White Paper,\textsuperscript{13} the Australian Government launched the Pacific Connect programme to forge stronger relationships between Pacific and Australian leaders across the public, private, academic and community sectors. Pacific Connect aimed to complement the Government’s numerous other digital innovation, cyber engagement, female leadership and research programmes in the region. The distinctive Second Track approach championed by GAP and ICDP saw the team win a two-year pilot contract in 2017 to run Pacific Connect.

ICDP is currently implementing Pacific Connect on a three-year extension. It supports joint projects run by Pacific Islanders and Australians, offers networking and educational opportunities for entrepreneurs, and emphasises female leadership roles under a theme of Australia-Pacific Connections for a Digital Future.

The ICDP team develops cross-cultural relationships by encouraging local generation, support and ownership of ideas and projects emerged from Pacific Connect Dialogues on particular topics, using the Second Track process. The relationships, begun and strengthened by these events, are then nurtured to become self-sustaining networks. ICDP, through its partners in GAP and the Strategic Development Group, has access to a network of more than 4,500 experienced individuals in Australia and can use their expertise to develop relationships, offer mentorship and cooperate on practical projects.

\section*{ICDP’S SECOND TRACK METHODOLOGY}

To stand out in a crowded field of conferences and regional events, Pacific Connect workshops and Dialogues emphasise their provision of focused and nurturing meeting spaces for current and emerging leaders. The Dialogues embrace open discourse, with participants shedding their official titles to overcome official and unofficial barriers. In the words of The Economist, the Second Track ‘creates a safe space where ideas can be aired and proposals tested, without official fingerprints’.\textsuperscript{14}

These elements of Second Track engagement mesh well with the traditional Pacific culture of face-to-face interaction, storytelling, and mutual respect and support, known as talanoa.

\textsuperscript{11} C. Fritz-Kalish, Twenty Years on the Second Track, \textit{Journal of Behavioural Economics and Social Systems}, vol. 1, no. 1, p. 45
\textsuperscript{12} Ibid., p. 46
\textsuperscript{13} Department of Foreign Affairs and Trade, 2017 Foreign Policy White Paper
\textsuperscript{14} Conflict resolution relies increasingly on diplomatic back channels, \textit{The Economist}, 21 Jan 2020
Talanoa is a traditional Fijian term for inclusive, participatory, and honest discussions which differ from Track One approaches in their informal and individual nature. Rather than encourage critical observations and an adversarial approach, talanoa engagements create space for empathy for different contexts. The approach is used throughout the Pacific, from community meetings to regional gatherings, and was adopted for the COP23 meeting in Germany and COP24 in Poland.15

These talanoa climate discussions looked to break the impasse of the concurrent Track One negotiations on the issue. They saw government officials, business and NGO leaders, and city and town representatives share their personal experiences of climate change, foster empathy for each other’s experiences and inform the official, Track One talks. Rather than haggle over technical terms, its roundtable discussions explored ‘Where are we?’, ‘Where do we want to go?’ and ‘How do we get there?’17 The COP23 talanoa generated over 200 discussion points and proposals18 and COP24 then doubled that total.19 Many of these points highlighted the need for climate security and the links between poverty and developmental challenges, human rights and economic opportunities. Organisers hoped talanoa process would produce a moral appeal for action, and shape the official COP24 outcomes to promote regional climate sustainability ambitions and actions.20 The Fiji Prime Minister and COP23 President, Frank Bainimarama, urged delegates to understand that ‘we all have legitimate points of view, but that we are all essentially in the same canoe’.21

ICDP’s interweaving of talanoa strengthens the Pacific Connect programme and its Second Track proceedings. The sharing of compelling personal experiences and an emphasis on empathy boost participants’ mutual understanding of the challenges and opportunities they face. One participant in a recent Brisbane Pacific Connect Dialogue on social impact noted that ‘As a group of women, each of us attended the Brisbane talanoa with our own dreams and hopes for our lives and for our families. Our crossing paths at the Brisbane talanoa was refreshing, and, as women of the Pacific, a reminder that we all shared the common goal; to create a better, more sustainable future for our Pacific region and the wellbeing of its people’.22

The Second Track process has been adapted by ICDP in this way to accommodate Pacific culture and improve outcomes for both Pacific and Australian participants. Ample time is allocated in each regional event for individuals to build rapport through one-on-one and small group discussions. Informal practice pitches are also a feature of Pacific Connect Dialogues, allowing Pacific participants to draw inspiration and receive feedback from their peers as well as event facilitators. Extra-curricular visits and activities are also arranged to build cultural awareness and understanding and deepen enduring cross-cultural relationships.

ICDP currently brings together emerging leaders from six countries – Fiji, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu – from diverse public and private sector disciplines. ICDP’s Second Track welcomes involvement from current public sector staff; however, all participants attend in a personal, rather than professional, capacity. This approach allows a more personal appraisal of current circumstances and creates more freedom for innovative solutions.

15. UN Framework Convention on Climate Change, Talanoa Dialogue Platform, 2018
16. Non-government organisation
17. R. Toito’ona, How successful was the Talanoa Dialogue in COP24? Solomon Star Newspaper, 22 Dec 2019
18. Foresight, Talanoa dialogue: climate change negotiations are not a diplomat-only affair anymore, 08 May 2020
19. V. Rattani, COP24: Talanoa Dialogue ends with a weak declaration, Down To Earth, 13 Dec 2018
20. Ibid.
21. Ibid., no 11
22. D. Lewis Boucher, Our Oceania: Forging a path in uncertain times, 19 Mar 2020
ICDP’s Second Track approach aims to foster long-term relationships between Australians and their Pacific Islander counterparts, rather than limit interaction to the events themselves. Economic outcomes and leadership development is a result of these relationships, rather than the relationships stemming from business or political ties.

While participants from a range of backgrounds are invited, all share common attributes and goals to ensure positive interactions and productive outcomes. Although an ambitious personal attitude is important, so is a genuine commitment to local and regional development, a sense of humility and the ability to embrace and engage others as well as implement change. Participants are selected based on a proven record of trust and respect in the community, and an extensive network with which they are willing to share.

Participants initially spend time together in an informal networking session, ‘breaking the ice’ and forming new relationships which will encourage them to share ideas and policy approaches later in the Dialogue. This stands in contrast to typical Track One engagements, which are often of much longer duration but, given their formal, rigid nature, provide less scope for relationship building.

ICDP Dialogues have the practical aim of developing solutions to local manifestations of ‘wicked’ problems through digital technology. Over the last three years, Pacific Connect Dialogues have considered digital marketplaces, assistive technology, freight and logistics, creative industries, and female entrepreneurship and leadership development. The extensive application process enables Dialogue facilitators group like-minded entrepreneurs to enhance the prospect of long-term relationships persisting, as well as generating project ideas participants could collaborate on overtime.

At least one Pasifika facilitator is present at each Dialogue, having worked in-country to plan the event, define the topic, design the agenda, identify keynote speakers and select participants. Their subject-matter expertise, local knowledge and personal networks also help them work with participants to develop projects after the Dialogue.

After introductions have been made and commonalities established, co-facilitators guide the assembled delegates through an overview of the problem at hand. This might be underdeveloped water hygiene and sanitation measures in Solomon Islands, for example. Each participant is then encouraged to share their experience of this issue and outline their thoughts on a solution in a respectful application of talanoa.

Three to five project ideas tend to emerge from each Dialogue, with participants self-organising in groups to brainstorm business plans or a pitch to present to the group as a whole. Presenting project ideas to the collective generates immediate feedback, which can be used to hone the proposal. Participants may join several projects, depending on their interest and experience and skills.

A communiqué is published after each Dialogue to sum up proceedings for participants and keep key stakeholders informed. Groups maintain contact through Slack channels provided by ICDP to develop the project, deepen their interaction and extend the network involved. Additional investors, suppliers and stakeholders from government, commercial, academic or community sectors can also collaborate on the platform as required.

