ITP ROADMAP 2020

Mergers of tertiary education organisations – approaches and implications

Acknowledgements

CONTENTS

EXECUTIVE SUMMARY

Many nations have undertaken systematic mergers of tertiary education organisations including China, Australia, South Africa, Northern Europe (Norway, Finland, Sweden and Denmark, and the Netherlands), Canada, Russia, and the UK with much apparent success (Goedegebuure, 2012), (Williams, 2017), (Azziz, et al., 2017). The experience in other countries is of more sporadic mergers albeit often influenced by Government (Azziz, et al., 2017).

'…international experience demonstrates that sensibly conceived and well-managed mergers, with due sensitivity being paid to cultural and human issues, can produce substantial longer-term benefits, both for individual institutions and higher education systems.' (Harman & Harman, 2003)

The latter type of merger is more common in New Zealand. Prosaic concerns have tended to dominate such as addressing financial viability concerns and ensuring continuity of provision in certain areas (the mergers of regional ITPs) although there are examples of the merger spiral phenomenon (Goedegebuure, 2012) (such as the wave of mergers in the ITO sector in New Zealand) (see Mergers in New Zealand).

There is little evidence about the long-term results and impacts of mergers and other collaborative activity and few formal reviews by institutions and funders (HEFCE, 2012). However the literature does suggests that initiatives can strengthen institutional performance, produce efficiencies, improve resilience and enhance alignment to national priorities, although not for all institutions in all circumstances (Williams, 2017), (Kyvik & Stensaker, 2013); (Harman & Harman, 2003), (Skodvin, 1999); (Ursin, et al., 2010); (OECD, 2016), (Papadimitiriou, 2018).

Mergers are one of several options for collaboration between tertiary education organisations. These options also include federated models, joint ventures, shared services, joint courses, associations and consortia (HEFCE, 2012). These arrangements are not necessarily one-way or one-shot opportunities with examples of institutional divorces following a full merger, and more tentative collaborations leading to full mergers over time (Pruvot, et al., 2015a).

Our review suggests that the more successful mergers tend to occur where mergers focus on the core mission of the organisations concerned, are initiated by the institutions themselves, are well-planned, swiftly executed, appropriately resourced, and take account of the many and various burdens placed on the people involved.

Mergers processes are less likely to be effective when the primary driver is reducing costs or achieving a particular size and scale, where the savings of merging are overestimated, and the contributions of the new partner are undervalued.

We should also recognise that mergers are complex and expensive endeavours, these costs come early, and the benefits take time, a stable policy environment is important, and the 'market' for potential merger partners can be artificially constrained.

We make a series of recommendations for the TEC and ITPs to help inform decisions about whether and how to undertake structural changes.

RECOMMENDATIONS

We recommend that when considering options for structural change in the ITP sector that:

- Mergers should be understood as one of a range of potential ways that ITPs can collaborate.

- Mergers have the potential to deliver both financial and non-financial benefits, but the realization of these benefits is not straightforward.

- Merger processes that are anchored in the teaching and learning mission of ITPs and initiated by the organisations themselves tend to be more successful, although there are many exceptions.

- Merger processes are complex, time-consuming exercises, require a long-term, sustained investment of time, money and personal effort, and the benefits of mergers take considerable time to realise.

- Policymakers can best enable merger activity by providing a consistent policy, regulatory, and funding environment and being clear about the role of the ITP sector so that stakeholders have a clear 'target' in mind when considering mergers.

- Policymakers should consider setting minimum requirements for mergers such as working conditions and/or stakeholder representation on governance bodies to assuage stakeholder concerns.

- The TEC should ensure that it has sufficient capacity to support merger activity across the sector including merger guidelines, programme management tools and resources and mechanisms to draw on the experience of the sector with the implementation of mergers.

- ITPs considering structural change should include mergers in the range of possible options they examine and undertake appropriate due diligence.

- ITPs undertaking mergers should draw on the advice provided in this report, the overseas literature on merger processes and the expertise and experience of their peers in the sector.

PURPOSE

This report provides an overview about how to go about merging TEOs successfully

The purpose of this report is to help inform decisions about structural change for the ITP sector by providing information on the range of collaborative approaches employed locally and internationally and the literature on how to ensure mergers are executed successfully.

METHODS

A desktop review of research into higher education mergers and a thematic analysis of secondary data

This report is predominantly a desktop review. The report comprises a literature review, a thematic analysis of secondary information about mergers and supporting commentary.

Literature review

The literature review involved a scan of the international literature on the merger of institutions of higher education and tertiary education. Key search terms used included "(institutional) mergers in further/higher higher education" and "(institutional) mergers in tertiary education". Selected snowballing of the most highly cited results was then undertaken with studies with poor fidelity to the topic excluded.

Thematic analysis

We conducted an inductive thematic analysis of the literature and other secondary information. The thematic analysis was recursive. Our analysis involved the reading of the available information, coding of key features, identifying the key themes, validating these across the set of data, defining the scope and focus of these themes and contextualising them in relation to the existing literature.

LIMITATIONS

This report is focused on mergers

Mergers are one on a continuum of options for changes to the way organisations work together. We understand mergers to mean circumstances when two or more partners combine to create a single institution, which may retain the name and legal status of one or them or be a new legal entity (HEFCE, 2012).