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23. G. Mungkaje, Building Australia – Pacific partnerships through entrepreneurship, 22 Jan 2020
24. ICDP, Digital Marketplace & Online Services Pacific Connect Dialogue Report, Dec 2019
25. ICDP, Technology Enabling Inclusiveness Dialogue Communiqué, 20 Aug 2019
27. ICDP, Samoa Creative Industries Dialogue Communiqué, 04 Jul 2019
28. ICDP, Brisbane Social Entrepreneurship Dialogue Communiqué, 09 Mar 2020
POSITIVE OUTCOMES OF IMPLEMENTING ICDP SECOND TRACK METHODS IN THE PACIFIC

Although ICDP is less than three years old, it has already enabled Pacific Connect as a broadly respected and fast-growing Second Track platform in the region. It has organised 29 Dialogues and workshops so far, creating 92 collaborative ideas to take forward. Several projects are proceeding to implementation, and five have received funding or awards from international stakeholders, governments or development agencies. There are over 500 members of the Pacific Connect community, including over 280 emerging leaders. Two-thirds of this network are female, and 70% are Pacific Islanders. Seventy-three members are Australian, with the next largest in-country networks being Fiji (47) and Papua New Guinea (42). Over 3,800 messages have been exchanged on ICDP’s Slack forums, and over 50 community members use it every week.

Participant testimonials can speak for the success of ICDP’s Second Track approach to problem-solving, relationship building and project development:

‘I believe Pacific Connect allows us to collaborate with like-minded emerging leaders. This is the answer to many challenges encountered by Pacific Island countries over time, especially in terms of strengthening “Australia-Pacific Connections for a digital future” through collaboration on projects and ongoing network activities.’
– a Solomon Islands Dialogue participant

‘I met many fascinating people through the Dialogue whom I am now working with or plan to work with in the future. The Dialogue gave me a platform to challenge myself, extend my own skills, knowledge and experience, and make connections that I would not have access to otherwise. The Pacific is vast, and the chance to reach out and connect with one another and converse differently on how we can address shared challenges is to be valued beyond measure.’ – a Solomon Islands (freight and logistics) Dialogue participant

‘It has truly been a wonderful experience for me to be invited to participate in this Dialogue. The time spent together was invigorating, meeting like-minded and impactful women across the Pacific sharing experiences, insights, exchanging contacts and making connections. I just loved the energy in the Dialogue room.’ – a PNG-based Pacific Connect Community member

‘Through ICDP I have been able to connect with other Australian entrepreneurs as well, who have been very helpful in providing advice and assistance in connecting me to other entrepreneurs who are doing similar work in the Pacific. As part of the ICDP alumni, you have access to amazing entrepreneurs in the South Pacific and Australia. What I’ve found is that I can approach them for any advice and any assistance and they’re always willing to help, which has been useful especially being based in Fiji, and sometimes needing help from Australia.’

29. ICDP, Testimonials
30. Ibid.
31. Ibid.
32. P. Benson, Pauline Benson’s inspiring entrepreneurial story, 16 Jan 2020
Examples of projects emanating from or linked to ICDP’s Second Track initiatives include:

- The establishment of the first Pacific World Economic Forum Global Shapers hub in Samoa.33
- Tugeda, a digital map of education infrastructure which turns every building in the Solomon Islands into a potential classroom.34
- The installation of outdoor touchscreens and WiFi hotspots for young Solomon Islanders in rural and remote Solomon Islanders35 to deliver educational material.
- The ‘Shifting Homes’ Virtual Reality project in Samoa which was chosen as an exhibitor at The Australian Pavilion at the 17th International Architecture Exhibition La Biennale Di Venezia.
- The online Less than Container Load platform that will help small-scale aggregators and exporters share information with farmers about export markets, pricing and logistics.
- The MobileMe app in Fiji which maps access for people with disability to buildings in Suva. On 3 December 2019 – the United Nations International Day of Persons with Disabilities – local supporters and volunteers captured data of existing infrastructure, and work is now underway to improve access around the town and share this information with the public.36
- The creation of the Yumi Wan project which provides online mentoring, advice and support to businesswomen from regional Australia and Vanuatu.
- The establishment of the Pacific Finds eCommerce platform for micro, small and medium enterprises owned by female entrepreneurs to help them market and sell their products online.

An independent review of the Pacific Connect programme substantiated the success of the Second Track process in fostering relationships. Ninety-five per cent of Dialogue participants said they would stay in contact with each other; while 90% agreed that ‘Pacific Connect is a programme that expands and strengthens Australian-Pacific connections by developing new networks’.37 Eighty-nine per cent of surveyed participants agreed that the programme ‘cultivates meaningful enduring relationships between Australian and Pacific individuals and organisations’, and over four-fifths believed it would contribute to regional economic development.38

THE CHALLENGE OF MEASURING SECOND TRACK OUTCOMES AND IMPACT

Despite the ever-increasing number of Track Two channels,39 and the early successes of Pacific Connect programme, objective assessment for measuring the wider success of these frameworks is still in their infancy. The difficulty of the problems to be faced, the diverse actors involved, and their varying ability to leverage power, finance and networks can mean that dialogues may take time to deliver concrete results.40 While the dialogues can generate ideas and build partnerships, additional funding is often

33. Global Shapers Community, Apia Hub
34. Common Code. Every building is a classroom with Tugeda. 18 Mar 2020
35. Hitnet, Our work reaches communities in the most remote corners of the world
36. B. Blackshaw, ICDP joins forces for MobileMe Mapathon, 19 Nov 2019
37. P. Simoes dos Santos, Evaluation of Pacific Connect Year Two, University of Technology Sydney Institute for Public Policy and Governance, 2019, pp. 9–19
38. Ibid.
39. Conflict resolution relies increasingly on diplomatic back channels’, The Economist, 21 Jan 2020
40. Ibid.
required to turn these ideas into reality, discussions may circle around particular sticking points, or projects may evolve beyond their initial intentions.41 The engagement fostered by a Second Track dialogue is never “linear”,42 and its facilitators must be agile in their efforts to retain focus on desired outcomes, as noted by the facilitator of the inaugural Pacific Connect Dialogue in Nuku’alofa, Tonga.43

IN CONCLUSION
ICDP’s application of the Second Track approach in the Pacific demonstrates how new types of engagements by non-traditional actors can bring people together for positive ends. By melding the Second Track format with traditional talanoa, ICDP has established active networks and innovative projects at a fraction of the cost of other schemes. Despite the structural problems of distance, funding and the current COVID-19 crisis, the Second Track-powered Pacific Connect programme has proved its worth by empowering individuals, businesses and local communities to complement traditional aid and Track One diplomatic engagements.

REFERENCES
Common Code (2020), Every building is a classroom with Tugeda, https://commoncode.io/blog/every-building-is-a-classroom
Department of Foreign Affairs and Trade (2017), 2017 Foreign Policy White Paper
Global Shapers Community, Apia Hub, https://www.globalshapers.org/hubs/apia-hub

42. Above, no.3
43. A. Carriline, Reflections from a facilitator on a Tonga Dialogue, 09 Dec 2019


Mapendere, J. (2006), Track one and a half diplomacy and the complementarity of tracks, *Culture of Peace Online Journal*, vol. 2, no. 1, p. 67


Simoes dos Santos, P. (2019), Evaluation of Pacific Connect Year Two, University of Technology Sydney Institute for Public Policy and Governance, pp. 9–19


PROTRACTED DISRUPTION, UNCERTAINTY, SHRINKING COMPANY LIFESPANS, ACCELERATED TECHNOLOGICAL CHANGE, ARTIFICIAL INTELLIGENCE, ROBOTICS, SHORT-TERMISM AND WORKFORCE TRANSFORMATION ARE COMBINING TO CHALLENGE EXECUTIVE MANAGEMENT IN BOTH THE PUBLIC AND PRIVATE SECTORS. HUMAN CAPITAL AND CORPORATE GOVERNANCE PROFESSIONAL LES PICKETT EXPLORES GLOBAL TRENDS AND EMERGING ISSUES.

INTRODUCTION

Company lifespans are shrinking, the odds of failure are increasing, growth is harder to achieve, the gap between winners and losers is becoming wider, and talent continues to be a scarce commodity. Couple this with an environment in which there is accelerating technological change, social polarisation, political gridlock, geopolitical shifts, and increased public scrutiny. Combined these point to an era of protracted uncertainty and volatility.

Against this backdrop companies are confronted by new and unfamiliar competitive imperatives that challenge traditional management capabilities. Rising to this challenge requires the capacity to generate new ideas and continuously reinvent the business. Business leaders must consider the broader context – economic, social, political and ecological – to endure in the face of unexpected shocks.¹

¹. Boston Consulting Group, 2020
A significant disruptor for contemporary business is artificial intelligence (AI). The gap between AI winners and losers is widening in nearly every sector. Those already behind must adopt the critical strategic, organisational, and leadership behaviours of today’s winners. AI is not just about technology. It is about people, process, culture, and strategy; ultimately it redefines the relationship between man and machine.

To enhance potential for future success senior management needs to identify and focus on the initiatives that have the highest potential. Actions that will separate the winners from the losers include:

- integrate AI into business strategy;
- prioritise revenue growth over cost reduction;
- take bigger risks to achieve greater impact;
- align AI development with its usage;
- treat AI as a business transformation;
- invest in AI talent, governance, and process change.

AI initiatives should not exist in isolation. Companies successfully generating value for AI closely link their efforts to companywide digital transformation.2

Given the scale and speed of digital disruption the nature of competition and collaboration in business is changing. Digital disruption is essential in achieving competitive advantage but it cannot be achieved by creating independent digital units or by launching digital products disconnected from the value chain. Transformation is successful only when it addresses the key elements: business model, value chains, customer relationships, and company culture.3

The twin trends of globalisation and robotics – or globotics – will usher in a period of unprecedented disruption that may displace workers at the fastest pace in history. Machine learning has given computers an unprecedented level of skill, making white-collar robots into fierce competitors for office jobs. Globotics describes the combination of this new form of robotics and globalisation. It is a revolution that is happening with astonishing speed and which will seem unfair in its impact. What is more, we cannot count on new jobs appearing at anything close to the same rates that they are disappearing. The sad reality is that it is a lot easier and faster to make money by eliminating jobs than it is to make money by creating jobs. When jobs are displaced at a breakneck pace but created at a leisurely pace many people who thought they had stable, well-paying careers will struggle. Job displacement is always certain; job creation never. Like factory workers who lost their jobs to automation, white-collar and service workers are now in danger of being displaced.4 Some projections indicate that 75 million jobs may be displaced with around 133 million jobs created as the result of technology.5

When a local job can be done remotely it can also be done in many other locations around the world. It has been estimated that about half of management, business, and financial jobs, around 30% of office and administration jobs, and almost 60% of professional, scientific, and technical jobs are open to international wage competition according to a recent US study.6

To deal with the revolution that is taking place around us, we need to stop focusing on the technology itself and start thinking about how to be leaders in the technological revolution. This paper considers some critical issues: leadership, skills and competencies, role clarity, accountability, priorities, focus, communication, understanding, cooperation, managerial effectiveness, respect, reliability, trust,

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2. Boston Consulting Group, 2020
3. Economist Corporate Network, 2019
4. Baldwin, 2019
5. World Economic Forum, 2018
recognition of contribution and the big picture problems of corporate management and human capital capability development and utilisation. The discussion that follows considers the way that technology is changing the workplace and therefore the economy and how organisations can navigate this brave new world in terms of approaches to leadership and management. It first discusses AI in more detail, then outlines the damaging trend of short-termism that has led to failures of leadership in the technological revolution. What makes good management is then considered, as well as the human capital requirements to develop a new way of thinking and acting.

ROBOTS ARE CHANGING THE WORLD

The most important general-purpose technology of our era is artificial intelligence. While AI is in use in thousands of companies around world and is having a transformational impact most big opportunities have not yet been tapped. The bottleneck is in management, implementation and business imagination. The number of robots in use worldwide multiplied three-fold over the past two decades to 2.25 million. Trends suggest the global stock of robots will multiply even faster in the next 20 years, reaching as many as 20 million by 2030 with 14 million in China alone. The implications are immense and the emerging challenges for policy-makers are equally daunting in scale.

While robots will boost productivity and economic growth by the creation of new jobs in yet-to-exist industries, existing business models in many sectors will be seriously disrupted and millions of existing jobs will be lost. Because AI is a very different technology from earlier types of automation it will most affect a very different part of the workforce. Better-paid, better-educated workers face the most exposure. Key AI impact points in the labor market include:

- AI could affect work in virtually every occupational group;
- better-paid, white-collar occupations may be most exposed to AI, as well some agriculture and manufacturing positions;
- business-finance-tech industries, natural resource, and production industries will be more exposed;
- AI looks destined to have most significant impact on prime-age (25 to 54) workers;
- bigger, higher-tech metro areas and communities heavily involved in manufacturing are likely to experience the most AI-related disruption.

The adoption of AI in business is a clear business opportunity that will have an overall net positive impact but an ethical and human rights lens needs to be applied. The Australian Government’s AI Ethics Principles provide guidelines to help organisations achieve better outcomes, reduce the risk of negative impact, and practise the highest standards of ethical business and good governance.

The principles have been designed to complement existing AI obligations and regulations and to be used by businesses and organisations when designing, developing, integrating or using AI. They come under eight categories: human, social and environmental wellbeing; human-centred values; fairness; privacy protection and security; reliability and safety; transparency and explainability; contestability; and accountability.

The principles also stress that there should be human oversight of AI systems and that those responsible for the different phases of an AI system’s lifecycle should be identifiable and accountable for the outcomes.

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7. Brynjolfsson and McAfee, 2017
8. Oxford Economics, 2019
9. Muro, Whiton and Maxim, 2019
10. UN Global Compact Network Australia, 2020
To take advantage of the latest advancements in AI, organisations need to focus on simplifying and securing AI at work or risk being left behind. Many workers find it challenging to keep up with the pace of technological changes in the workplace. They want a simplified experience with AI at work, a better user interface, best practice training, and an experience that is personalised.11

AI is challenging the very concept of the firm, redefining how to create, capture, share, and deliver value by building a data-centric operating architecture that breaks down anachronistic silos cutting horizontally across the organisation. Competitive advantage is shifting away from vertical capabilities toward universal capabilities in data sourcing, processing, analytics, and algorithm development, leading to the gradual demise of traditional specialisation.12

Currently there is a great divide between what employees are doing with AI in their personal lives and how far along their employers are in implementing AI in the workplace. An April 2018 study titled ‘AI at Work’, conducted by Oracle and research firm Future Workplace, led to some surprising findings, among them the fact that 93% of people would trust orders from a robot at work, and that 70% of employees are already using AI in their personal lives yet only 24% use it at work.13

Of the threat that AI presumably poses to future employment, Erik Brynjolfsson and Andrew McAfee write in the Harvard Business Review that ‘Over the next decade, AI won’t replace managers, but managers who use AI will replace those who don’t’.14 Moreover, it is not clear how the roles and tasks that employees perform will change and what organisations should do as a result. Aligning workforce transformation, a significant and deliberate change to the nature of an organisation’s employee base, with broader strategic goals is challenging senior management.

Analysis of 200 executives across eight countries shows that widespread workforce transformation is under way with more than eight in ten respondents confirming this is happening in their organisation. The most common changes made have been increased investments in technology and digital-skill training.

Resistance to change and a lack of understanding of the ideal workforce are two critical barriers to workforce transformation. In many organisations, management is failing to think strategically about what transformation requires and how to motivate employees to be an integral part of the future workforce. Organisations need to focus on simplifying and securing AI or they risk being left behind.

People have a number of concerns with AI. To extract maximum business value from this technology, organisations have to understand what is stopping people from fully embracing AI then devise strategies for overcoming the barriers. Among the biggest barriers to adoption and use of AI in the workplace are a preference for human interaction and concerns about security and privacy.15 Despite this, people are able to perceive and appreciate the technology’s potential. Workers believe that AI can present them with important opportunities – including being able to master new skills, gain more free time, and to expand their current role so it’s more strategic.

Employees are ready and willing to learn new skills but executives are no so confident. A global survey of over 7,000 executives and HR leaders in

11. Oracle, 2019
12. Iansiti and Makhani, 2020
13. Oracle, 2018
14. Economist Intelligence Unit, 2019
15. Oracle, 2019
34 countries found that 78% of employees say they are ready to learn new skills while executives believe only 45% of their current workforce can adapt to the new world of work.