This report does not address the merits of structural changes relative to other options such as the status quo and other forms of collaborative practice such as federated models, joint ventures, shared services, joint courses, associations and consortia because of the paucity of evidence. We do make reference to these approaches where additional context is warranted.

INTRODUCTION

At some point along this continuum (of change) we will have a strong and stable sector (Office of the Minister of Education, 2018).

The Government wants ITPs to operate as a well-co-ordinated network centred on and accountable to local communities, and act as a government arm of the regional development agenda. Employers and learners want ITPs to offer high-quality and flexible learning that meets their needs.

The current model is not delivering on these expectations consistently. Rising cost pressures, reduced demand, greater competition, variable performance and inefficient business models threaten the sustainability of the network.

A key reason put forward for this misalignment is the devolved network of autonomous providers and an associated lack (in general) of coordination and collaboration. The devolved network of autonomous providers largely does not coordinate on capital planning and balance-sheet management, student mobility and credit transfer, programme design or back-office services (Office of the Minister of Education 2018).

We looked to the international literature on mergers of higher education and tertiary organisations to provide us with useful insights about what works well, what activities ought to be avoided and the limitations of each approach.

This literature was combined with other secondary data to help identify a typology of mergers and their key characteristics. These results informed several recommendations to the TEC about how it should approach structural change in the ITP sector.

The ITP Roadmap 2020 project is exploring changes to the structure and operation of the ITP network to address these issues and secure a sustainable future for the ITP network. The project is looking at a continuum of options for a stronger system approach to ITPs including:

- Retaining the current system but making it behave more collaboratively through investment and quality assurance requirements;

- Modifying governance and administration of the current system such as regulating for greater shared services;

- Significant structural change such as reducing the number and size and scope of providers; and

- Fundamental structural change including reconsidering the type of bodies that ITPs are in either the short or long-term (Office of the Minister of Education, 2018).

LITERATURE REVIEW

A brief overview of the literature

Options available for structural change to a tertiary education system span across a continuum that reflects varying levels of integration and institutional autonomy

There are few examples of research that examine the merger experience of ITPs or their overseas equivalents. Much of the literature considers the higher education sector in its broadest sense (i.e. by including ITP-type institutions together with universities) or is focused on the university sector.

The following categorises the literature we have sourced to aid the reader in interpreting our findings. Research into mergers in ITP-type institutions is likely to be more applicable to New Zealand ITPs; however much can be learnt from the experience of higher education mergers more generally.

Examinations of the impacts of ITP mergers in New Zealand are limited to (Grey, 2015), and (NZQA & Ako Aotearoa, 2014). (Abbott, 1999), (Abbott, 2000), (Abbott, 2003), (Smart, 2009) provide a useful overview of the measured efficiency of ITPs in New Zealand including the impacts of mergers. Additional context relevant to merger events involving ITPs is provided in (Aoraki Polytechnic/CPIT, 2015), (Fraser, et al., 2015), (Marshall, 2015), (NZPC, 2017), (TEC, 2018), and (Whittle, 2015).

International literature that discusses the processes and discrete impacts in organisations broadly equivalent to ITPs include (Capuccinello & Bradley, 2014), (Ernst & Young, 2018), (Goedegebuure & Schubert, 2017), (Harman & Harman, 2003), (Harman & Meek, 2002), (Koontz, 2009), (Payne, 2008) and (Roche, 2003).

Broader surveys of merger activity which include overseas equivalents of ITPs include (Azziz, et al., 2017), (Centre for Education and Industry, 2003), (Georghiou & Harper, 2015), (Lang, 2003), (Millet, 1976), (Ribeiro, undated), (Russell, 2017), (Russell, 2018), (Skodvin, 2014), (Skodvin, 1999), and (Tirivayi, et al., 2014), (Williams, 2017).

Examples that are specific to the university sector overseas include examinations of mergers in Belgium (Swanepoel, 2004), China (Cai, 2007), (Yang, 2015), Iran (Ahmadvand, et al., 2012), Ireland (Harkin & Hazelkorn, 2015), Norway (Frolich, et al., 2016), (Kyvik & Stensaker, 2013), (OECD, 2016), United Kingdom (Papadimitiriou, 2018), and the United States of America (Carter, 2016), (Leslie, et al., 2018), (McBain, 2009), (Min, 2017), (Stephenson, 2011), (Weinblatt, 2012).

Other surveys of merger activity in the tertiary education sector that tend to focus on universities include (Deloitte, 2012), (Ferlie & Trenholm, 2018), (Goedegebuure, 2012), (HEFCE, 2012), (Ripoll-Soler & De-Miguel-Molina, 2014), (Sharrock, 2013), and (Ursin, et al., 2010) including a small number of international comparisons such as (Liu, et al., 2018), (Melin, et al., 2014), (Mitchell, undated), (Patterson, 2000), (Pinoheiro, et al., 2015), (Pruvott, et al., 2015), and (Pruvot, et al., 2015a).

Examples of process guides that appear broadly applicable to higher education institutions of any type include (Deloitte, 2012), (HEFCE, 2012) and (South Africa, 2004).