What people need most in this period of transformation is leadership – to rely on the knowledge and experience of those who can see the big picture. The next section discusses the dangerous trend of short termism in modern society.

SHORT TERMISM
We live in a fast changing environment confronted by a constant stream of changes in technology, economics, and financials accompanied by an ongoing lack of clear future direction and political leadership. The business landscape is changing with the growing challenge of international competition and free trade agreements. Leadership is more important than ever; yet there is a dangerous focus on short-term decision making in both the private and public sectors and many of our politicians are spending far too much time point scoring and ego tripping rather than leading their respective countries.

Short termism leads to excessive risk taking, deceptive reporting, poor leadership, and lost opportunities. It presents many challenges to business owners and senior management teams who are working to try to find the right mix of time critical short-term action and long-term strategies that will have a positive impact on business performance and sustainability. According to the Australian Institute of Company Directors ‘... There is an imbalance in decision making in favour of short-term perspectives and objective... Greater emphasis on longer term consideration is now required to achieve a sustainable balance’.16

A focus on short-term corporate profitability creates poor leadership that damages business according to a survey of 4,000 business leaders conducted by London Business School, which found that 77% of businesses are making decisions based on short-term profitability. Around one third of the participants identified creating a responsible culture as their top priority.

Developing a longer-term focus with accompanying longer term investment are critical factors for growth and sustainability. However, contemporary management is too frequently focused on the technology, failing to see the big picture, as discussed in the following section.

OBSESSIVE FOCUS ON TECHNOLOGY
There is almost an obsessive focus on the technology revolution. This narrow focus may well be the reason many change initiatives fail to achieve the anticipated benefits. Over the years I have been presented with cost benefit justification for major expenditure on technology – many running into millions of dollars. There seems little hard evidence that many of these actually achieved all the benefits proposed during the justification for approval stage. Many reasons are provided for this failure, almost as if they have been produced from a template. They include:

- circumstances changed;
- we had to wait too long for feedback;
- staff did not support our programme;
- union opposition;
- there was lack of real executive support and commitment;
- the market moved in another direction;
- our technology was incompatible or obsolete;

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• we did not expect that some phases of the project would take so long;
• new programmes and software became available;
• we forgot the need for additional facilities to support the programme;
• the dollar went up (or down) faster and further than we had anticipated;
• we could not find people with the competencies we needed... and when we did we could not keep them;
• people just do not want to change the way they do things.

Rarely are we told that the initiating team of technologists just got a bit carried away with the challenges of a new plaything and lost objectivity in the planning and development stages. Over-optimistic planning and budgeting is quite different to creative, responsible risk-taking. Yet, when we look back we recognise that we wanted a Mini but somehow it grew into a Ferrari... and an optioned-up version at that. It is very hard for the professional technologist to resist the challenge of being in or directing a leading edge project utilising the latest or emerging technology – even though the organisation may still be in punched-card operating mode.

Senior executive management is happy with the comfort level provided by systems they know and understand and a business environment they can manipulate. They dream of the good old days when the boss was the boss, where bright young things with degrees did not rattle their cage and challenge the status quo, when there was a higher degree of stability and certainty, and globalisation and terrorism were just words in a reference book.

Some thirty years or so ago a review by the ILO of the projected global take up of the use of robotics in manufacturing show that actual usage failed to reach anywhere near the anticipated level. The main reasons identified included lack of understanding of their potential applications and benefits by senior management and lack of operating skills by the workforce. Poor or inadequate training was identified as a critical contributor to slow adoption. This can be attributed to poor management of a significant workplace change. This suggests that we need to place far greater emphasis on managerial leadership. In other words, the problem is not a failure of technology – we need more than a technology revolution, we need a people revolution. How can transformation be managed better? This is outlined next.

BETTER MANAGEMENT

When we look at the underlying cause of things that go wrong we can generally track it back to the human factor. That is, mistakes are caused by people who did not know what to do, how it should be done, where or when to do it. There are people who lack the knowledge and skills to competently do their job. These are the people who come to work but lack leadership and direction, have low motivation, and fail to utilise their personal capabilities. These are the people that management has failed because the ultimate responsibility for lack of effective leadership in any organisation rests with the senior executive management.

It is interesting that as a nation we cope well with change in our private lives and Australia has demonstrated time and again a willingness to rapidly embrace new technology (introduction of television, mobile phones, internet, social media). This makes me ponder on the contradiction. If we are so adaptable and willing to change so readily, why do around 80% of corporate change initiatives fail to reach their objectives? The major cause must surely be poor management.
Poor management fosters failure. Failure to clarify the purpose and objectives, failure to define the scope of the initiative, failure to plan and manage change, failure to communicate, failure to involve people, and failure to bring them into the transition at an early stage.

Over the years a number of our major bitter industrial disputes have been around workplace changes. Some of these were specifically related to technological change. Many of these divisive, non-productive conflicts could have been avoided with more effective planning for and management of change in the workplace. We are regularly confronted with enterprise closures, downsizing, and retrenchments. The rate of staff and managerial turnover has progressively increased and can be expected to increase further caused by the churn frequently accompanying technology related workforce transformation.

This brings with it the increasingly serious problem of the retention of knowledge and expertise by corporations. Much has been and is being said and written about intellectual capital and knowledge management. When someone (particularly an experienced specialist) leaves an organisation a high level of know-how walks out the door with them. Then there is the emerging debate about who really owns the knowledge that is in the mind of people who leave.

Knowledge management is a management trend and there are many definitions. Standards Australia has a simple and realistic definition that recognises knowledge management as a multi-disciplinary approach to achieving organisational objectives by making the best use of knowledge. During a period when there is great pressure to reduce enterprise overhead costs we have seen the creation of yet another corporate role...that of Knowledge Manager. Whether this is a transitional role or one of long-term substance remains to be seen.

Regardless, there are some key issues confronting today’s enterprises. The following list of questions is not exhaustive but gives some indication of the scope of the challenge.

- Is there a corporate knowledge management, retention and communication strategy?
- Does the organisation know:
  - What it needs to know?
  - What it actually knows?
  - What it does not know?
  - What it does not know that is critical to future success?
  - What use is made of technology to store and communicate knowledge?
- Is knowledge readily accessible, credible and usable?
- How is knowledge passed to those who need it?

There is also increasing pressure on business to become more socially responsible. A convergence of economic, social, and political forces are compelling organisations to rethink the way they do business, pushing them towards better and more responsible behaviour.

Nations are competing in a number of dynamic and competitive world economies with great pressure being exerted on governments around the world to reduce public sector spending, and increase productivity and employment levels without reducing services and benefits. At an enterprise level, the demands of the investment community and company shareholders for long-term sustainability and increasing levels of profitability continue to get louder. At the individual level people have grown weary of incompetent managers and of their skills not being recognised and capabilities under-utilised.

For years we have heard the ongoing complaints from people at all organisational levels in both
public and private sectors about poor leadership – particularly at the frontline and middle management levels – about lack of commitment and poor performance, ineffectual internal communication, increasing staff turnover and absenteeism. The list goes on. So how can we create better leaders?

Leading in the future requires the capability to operate in a business environment that is highly disruptive and predominantly volatile, uncertain, complex, and ambiguous (VUCA). Technological advancements in artificial intelligence, robotics, sharing platforms, and the Internet of Things are fundamentally altering business models and industries. These changes are often not only alien to businesses; they are taking place at unprecedented speed. Leaders at all levels need to develop the relevant competencies and skills to successfully adapt to the new realities. Leaders today must deal with:

- **Volatility**: Things change unpredictably, suddenly, extremely, especially for the worse.
- **Uncertainty**: Important information is not known or definite; doubtful, unclear about the present situation and future outcomes; not able to be relied upon.
- **Complexity**: Many different and connected parts: multiple key decision factors, the interaction between diverse agents, emergence, adaptation, coevolution, weak signals.
- **Ambiguity**: Open to more than one interpretation; the meaning of an event can be understood in different ways.

The critical importance of getting the human performance and people development factors right in organisations is very clear. This means that far greater use will be made of human capital analytics to enhance investment in our human resources, increase the effectiveness of managerial leadership, improve productivity, provide greater opportunity for personal growth, and improve organisational performance.

Although the shift to human capital metrics may seem innocuous it has the potential to spark a quiet revolution in organisations and is what is needed to survive and prosper in an increasingly knowledge-intensive and competitive global economy. It helps identify and eliminate stubbornly-resistant, industrial-era mindsets, processes and managers, and sets the stage for replacing them with knowledge-era counterparts.

**PEOPLE MANAGEMENT CHALLENGES**

We need people to want to come to work, to enjoy what they do and to feel that their contribution is recognised and rewarded.

But how to translate what we aspire to into what we do? The cold reality is that there is a chasm between the vision, mission statement, objectives, and strategies of businesses and their operational people management processes. To build a bridge requires bold, innovative action to protect people and contribute to enterprise survival and future success. That is, to develop innovative and challenging human capital capability initiatives that recognise that people provide organisations their only sustainable competitive advantage.

In an increasingly globalised world human capital is arguably the only remaining sustainable source of competitive advantage for organisations, particularly those operating within high-wage, developed nations. This means that effective, forward-looking human capital management must become a core competence for all organisations that expect to survive (much less prosper) as the world economy continues to evolve.

We need to be careful in our time poor very busy work environment not to be fooled by the increasing variety of wonderful new quick fix
alternatives, many of which have little substance and do not add value to the enterprise. We all know that in the final analysis people make it happen and that effective managerial leadership at all levels is possibly the most critical success factor.

So what does the company of the future look like? The next section takes a look into the future.

**TOMORROW’S COMPANIES**

Senior executive teams can be successful if they adopt a philosophy of dynamic conservatism, that is, learning from the past, managing the present, and planning for the future. Future success demands a genuine focus on the longer term. This requires a high level of understanding, trust and co-operation between board members, senior executives, and operating management. Too often good corporate governance and business leadership are replaced by ego tripping, individual point scoring and personal career building.

Tomorrow’s successful companies are carefully planning and working hard to improve business outcomes and create value. They recognise that international competition, expansion and growth bring new challenges and opportunities. They know that the days of running the people side of their business by instinct and intuition are over. Developing and optimising human capital capability is the new frontier for improving organisational success and having sustainable competitive advantage. These companies are working on redefining success and creating frameworks that align financial, social, and environmental objectives and effectively utilise technology and human capital capability. They recognise that a new model for corporate leadership is required to improve current performance and advance the achievement of future strategic objectives. They know that every organisation has its own culture, dynamics, strengths, and weaknesses, that different factors drive outcomes, and that organisations change in terms of their goals, maturity and stability. They have a strategy to develop tomorrow’s successful business leaders. They are utilising the emerging science of human capital metrics and challenging the assumption that there is a small number of common factors that drive employee engagement across all organisations. They recognise that a new approach is needed to identify which investments in human capital will most effectively improve organisational performance and drive future success.

The leaders of tomorrow’s successful global companies will have a different mindset from much of what we see today. They will have a clear vision, strong values, courage, empathy, be accessible, have high level negotiating and interpersonal skills, a passion for teamwork, humility, and a commitment to the development of future leaders.

Two out of three of executives participating in a UK survey said that they are not yet ready to lead their businesses into the future and that the successful organisation of the future that will be flexible, adaptable and able to cope with rapid change.

To succeed in the 2020s companies should focus more on maturing the organisational capabilities necessary to evolve and grow sustainably. They should also increase their rate of organisational learning, focusing more on discovery and adaptation than on forecasting and planning. Action to reinvent an enterprise as a next generation learning organisation should be based on continuous innovation and sustainable growth and include:

- adopt technologies for seamless learning;
- integrate machines and humans;
- embrace new ways of working;
- commit to always-on transformation;
- make diversity a business requirement;
- combine business and social value.
It is also important to leverage AI and advanced analytics to create integrated learning loops in which machines use continuous feedback to act, learn, and adapt on their own without the bottleneck of human interventions. AI will enable companies to stay competitive, HR leaders to be more strategic, and employees to be more productive at work. If organisations want to take advantage of the AI revolution, while closing the skills gap, they will have to invest in AI training programs. If employees want to stay relevant to the current and future job market, they need to embrace AI as part of their job. In fact, people are not afraid of AI taking their jobs and instead want to be able to quickly and easily take advantage of the latest innovations. To help employees embrace AI organisations should partner with their HR leaders to address the skill gap and focus their IT strategy on embedding simple and powerful AI innovations into existing business processes.

While it is very clear that learning is an important business strategy that has a significant impact on competitive advantage and can build long-term shareholder value, today’s measures of business performance do not place value of knowledge as a business asset. The successful companies of the future will have an environment and culture that actively encourages and rewards learning and the sharing of knowledge within the workplace. If we want to develop a successful learning organisation we need a vision for the future which is communicated, understood, shared and supported. We need to know what core capabilities for success are required today and those that will be needed in the future. To achieve a real competitive advantage we need to know which critical capabilities are applicable to the enterprise and those which apply to specific functions and to individuals within the organisations.

In addition, we must provide consistent effective and dynamic leadership that is transparent and have a senior management team that sets an example and actually practices the rhetoric. We need to create and maintain a positive, supportive, encouraging and rewarding culture that motivates staff, facilitates the acquisition of knowledge, and encourages innovation and creativity.

Organisations should develop structures and operating processes that facilitate rather than hinder or discourage individual and team achievement. We need to cut red tape, minimise bureaucracy, and facilitate decision making as close to the action as possible. We must also regard and manage our people as assets. This means avoiding the double standard of telling the staff that they are the enterprise’s greatest asset while telling the media and investment community that people are the greatest cost [which infers the greatest liability] to the organisation. While the accounting figures may show that staff-related costs represent the major item of expenditure, particularly in labour intensive industries, the semantics are important and the communication processes require a thoughtful and well-planned approach.

A significant UK research project clearly indicated that investing in people can radically improve bottom line performance. To achieve this there needs to be a clear link between people management and business strategy and it would be beneficial to have a representative at board level responsible for developing the organisation’s people strategy. There also needs to be a clear, well thought through, and robust people management strategy.

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17. Boston Consulting Group, 2020
18. D. Schawbel, Research Director at Future Workplace
19. Emily He, SVP, Human Capital Management Cloud Business Group, Oracle
CONCLUSION
What is missing from the above discussion is the role of research. We need the academics, the creative thinkers and the dreamers. We need the books, magazines, and the internet to communicate theories, ideas, and practices.

We know that the major challenges facing managers include:
- improving their communication skills;
- developing more effective leadership skills;
- coping with rapidly changing technology; and
- developing more effective change management capabilities.

Let’s develop research and practice that focuses on how to address these challenges and acknowledges what are the barriers to achieving these goals. Ultimately, let’s answer the question: if people are an organisation’s greatest asset, why do we show them as a cost on the balance sheet? Now that’s something for the accounting profession to think about!

REFERENCES
Australian Government (2019), Artificial Intelligence Ethics Principles
Boston Consulting Group (2020), How to Thrive in the 2020’s
Economist Corporate Network (2019), Riding the Waves of Disruption: Business Ecosystems and Competitive Advantage in the Digital Economy
Economist Intelligence Unit (2019), Work in Progress: Aligning Workforce Transformation to Business Strategy
FinTechVisor (2019), A People Driven Digital Strategy for Singapore’s DBS Group
Mercer Global Talent Trends (2020)
Oracle (2018), AI at Work: It’s Time to Embrace AI
Oracle (2019), AI is Here to Stay: Organisations Need to Simplify and Secure AI to Stay Competitive
Oracle (2019), From Fear to Enthusiasm: Artificial Intelligence is Winning More Hearts and Minds in the Workplace, Oracle Future Workplace AI @work, Global Study
Policy Program at Brookings, Brookings Institution, Washington
UN Global Compact Network Australia (2020), Pressures Report
World Economic Forum (2018)
A new world is trying to be born – a world that seeks greater resilience, creativity, compassion and sustainable planetary progress. To bring this world into being, we need a new set of abilities not yet taught in schools and a fresh perspective on humanity. Neuroscientist, entrepreneur and expert in human-centred design Dr Melis Senova explains the idea behind her proposal for a new Institute for Human Potential.