Finally, literature on merger activity in the private sector we have cited includes (Bower, 2001), (Chatterjee, 1986), (Christofferson, et al., 2004), (Jarrell & Poulsen, 1989), (Knilans, 2016), (Moeller, et al., 2005), (Rossi, et al., 2013) which illustrates broader themes.
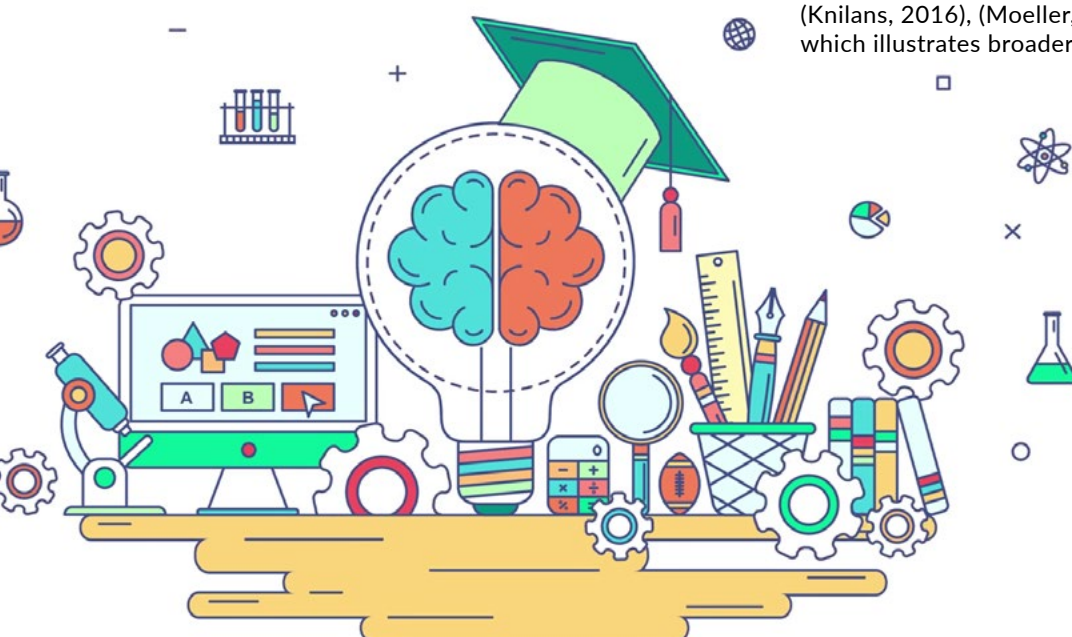
Collaboration and mergers - trends and drivers

Often the rationale for organisational integration and merger partly stems from observations that organisational systems are out of sync, overlap, counteract and are layered rather than coordinated and "well- ordered" ((Orren & Skowronek, 2004) cited in (Frolich, et al., 2016)).

One of the earliest examinations of mergers in higher education included ten case studies and emphasised the very wide variety in circumstances that gave rise to mergers and the experience of participants, even of the same merger (Millet, 1976).

The global trend has been to create fewer, larger, multi-campus and comprehensive institutions (Harman & Meek, 2002); (Liu, et al., 2018)). (Harman & Harman, 2003) note that 'sensibly conceived and well-managed mergers, with due sensitivity being paid to cultural and human issues, can produce substantial longer-term benefits, both for individual institutions and higher education systems.'.

Many nations have undertaken systematic mergers of tertiary education organisations including China, Australia, South Africa, Northern Europe (Norway, Finland, Sweden and Denmark, and the Netherlands), Canada, Russia, and

the UK with much apparent success (Goedegebuure, 2012), (Williams, 2017), (Azziz, et al., 2017). These changes reflect a systemic transition from small, elite higher education systems to massified offerings (Georghiou & Harper, 2015).

In Australia reforms in the early 1990s (the Dawkins reforms) involved a move from a two-tier sector with 19 universities and 46 colleges to a "unified" one with 36 public universities, many born of merger (Sharrock, 2013). More recently the number of TAFEs reduced from 98 to 29 between 1996 and 2017, with the number of campuses in Queensland dropping from 82 to 44 (Goedegebuure & Schubert, 2017).

The experience in other countries is of more sporadic mergers albeit often influenced by Government (Azziz, et al., 2017). For example, in England the government used incentive funding to encourage the intensification of strategic alliances, in Flanders the number of institutions reduced from 160 to 20 in ten years in response to minimum enrolment levels, and the quality assurance system in Romania grants larger institutions various advantages thereby creating incentives for collaboration (Williams, 2017).

Collaborative approaches and mergers have been used to achieve a variety of objectives such as:

- increased efficiency and effectiveness particularly for size-related capability;

- action to deal with institutional fragmentation or nonviable institutions;

- building off the strengths of the merger partners including complementary curriculum to increase course diversity and broaden student access for more diverse student populations;

- increased levels of government control over the direction of a tertiary education system and better alignment with national and regional policy objectives

- strategic positioning by institutions including a desire to block access to certain markets; and

- coping with the effects of demographic change (Millet, 1976), (Centre for Education and Industry, 2003), (Harman & Harman, 2003); (Harman & Meek, 2002); (Ahmadvand, et al., 2012), (Mitchell, undated) and (Liu, et al., 2018)).

LITERATURE REVIEW (CONTD.)