The many challenges faced by humanity today can only be tackled by understanding and unleashing the full power of human potential. Technological innovation and social change are accelerating at a bewildering rate. For individuals and nations to not only cope with change but shape it and thrive, we need to prioritise the skills which define our humanity, rather than pursue old and outdated paradigms of knowledge, or compete with the machines we have created.

We live in the Anthropocene, the era in which human activity is the dominant influence on the environment and climate. The decisions we make today, as individuals and communities, will not only affect our prosperity but might decide the survival of our descendants. It is therefore incumbent on us to consciously reconsider how those decisions are made and realise the importance of the meta-cognitive attributes (or meta-skills) which shape them.
META-SKILLS UNDERPIN SUBJECT KNOWLEDGE

The industrial revolution of the 19th century demanded a more educated workforce, and mass education, in turn, borrowed its model from the factory. Schools and universities today are optimised for efficiency, producing the highest number of graduates at the lowest possible cost by marking progress through standardised examinations. However, this mass production of knowledge is increasingly irrelevant to the individual skills demanded in our post-industrial age of automation and artificial intelligence.

Recent government proposals to increase the cost of arts degrees follow years of other efforts to encourage STEM studies in the hope they will revive the economy to compete with other nations. Unfortunately, a rigorous understanding of science, technology, engineering and maths is necessary but not sufficient at a time when the need for meta-skills such as creativity, emotional maturity, agility and resilience is coming to the fore.

Policymakers still expect students to emerge with a static identity – an engineer, lawyer or doctor – rather than a set of skills which will allow them to solve problems creatively, adapt to changing circumstances and effectively lead teams of other human beings. However, just as machines replaced agricultural workers in the 19th century, and manufacturing workers were supplanted in the 20th, so computers are replacing office workers today and many professions will be disrupted by artificial intelligence tomorrow.

Businesses complain that graduates arrive unprepared for the world of work because students are still being prepared for 19th-century factories, or 20th-century offices, rather than the creative hubs of the 21st century. As Sir Ken Robinson quipped, ‘complaining that graduates aren’t creative is like saying, “I bought a bus, and it sank.”’ The last thing the world needs is human robots. So our schools and universities should begin to recognise, value and promote the meta-skills which society demands and which will never be replaced by a computer.

UNDERSTANDING META-SKILLS

So what is a meta-skill? Gustavo Razzetti defines it as ‘a master skill that magnifies and activates other skills... a high order skill that allows you to engage with functional expertise more effectively... a catalyst for learning and building new skills faster’. Meta-skills are the foundation on which we build the world, the human attributes and qualities that allow us to use the knowledge we acquire for higher purposes and nobler aims. Meta-skills are transferable from situation to situation and, as they determine the ‘how to be’ rather than the ‘what to do’, are best understood as guiding principles than sequential steps.

Marty Neumeier advocates investment in five specific meta-skills – feeling, seeing, dreaming, making, and learning – in his book Meta-skills: Five Talents for the Robotic Age. Appreciating the power of these concepts will help individuals, communities and organisations self-direct, coordinate and collaborate on their initiatives, allowing society to react to challenges such as COVID-19 or climate change in a more agile and resilient way.

2. G. Razzetti, The Metaskills You Need to Thrive in the 21st Century
Establishing proficiency in meta-cognitive skills will also have an impact in the following areas:

- **Potential**
  The future will belong to individuals, companies and countries which understand the untapped power of human potential and implement the evidence-based practices required to express it through technological advance, social reform, entrepreneurial endeavour and scientific discovery.

- **Productivity**
  While classical economic production required the rational organisation of land, labour and capital through enterprise, growth in the 21st century cannot ignore the environmental, cultural, political and technological conditions which underpin it. Similarly, understanding the meta-skills which underpin and direct our technical know-how and individual aims will help individuals, organisations and governments not only innovate but share its benefits among all.

- **Progress**
  The meta-skills of self-management, interpersonal communication and social awareness will help people adapt to new norms and transition gracefully to new paradigms on a sustainable and ongoing basis. Improving our ability to adapt and evolve will, in turn, make communities less reliant on external assistance, freeing government resources from welfare to invest in the future.

### META-SKILLS, MINDSETS AND INNOVATION

We are always urged to innovate to adapt to a fast-changing world. Still, the debate is focused on the ‘what’ of process, infrastructure and policy, rather than the ‘why’ of what this innovation is supposed to achieve. To inspire the population, innovation should be redefined as a force which benefits people rather than profit.

We need to broaden our thinking to encompass innovation in our society and redesign our struggling super systems of education, health and finance to serve all Australians. This will require a set of new mindsets far more radical than those proposed by our political leaders. Rather than assume we know the answer as soon as a question is asked, we should be open to listening and exploring all alternatives. Only by loosening our attachment to the past can we contemplate new concepts. Our children are innately curious, yet this invaluable trait is all too often crushed by the needs of education and the cares of adulthood. To innovate, we must first see our world through new eyes, and cultivate a **beginner’s mind**. 4

To build on that, we must then maintain an **open mind**. We must welcome new perspectives and paradigms, rather than instinctively defend our boundaries and social traditions. Allowing these boundaries to be tested and stretched encourages a more nimble viewpoint more conducive to creativity and innovative thinking. In an increasingly technological and interconnected world, where boundaries between nations and cultures are diminishing, having an open mind is an entry criterion for successful interaction.

These attributes, in turn, nurture the **creative mind**. A creative mind is willing to question the systems that have organised society for hundreds of years. The ability to reconsider problems from first principles may be the only way to tackle the complex systemic challenges facing humanity today, from social strife and political confrontation to economic disruption and environmental catastrophe.

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A PhD does not delineate a creative mindset in design, but by defiance of the worn-out problem to solution pathway drilled into us at school. A genuinely creative mindset is more interested in asking great questions about global challenges than huddling around a single answer. It is willing to spend time understanding a problem’s core, rather than snatching the first proposal to make the problem disappear.

The seduction of a solution is no longer fit for purpose in an ever more complex world of dynamic socio-technical systems. We cannot solve challenges with the same thinking that created them, rely on linear thinking to tackle complex challenges or polarise in tribal groups on issues which affect us all.

Putting all these and other meta-skills together will help us cultivate the whole mind we need, to perceive, understand and act upon reality with an inclusive and systemic perspective. It will help us focus on social outcomes, rather than economic outputs, on people, rather than things.

THE META-SKILL OF LEADERSHIP

Leadership is another meta-skill only humans can deliver: While there is no shortage of authoritarian leaders in the world today, yet this type is the antithesis of the purpose and direction we crave to build a robust, safe and secure future for our species.

Modern experience proves that the drive for economic prosperity is not enough to guarantee contented lives. We should strive for meaning, as well as the satisfaction of immediate needs. By developing our meta-skills, we will not only become more resilient in the face of adversity, and agile in a time of change, but also offer a new model for the good of our planet and its people.

The ability to prioritise is another vital meta-skill. If we prioritise the absolute need – as people, organisations and a nation – to have a net positive impact on our planet, we can not only make a difference ourselves but show authentic leadership by inspiring others to follow. With a clear sense of purpose and intention, it becomes much easier to focus the decisions about what and how to achieve it.

TO REACH FOR THE STARS, WE MUST REACH WITHIN OURSELVES

Ray Kurzweil is a leader in the field of artificial intelligence. Still, he defined our unique biological advantage when he said that ‘ours is the species that inherently seeks to extend its physical and mental reach beyond current limitations’.5

The process of extending our physical and mental reach beyond our current limitations rests on our ability to learn, create and cooperate. Learning unlocks the ability to master the skills any situation may require. So our schools and universities should increasingly teach us how to learn, rather than static skill sets and attitudes. We should also take responsibility ourselves. While our biological evolution is achingly slow, lagging far behind our rampant technical innovation, we can evolve and shape our ways of thinking – our mindsets – through conscious effort.

To learn effectively – and grow as a human race – we need to appreciate and develop a range of enabling meta-skills. These may be summarised as:

- **self-awareness** – the ability to observe own behaviour in rational terms;
- **self-reflection** – the ability to reflect on the implications of our own behaviour for others as well as ourselves; and
- **self-directed growth** – the interest in the evolution of our own capacity.

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These meta-skills are more than the key to remaining employable in a world where drones deliver goods manufactured by robots and designed by computers. They are the qualities which make us human and distinguish us from our machines. They should be nurtured to save ourselves from our baser instincts but also to appreciate the better lives they help create.