Continuum of change - models of coordination and merger

Options available for structural change to a tertiary education system span a continuum that reflects varying levels of integration and institutional autonomy. The form of collaboration or merger will influence the process; difficulties experienced; resulting structures; and the likelihood of success of those structures. In the interests of brevity, we focus on full mergers and the attendant requirements and considerations.

(Ripoll-Soler & De-Miguel-Molina, 2014) suggest that the goal should not be maximum integration. Potential partners should rather assess the variables of each

situation and determine which form on the continuum is likely to optimise the desired outcomes. The processes involved in collaboration are not linear or static, while most mergers once completed appear to be stable or even irreversible other forms of collaboration such as alliances and federations are more likely to be in a position of evolving in either direction.

The table below shows the continuum of collaboration commonly referenced including by (Harman & Harman, 2003); (HEFCE, 2012), (Ripoll-Soler & De-Miguel-Molina, 2014).

Table 1: Selected examples of collaborative practice in tertiary education

Informal Collaboration or cooperation	Affiliation or informal association	Consortium	Joint Department	Merger with Federal Structure	Merger with Unitary Structure
Academic projects, research or publications. Shared expensive or specialised equipment. Can occur on individual, staff or department levels.	Inter-university qualifications, specialised services or programmes. The autonomy of different parties is not compromised. Collaboration with local government or health providers	Collaborative consortia that exist in parallel to their founders, and have their own corporate identity. Strategic alliances or partnerships Shared services arrangements The TANZ eCampus is an online study and distance learning service[1]	Jointly owned facilities or departments, Jointly owned university companies	A combination of two or more separate organisations. Overall management control is under a single governing body and single chief executive. Normally all assets, liabilities and responsibilities of the former institutions are transferred to either a continuing institution or to a new institution.	
COOPERATION **Increasing flexible, lower risk, more easily unwound, less costly**		**COORDINATION**		**MERGER** **Increasingly fixed, higher risk, not easily unwound, costly to achieve**	

. The institutions involved in the venture are: Ara Institute of Canterbury, Otago Polytechnic (OP), Universal College of Learning (UCOL), Nelson Marlborough Institute of Technology (NMIT), Eastern Institute of Technology (EIT), Toi Ohomai Institute of Technology, and NorthTec)

Merger models

Mergers may be classified based on their participants: single-sector vs cross-sector; twin (or two institutions) vs multiple partners; similar academic profiles (horizontal merger) vs different academic profiles (vertical merger); or complementary vs non-complementary (overlapping). Mergers also can be classified based on the strategy that drives them, their motivation, and/or the resultant degree of absorption (Koontz, 2009), (Azziz, et al., 2017).

The table above shows that mergers can adopt either federal or unitary structures. In a **federal structure,** participating institutions usually retain a substantial level of autonomy and key elements of organisational identity and culture (e.g. the strategic partnership between Whitireia and Weltec with a shared council, chief executive, leadership team and back-office services, has elements of a federal structure). In a **unitary structure,** former institutions are no longer recognised, and a new governance body and set of structures are implemented.

While federal models are often more attractive to institutions, they are sometimes unstable in conflict situations and can limit the level of administrative rationalisation and streamlining of academic offerings achieved (Ripoll-Soler & De-Miguel-Molina, 2014). (Harman & Harman, 2003) note that experience with federal structures in Australia has been disappointing and unitary structures are the more common Australian model.

The literature further classifies mergers according to structural features of the institutions involved:

Voluntary and involuntary mergers Voluntary mergers (non-directed, 'bottom-up' processes) are driven by the participating institutions themselves and typically occur in a more deregulated tertiary education environment. Involuntary mergers ('top-down' or policy-induced) spring from external forces (e.g. falling student demand) or government incentive, pressure or direction (Harman & Harman, 2003), (Goedegebuure, 2012).

Ideally, all institutions involved in mergers should feel a sense of 'gain' from the process (OECD, 2016) Voluntary mergers are more likely to foster a sense of ownership and common identity. Greater staff involvement during the negotiation and implementation of a voluntary merger make them easier to organise, and they generally are more successful than an involuntary merger (Skodvin, 1999), (Harman & Harman, 2003); (Kyvik & Stensaker, 2013).

Consolidations and takeovers: A consolidation involves institutions of similar size forming a new institution, as opposed to the 'take-over' of a small institution by a large institution. Consolidations are challenging to organise, involving complex decisions about branding, leadership and structure (Harman & Harman, 2003).

Single sector and cross-sectoral mergers: cross-sectoral mergers (e.g. a university and an ITP) can pose special problems, particularly when the institutions have distinctively different missions, roles and cultures (Harman & Harman, 2003).

Tairawhiti Polytechnic and Eastern Institute of Technology (EIT) in 2011, and Christchurch Polytechnic and Aoraki Polytechnic forming the Ara Institute of Canterbury in 2016, are examples of single sector mergers. Both appear to have been successful with the 'new' institutions considered to be high performing ITPs.

Two-partner and multi-partner mergers: these mergers differ significantly in character and detail. Multi-partner mergers may result from a small institution trying to include additional partners into merger negotiations in order to avoid being 'swallowed up' by a larger institution (Harman & Harman, 2003) and may be more difficult to execute (Kyvik & Stensaker, 2013).