Meta-skills are not obscure or irrelevant. They are:

- the ability to feel – from intuition, empathy, social intelligence to communing with nature – as well as think;
- the ability to imagine as well as implement those dreams in reality; and
- the capacity to think holistically about the past, present and future, and the rest of the world as well as ourselves.

Meta-skills allow us to tolerate complexity, navigate ambiguity and see reality as the sum not of things but their interconnections.

The world portrayed in the news every day is a frightening, gloomy and dangerous place, but I remain convinced that a new world is struggling to emerge from the chaos. A world of greater resilience, creativity, compassion and sustainability. To bring this world into being, we will need to value and promote a new set of age-old abilities that are not yet taught in schools. We will need a renewed perspective on what human potential might look like. To quote an Insight Report published by the World Economic Forum in January 2018, we need ‘nothing less than a societal mindset shift for people to become creative, curious, agile lifelong learners, comfortable with continuous change’.6

An Institute for Human Potential can advocate for these skills and qualities, but we can all play our part today.

REFERENCES


BOOK REVIEW

LEADERSHIP, NOT LEADERS: REFLECTIONS ON RONALD HEIFETZ’S THEORY OF ADAPTIVE LEADERSHIP

by Ian McAuley

How can we mobilise the resources of a group or society to make progress on the difficult issues they face? Policy commentator Ian McAuley puts Heifetz’s model of adaptive leadership into the Australian context.

There is no shortage of works on leadership: a search through the National Library catalogue throws up 451 books and journals with ‘leadership’ in the title. Writings on leadership tend to fall into two categories: analysis of political and business ‘leaders’ such as Winston Churchill and Jack Welch, and advice on how to become a successful ‘leader’.

A third and very small category is about ‘leadership’ as something separate from ‘leaders’.

THINKING ABOUT ‘LEADERSHIP’ RATHER THAN ‘LEADERS’

Ronald Heifetz of the Centre for Public Leadership at the Kennedy School of Government has written three books on leadership – one alone, two in association with other authors – which hardly mention the word ‘leader’.1 Rather, they are about the hard work of leadership, a set of activities which do not necessarily attach to those holding positions of authority.

Authority is generally associated with a particular position in an organisation – a CEO, a shift supervisor, a colonel, a corporal, a prime minister, a local government administrator. The boundary of responsibility for such positions is usually set out in a job description or a legislative mandate, and for the most part the work of the people in those authority positions is about directing, planning, controlling and organising – the textbook functions of management.

Heifetz defines leadership as something quite different. He sees leadership as a set of activities involving the mobilisation of the resources of a people or of an organisation to make progress on the difficult problems they face. Those holding positions of authority may exercise leadership, but so too may others who hold no positions of authority.

He is wary of the traditional ‘leader-follower’ model, because ‘mobilising the resources of a people or organisation’ involves handing the work to the people involved. The best work of leadership is often unseen and unsung.

The ‘leader-follower’ model prevails, however, particularly in times of stress when people seek out the strong ‘leader’ to solve their problems, and it is easy for those who step into this role to foster dependency. When the ‘leader’ fails to deliver, however, she or he is unceremoniously dumped – metaphorically ‘assassinated’. Australia’s federal political scene provides many cases in point. Similarly in the private sector, we often see a surge in a company’s share price following the departure of a CEO and the appointment of a new one, an indication of heightened expectations and an assumed dependence on the ‘leader’. Heifetz is particularly dismissive of the ‘charismatic leader’.

‘The pitfall of charisma... is unresolved dependency’, he writes.2

Heifetz points out that the work of authority and the work of leadership are often in conflict, because while the work of authority is generally about maintaining order and protecting the organisation from disruption, the work of leadership, in tackling difficult problems, can lead to distress, dissonance, disorder and disequilibrium.

The ‘difficult problems’ to which he refers are those presenting stakeholders with an adaptive challenge, where there are no straightforward solutions, where there may be no clear short-term ‘win-win’ outcomes, and where parties face actual or apprehended loss. Often the nature of the challenge is far from clear; part of the work of leadership lies in clarifying the nature of the challenge.

TECHNICAL AND ADAPTIVE PROBLEMS

Heifetz distinguishes clearly between technical and adaptive problems. Organisations with established authority structures are adept at solving technical problems. But as would be well known to those who work on Second Track processes3, there is no clear handbook for dealing with adaptive problems. In the most recent of his three books, The Practice of Adaptive Leadership, he stresses the importance of flexibility and experimentation in handling challenges.

The table overleaf, adapted from that same book,4 shows the distinction between the way technical and adaptive challenges should be handled. In handling adaptive challenges there is no one locus of work: all stakeholders should be involved, and the task of leadership lies in mobilising their resources.

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2. Leadership Without Easy Answers, p. 247
4. Taken from Figure 2.1 ‘Distinguishing technical problems and adaptive challenges’, omitting, for the sake of clarity, the ‘technical and adaptive’ category which calls for a mixed approach.
DISTINGUISHING TECHNICAL PROBLEMS AND ADAPTIVE CHALLENGES

<table>
<thead>
<tr>
<th>KIND OF CHALLENGE</th>
<th>PROBLEM DEFINITION</th>
<th>SOLUTION</th>
<th>LOCUS OF WORK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Technical</td>
<td>Clear</td>
<td>Clear</td>
<td>Authority</td>
</tr>
<tr>
<td>Adaptive</td>
<td>Requires learning</td>
<td>Requires learning</td>
<td>Stakeholders</td>
</tr>
</tbody>
</table>

One could conceivably put a fourth column on to this diagram, specifying the type of approach – First Track or Second Track – corresponding to technical and adaptive problems.

Heifetz stresses that we can ‘make progress’ on adaptive challenges, but ‘solving’ them may be out of reach at least in the medium term, because the stakeholders’ adaptive work may involve living with the fact that some conditions have to be accepted. Those involved in Second Track processes will see that there are only shades of definitional difference between ‘adaptive’ problems and ‘wicked’ problems: most can be classified either way.

Public policy responses to climate change illustrate some of the differences between technical problems and those posing adaptive challenges. The transition to renewable energy presents huge technical problems for power companies and government regulators – problems to do with reliability of supply, provision of transmission infrastructure and affordability. In dealing with the consequences of climate change, insurers need to work with areas of uncertainty that are outside their well-established risk models.

The problems presenting adaptive challenges are not so clearly defined, however. Maybe international pressure to account for Scope 3 emissions, or a collapse in thermal coal prices, will see a rapid reduction of mining for thermal coal. Either way, there would be a concentration of losses among those involved in coal mining, including all people in communities where the local economy is dependent on coal mining. Policy analysts may be able to assess the immediate financial losses of the people involved, but even if alternative economic activity is available, there will still be losses — companionship, prestige, autonomy and community, to name some qualities that people value but that are not always articulated. Even before there is any work on structural adjustment, good leadership involves identifying, articulating and respecting these losses – a task that involves much more listening than talking, and for which those conditioned by a successful experience of ‘directing, planning, controlling and organising’ may be poorly suited.

Heifetz acknowledges that the distinction between technical and adaptive work is not always clear-cut. In the Australian bushfires of 2019–20, many firefighters had to deal with the technical task of assessing the best way to deploy their limited resources, while dealing with the tough task of urging people to abandon their properties. The task of leadership can fall to people well down the line.

Sometimes what initially presents as a technical problem is actually a manifestation of a significant adaptive challenge. An example is presented by the crashes of two Boeing 737 Max aircraft in late 2018 and early 2019. There was certainly a technical problem, but it took time for the adaptive problem, which was about the culture of the corporation following the Boeing-McDonnell-Douglas merger, to emerge.
Heifetz warns of the way policymakers often try to treat adaptive problems as if they are technical problems. Although they may require a large commitment of administrative resources, the solution of technical problems is reasonably straightforward, while adaptive problems can be politically confronting. For example, in dealing with climate change it may be tempting for a government to go on handing out drought relief and carry-on finance to struggling farmers in the arid and semi-arid zones. That is a technical approach, sitting within current administrative structures. It is much harder to confront the possibility that some areas may have become unviable for grazing – a problem involving many stakeholders and much more distress.