Similar and different academic profile mergers: mergers of institutions offering courses in the same fields of study are 'horizontal' mergers, while mergers of institutions offering courses in different areas are 'vertical'. When merging institutions have complementary missions and cultures, the chances of success increase ((Skodvin, 2014) cited in (OECD, 2016)).

Horizontal mergers often guarantee cultural commonality, but a major rationalisation of course offerings is likely to be necessary to achieve cost savings. (Harman & Harman, 2003). There are conflicting views however about the relative merits of horizontal versus vertical mergers (Liu, et al., 2018).

Geographically far and near mergers: despite advances in communications technology, geographical proximity plays an important role in influencing decisions about which the institutions should be merged. Research shows that the most successful mergers have taken place between institutions which were not physically far from each other. (Skodvin, 1999).

Telford Rural Polytechnic (Telford) becoming a campus of Lincoln University (Lincoln) in 2011 was a cross-sectoral merger, where the two institutions were considerably different in size and not geographically close. The merger does not appear to have been successful - Telford is now part of the Taratahi Agricultural Training Centre (near Masterton).

Changes in control: Some mergers also invoke changes in the ultimate governance and control of institutions. Countries with significant federal and local governments may choose to transfer or share control between levels (Yang, 2015).

End state forms: (Ferlie & Trenholm, 2018) note general trends toward convergence in institutional form in higher education, but point out that certain conditions (such as structural change) can disturb the common understanding of the permissible (and narrow) range of common organisational forms. They cite examples of novel organisational forms such as mutual staff ownership, professional partnerships, social enterprises, virtualised providers, and philanthropic foundations.

Planning and implementation processes

(Skodvin, 1999)) notes the 'widespread agreement that processes of merging are 'spiced' with small and large problems and conflicts.'.

Planning and design

Restructuring processes require significant adaptation of institutional structures that are often resistant to change (within a regulatory and policy framework that often does not aid adaptation) (Ripoll-Soler & De-Miguel-Molina, 2014). The drivers and objectives of mergers, therefore, need to be stated with clarity and accompanied by a detailed process plan (OECD, 2016)).

Government and government agencies can play a constructive support role here through the:

- articulation of merger goals and rationale;
- provision of advice, support and guidance to institutions;
- provision of funding incentives or flexible financial support for special merger costs; and
- clarification of issues about staffing and salary levels.

Issues about staff employment and student ability to finish the courses that they are enrolled in, should be addressed transparently and early to generate support for mergers (or minimise opposition) (Harman & Harman, 2003).

Negotiation and effective implementation

Mergers usually place heavy additional workloads on participating institutions and can have significant (and unexpected) upfront costs relating to property rights and liabilities, staff redundancy and salary scales, staff upskilling, department restructure, library service integration, and infrastructural upgrades. Any financial benefits tend to be long-term (Harman & Harman, 2003); (Skodvin, 1999).

Merger negotiations can often be financially costly processes in themselves (Stephenson, 2011). In general, therefore, negotiations should be as open as possible to maintain momentum and progress. Accurate and transparent information on the financial health of institutions should be widely shared between the negotiating parties.

Key priorities, responsibilities and timeframes need to be identified in implementation strategies. Strong management and leadership should be appointed early in the process to increase effectiveness (OECD, 2016) citing (Melin, et al., 2014). The research suggests that mergers work best if the participating institutions can move quickly (both during and post-merger) (OECD, 2016) citing (Harman & Harman, 2003). Specific approaches may also be needed for different parts of the organisation, for example libraries (Swanepoel, 2004).

Staff (and student) involvement is generally important, not only to reduce uncertainty and stress on staff and systems but also to boost internal support and cooperation for the merger (OECD, 2016).

Merger outcomes

The large body of research in the private sector consistently estimates that many mergers fail outright or do not achieve the expected benefits in terms of increased shareholder value or efficiency gains. The general literature on mergers suggests that the returns to acquiring firms tend to be low or even negative (Jarrell & Poulsen, 1989), and acquiring firms tend to decline in value (Moeller, et al., 2005). There are also high failure rates for other kinds of collaborations (HEFCE, 2012).

Mergers are particularly important in mature economic sectors where market shares may be stable, but many mergers produce mixed results. A likely explanation is the inherent complexity of the process of bringing together two (or more) separate entities into a new 'whole' (Rossi, et al., 2013). Other factors at play include the 'winners curse', namely that the winner of an auction or contest or bidding war tends to be the most optimistic person or institution (Christofferson, et al., 2004).

Evidence is mixed about the outcomes of tertiary education mergers - both in terms of the intended economic and administrative benefits, and also intended improvements in the quality of education and research. There are however many examples of success; (Harman & Harman, 2003), (Skodvin, 1999); (Ursin, et al., 2010); (Kyvik & Stensaker, 2013), (OECD, 2016)).

Mergers can also have ambiguous effects on competition. A merger might reduce competition in the sector overall while increasing curriculum choice or enabling local provision to be maintained (Payne, 2008).

The nature of the outcomes being sought is relevant. Collaboration is much more common in research, engagement, and back-office administration and other support services than the design and delivery of teaching and learning (Williams, 2017).

(Kyvik & Stensaker, 2013) outline a range of factors that impact the success of a tertiary education merger, including:
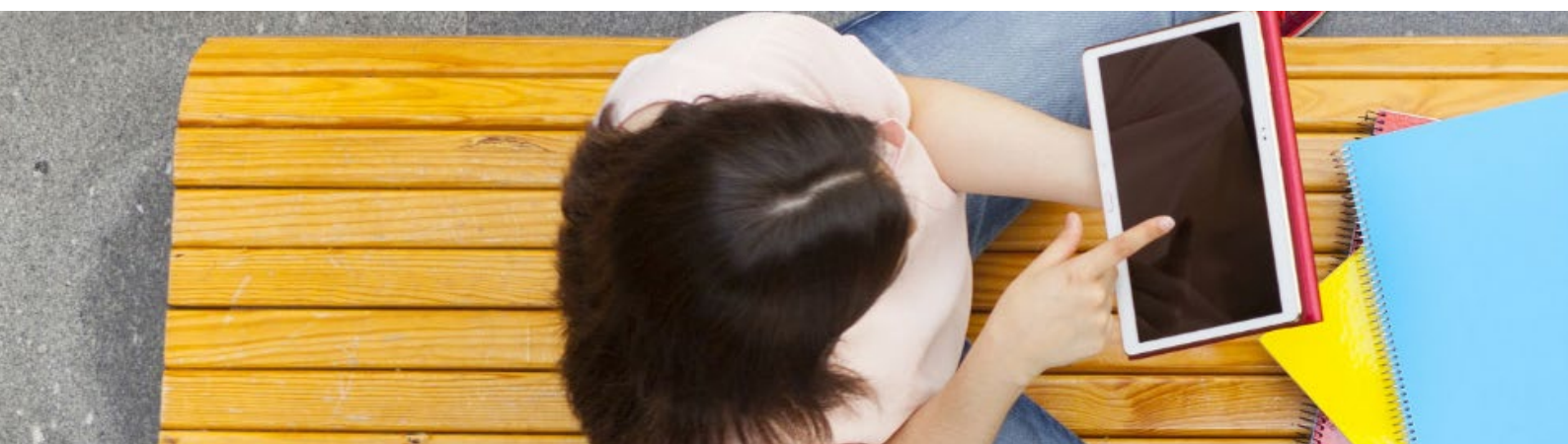
- **structural factors,** e.g. the number of institutions merging, the size and geographical proximity of involved institutions

- **cultural factors,** e.g. institutional identity, history, values and norms
  Even when institutions seem to be highly compatible, they often possess underlying cultural differences that can impede integration. A merger is more likely to be successful if an integrated and coherent community is built that displays commitment, loyalty and shared values to the new institution during and following a merger (Skodvin, 1999); (Harman & Harman, 2003).
  (Ripoll-Soler & De-Miguel-Molina, 2014) note that 'to measure the success of a merger it is necessary to emphasise the richness and diversity of the new institution created, because the cost reduction per se does not justify it, and it may even be the case that the total savings of the new institutions resulting from mergers are not significant.'.

- **interest-group factors,** e.g. attitudes of stakeholders, leadership and boards.
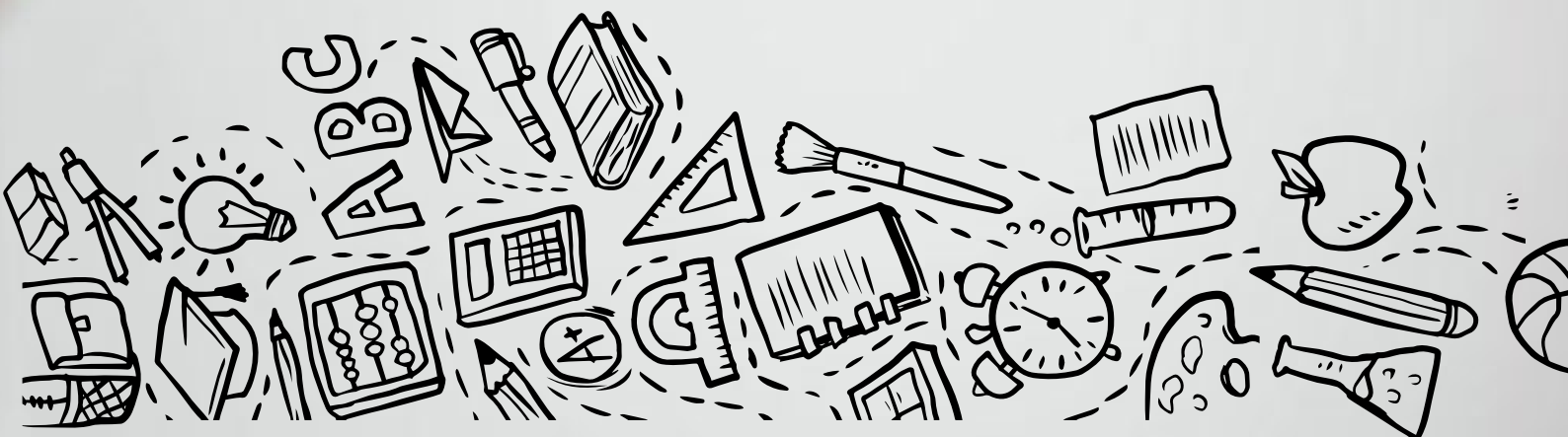
(Skodvin, 1999) argues that outcomes generally fall into three categories. There is little clear-cut positive or negative evidence within each grouping. One takeaway is that the literature often suggests that merger approaches do not always generate positive outcomes in priority areas to the degree intended.