WORK AVOIDANCE
Deliberately defining a problem as a technical one when it is really an adaptive one is an example of what Heifetz calls ‘work avoidance’. There are many other ways we can avoid working on hard issues. One way, in domestic, corporate and political life, is simply to deny its existence. Another, favoured by governments, is to shove the problem down the line by calling an inquiry, preferably one that will report after the next election.

The most destructive form of work avoidance is to sheet blame for the problem, or at least a manifestation of the problem, on to a particular individual or defined group. The individual scapegoat is often the authority figure, the ‘leader’. Politically, it is usually the head of the party in office. Ethnic minorities and dissident protesters can be fair game.

When taken to extremes, scapegoating can have disastrous consequences, as in Hitler’s scapegoating of the Jews, or in Stalin’s scapegoating supposed enemies of the state. Even when its manifestation is less extreme – as in a series of coups against prime ministers – the consequences are serious, for they involve a deflection of the energies which could be turned to meeting the adaptive challenges.

Unfortunately, in a democracy, there are not many rewards for a government or a party seeking government to spell out the nation’s adaptive challenges, particularly if dealing with them involves some change in lifestyle or an increase in taxes. The temptation for the politician, too aware of his or her own impotence, is to engage in work avoidance. But in such situations the politicians can be helped by those whose capacity for leadership is not hampered by the constraints of formal authority.

Heifetz uses President Johnson’s relation with Martin Luther King as a case in point: as a Texan Democrat, Johnson could not have put civil rights on to the agenda, but he was able to respond to pressure from King. In Australia, it is often the retired politician, free of the shackles of accountability to the party rooms and the party caucus, who can raise hard issues.

Sometimes, it is a person within the organisation, but who is well down the line, who can raise hard issues. In Australia’s post war years, no political party dared question the virtue of tariff protection, but in the press there was a consistent voice against tariffs presented by ‘a modest member of parliament’. The ‘modest member’, Bert Kelly, was a dissident, but he was no renegade. The Prime Minister, Harold Holt, had a strong belief in free trade, and valued Kelly’s contribution as a pressure point. Often, if people want to see how those in authority think about an issue, it is useful to listen to voices down the line. Much can be gleaned from staff presentations at conferences, for example: their departures from the official line are often well-known and approved by those further up the hierarchy. Heifetz’s advice for those in positions of authority who feel constrained within a narrow authorising environment is to nurture and support loyal dissidents and disruptors.
Heifetz does not downplay the possibility of authority as a platform for leadership. Those holding a position of authority have the capacity to put an issue on the agenda, and can devote resources to research and publicity. But they are impeded not only by the political expectations of office but also by the day-to-day demands of office. It is often hard for such people to ‘go to the balcony’ as he says, to see the broad picture. Senior public servants for example often find that their energy is taken by their ministers’ demands for political support and by budgetary demands.

CONCLUSION
Heifetz’s ideas themselves set an adaptive challenge, for they force us to break away from our established ideas of leadership, as if leadership is some quality we achieve by virtue of being appointed to a position. Many of those exposed to his work through his courses at the Kennedy School, through his consulting with Cambridge Leadership Associates, or through his books, must feel let down, for they would have expected that his theories would help them achieve the coveted title ‘leader’ in their organisation, when what he tells them is that leadership involves a great deal of patient hard work and that others may get the credit. It won’t come as a surprise to women that many men, particularly those who have achieved positions in organisations with strong authority structures such as armed forces, find his teaching discomforting, while women find his ideas easier to understood.

While Heifetz presents a general theory applicable to the public sector, not-for-profits and the private sector, the examples in his books are drawn mainly from the public sector. That may be because the public sector is under more exposure than other sectors: teachers of management seeking case studies would be lost without reports from government auditors and commissions of enquiry. It may reflect the fact that hard jobs involving wicked problems tend to end up in the public sector: But his work is surely applicable to the corporate sector where we so often witness corporate collapse because of a failure of managers and boards to appreciate the adaptive challenges they face – their ‘Kodak’ moments. Is Schumpeter’s ‘creative destruction’ an unavoidable collateral cost of capitalism, or can companies renew and adapt as they confront adaptive challenges?

Heifetz’s three books, published over many years, are consistent in their theory but with different emphasis and readerships in mind.

Leadership Without Easy Answers (1994, 1998) provides a solid theoretical basis for his work. Those with an academic interest in leadership will find it a rich resource.

His 2002 work Leadership on the line: Staying Alive through the Dangers of Leading, co-authored with Marty Linsky, also of the Kennedy School, is a guide to those applying the theory of adaptive leadership. The subtitle ‘staying alive’ points to its content, for the exercise of leadership, with or without authority, involves striking a fine balance between work avoidance, and pushing the group beyond their capacity to handle the pain and stress of adaptive change. Pushed too hard, the group’s response is assassination.
The Practice of Adaptive Leadership; Tools and Tactics for Changing Your Organization and the World, written with Marty Linsky and with Alexander Grashow of Cambridge Leadership Associates, is a detailed ‘how to’ book. Its target readership seems to be the person who has been appointed to a middle management position and is wondering why the gift of leadership has not accompanied the appointment. It could serve as guide for someone who prefers the careful pace of self-study to the compressed learning in an ‘adaptive leadership’ course.
LIST OF CONTRIBUTORS

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DR PETER MASSINGHAM is an academic and consultant. He was a Director of a Research Centre for Knowledge Management from 2002-2014. Before joining academia in 1998, he was a management consultant, most recently with KPMG. He works with a range of Australian organisations on their business strategy, particularly focusing on knowledge management. He has published more than 50 peer reviewed papers in academic journals and international conferences. He has won several outstanding paper awards in his field’s top journals. He was the Chief Investigator on an Australian Research Council Linkage Project grant with the Australian Department of Defence (2008-2013). Peter has completed a textbook on knowledge management which was released in October 2019 titled Knowledge Management: Theory in Practice (Sage Publications). Peter was BESS’s Editor-in-Chief, and is currently on extended leave.

IAN MCAULEY is an independent public policy professional and lecturer, and a fellow of the Centre for Policy Development. He graduated from the University of Adelaide with qualifications in engineering and business management, following which he worked in a large manufacturing firm. Ian has worked in the Commonwealth Government’s Industry and Trade Departments, including a posting to the Middle East for the Trade Commissioner Service. Following completion of an MPA at Harvard’s Kennedy School, Ian became a permanent part-time lecturer at the University of Canberra, with his other work including consulting for Australian government agencies and international agencies, and pro-bono work for consumer and welfare organisations.

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LES PICKETT is Chief Executive Pacific Rim Consulting Group. His professional career has taken him to over twenty countries and he has extensive practical experience in corporate governance, strategic business planning, mergers, acquisitions, enterprise restructures and reorganisations. He participated by invitation in a residential programme on ‘Human Resources for Competitive Advantage’ conducted by the Harvard Graduate School of Business Administration in Boston, and is recipient of the Asia-Pacific Human Resource Development Award for outstanding contribution to the human resource profession in the Asia Pacific region. Les is a member Australian Government Consultative Committee on Knowledge Capital and International Board of Advisors to the International Public Management Association for Human Resources. Past roles include Chairman of the Human Resources Advisory Panel Productivity Australia, Director of the World Federation of Personnel Management Associations, International President of the Institute of Business Administration, Chairman of the Executive Board of the International Federation of Training and Development Organisations, and member of the board of directors of the Australian Human Resources Institute.

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DR MELIS SENOVA is Co-Founder and Chief Executive Officer of Huddle, a strategic design firm that specialises in designing for people. Dr Senova is a recognised industry leader, a published neuroscientist, entrepreneur, author and executive mentor. She is passionate about the potential within people and the power of creative problem solving within complex organisations. With a PhD in Human Factors, she is particularly interested in what it means to be a leader in this time of rapid shift. Dr Senova has a gift of enabling groups of people to break out of traditional mindsets and create meaningful change in themselves, their organisations and the world around them. This has seen her become a pioneer in the field of human-centred design, a founder of an award winning human-centred design firm, a highly regarded thought leader, mentor and advisor to CEOs, board members and most recently, Heads of State. Her book, This Human, published in 2017, was selected as part of the Stanford D. School curriculum for 2018.
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