Table 2: Trade-offs in collaborative activity

Governance, management and administration	Mergers tend not to result in fewer administrators. Horizontal (throughout departments and centres), vertical (management levels), and geographical (geographically spread units) complexities mean that large merged institutions will need more administrative resources. (Ripoll-Soler & De-Miguel-Molina, 2014) also note that the 'elimination of duplication' in relation to governance, management and administration is difficult to achieve.
Economics	Some studies show that both public and private institutions achieve their cost-cutting goals after a merger and that economies of scale may occur in regard to library, administrative and management systems. However, (Ripoll-Soler & De-Miguel-Molina, 2014)) and other studies have suggested that in most cases, the goals of delivering the same services at a lower cost are not reached. They note that 'joining together two institutions with their features, weaknesses and strengths just means creating a larger entity with the same features, weaknesses and strengths of the constituent institutions, and also with higher associated costs.'. If economies of scale are achieved, they tend to appear only in the medium to long-term. Similarly, (Liu, et al., 2018) note that the consistent belief that mergers will produce economies of scale is largely unproven in the research. Cost savings and other fiscal benefits are difficult to quantify and tend to be overestimated.
Academic activities	Experiences are mixed in relation to improvements to teaching and research. Evidence from Australia, the USA and the Netherlands illustrate that mergers can improve the breadth of different education, creating broader and more multidisciplinary course programmes. Furthermore, there are technical synergies to be gained through the pooling of academic talent.

CASE STUDIES

Country case studies provide a useful illustration of the 'trade-off' that occurs between decisions relating to structure and resulting outcomes.

TAFE TRANSFORMATIONS

In Australia, the development of a centralised NSW TAFE model and a comparatively de-centralised Victorian TAFE model are providing distinct results and insights into options for improved efficiency and performance of the ITP sector.

The NSW single brand strategy ('One TAFE NSW') to compete with private providers collectively, limit inefficiencies and drive synergies, has created cost efficiencies, reduced duplication and streamlined operation. Conversely, there are some concerns that the system may lack the flexibility to respond to local conditions.

The Victoria model, with a structure of autonomous governance by institutes, is responsive to local conditions and issues and effectively serving regional communities. Broad spread and diversity encourage innovative and strategic thinking. With no common strategic objectives, however, collaboration is challenging. There is significant duplication across institutes, making cost reductions difficult, and there are no restrictions on scale, size and scope, however inefficient that may be for a region (Ernst & Young, 2018).

NORWAY - TRANSFORMING A HIGHLY DECENTRALISED SYSTEM

A thematic study by the OECD of Norway's tertiary education system described a decentralised system of 53 higher education institutes (HEIs) and over a hundred post-secondary/tertiary vocational institutions of various sizes, dispersed throughout the country (OECD, 2016). While the quantity and distribution of institutes reflected Norway's commitment to regional economies, significant issues relating to scale and breadth arose. Some institutions had difficulties attracting staff and students, and many were too small to conduct competitive research.

These small academic environments were reformed partly by merging several institutions. Over two years (2015-2016), the total number of higher education institutions was reduced from 53 to 42. Merger proposals were initiated by institutions, with input, encouragement and final approval from the government. Institutions standing alone after that first round of mergers could be reassessed and ultimately merged in a government-driven process. The process mainly concerns university-colleges (an ITP equivalent) merging with universities or other university-colleges (Government of Norway, 2015a). The Government's goals for the process include a reduced number of institutions and a significant remapping and re-organisation of the sector (OECD, 2016).
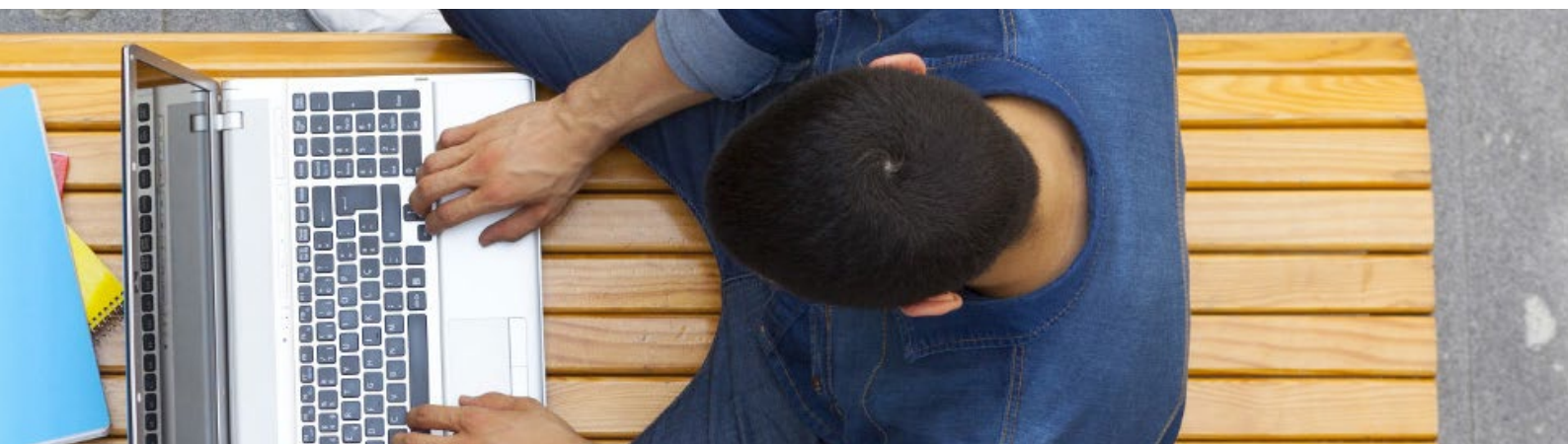
RESTRUCTURES IN IRISH HIGHER EDUCATION - COLLABORATION AND MERGER (2011-2014)

In 2011, a National Strategy for Higher Education to 2030 (the Hunt Report) recommended changes to the structure and organisation of the system, including an intention to develop greater system-level coherence and coordination amongst higher education institutions.

The Hunt Report signalled the end of 'bottom-up' collaboration. It was a move away from light touch regulation to a more systematised and regulated approach, focused on measurable outcomes. It contained three significant policy implications:

1. Reform of the Institute of Technology (IoT) sector through amalgamations;

2. Consolidation and absorption of smaller institutions into the university sector; and

3. Establishment of regional clusters of collaborating institutions within a geographical area.

While the Report proposed using mergers as a system-level tool to address issues of fragmentation and institutional size, it ruled out formal (cross-sector) mergers between IoT and universities to avoid the dilution of system diversity. Instead, critical mass could 'be created or enhanced through institutional cooperation and collaboration'.

Other aspects of the Hunt Report highlight the complexity of balancing policy objectives and competing interests during a change process. For IoTs, the development of a smaller number of amalgamated institutes was proposed in order to advance system capacity and performance. Amalgamation was encouraged via the possibility of an IoT group being redesignated as a Technological University. While this was a strong incentive for many IoTs, it was viewed in by parts of the sector as detrimental to the distinct binary IoT and university system. Regardless, it was a funding model adjustment linking funding allocations to student numbers that left many smaller institutions with no option but to amalgamate into bigger groups.

This 'directed' approach was also evident in the wider "strategic dialogue" with all publicly funded HEIs in Ireland about three-year compacts that were based upon delivery of specific outputs and outcomes and aligned with national objectives (adapted from (Harkin & Hazelkorn, 2015)).

GROWTH AND CONSOLIDATION IN NEW ZEALAND

Structural change including mergers has been a feature of the ITP sector since the inception of technical colleges in 1886. These changes appeared to involve three major phases set out below.

Structural change including mergers has been a feature of the ITP sector since the inception of technical colleges in 1886. These changes appeared to involve three major phases set out below.

Technical colleges in the main centres were split into standalone secondary schools and ITPs, and community colleges emerged in regional New Zealand. The number of technical institutes, polytechnics and community colleges peaked at 25 in 1990. These changes followed the breakup of the University of New Zealand in 1961 (Abbott, 2000).

Gradual growth to 1959

Expansion to the 1990s

Consolidation

There have been 12 'structural change events' since 1990 involving three waves:

- *Considerable re-organisation between 1999 and 2001. The number of ITPs reduced by a net five through 'type' changes (the formation of AUT and the merger of Wellington Polytechnic into Massey University), UCOL absorbed polytechnics in the Wairarapa and Wanganui, and two ITPs in the Wellington region formed a new entity, Weltec. The number of ITPs reduced to 20.*

- *A more modest wave accentuated by some experimentation between 2011 and 2012 reduced the number of ITPs by a net two. Tairāwhiti Polytechnic was absorbed into EIT, Weltec and Whitireia embarked on a strategic partnership while retaining their separate brands and Telford Rural Polytechnic merged into Lincoln University. The number of ITPs reduced to 18.*

- *More explicit weight on the mana of merging parties such as the mergers that formed Ara and Toi Ohomai. The Telford division of Lincoln University proven unsuccessful and was transferred to Taratahi Institute of Agriculture (a PTE) in 2017. The number of ITPs reduced to 16.*

Table three provides a summary of these structural changes (adapted from (TEC, 2018)).

Table 3: Structural changes involving New Zealand ITPs, 1999 to 2017

Formal merger/ existing entity	Formal merger/new entity	Vertical mergers	Federal model
2001: UCOL merged with Wairarapa Regional Polytechnic	2001: Weltec formed from Hutt Valley Polytechnic and Central Institute of Technology	1999: Wellington Polytechnic merged into Massey University	2012: Single Council for Weltec and Whitireia Community Polytechnic
2002: UCOL merged with Whanganui Regional Community Polytechnic	2016: Ara Institute of Canterbury formed from CPIT and Aoraki	2000: Auckland Institute of Technology became Auckland University of Technology	2015: Single CEO for Weltec and Whitireia Community Polytechnic
2011: EIT merged with Tairāwhiti Polytechnic	2016: Toi Ohomai formed from Bay of Plenty Polytechnic and Waiariki	2011: Telford Rural Polytechnic merged into Lincoln University	
		2017: Telford transferred from Lincoln to Taratahi (PTE)	

Other important developments in the wider sector included the reorganisation of the ITO sector which reduced the number of these non-government organisations from 39 to 13 in the early 2010s.
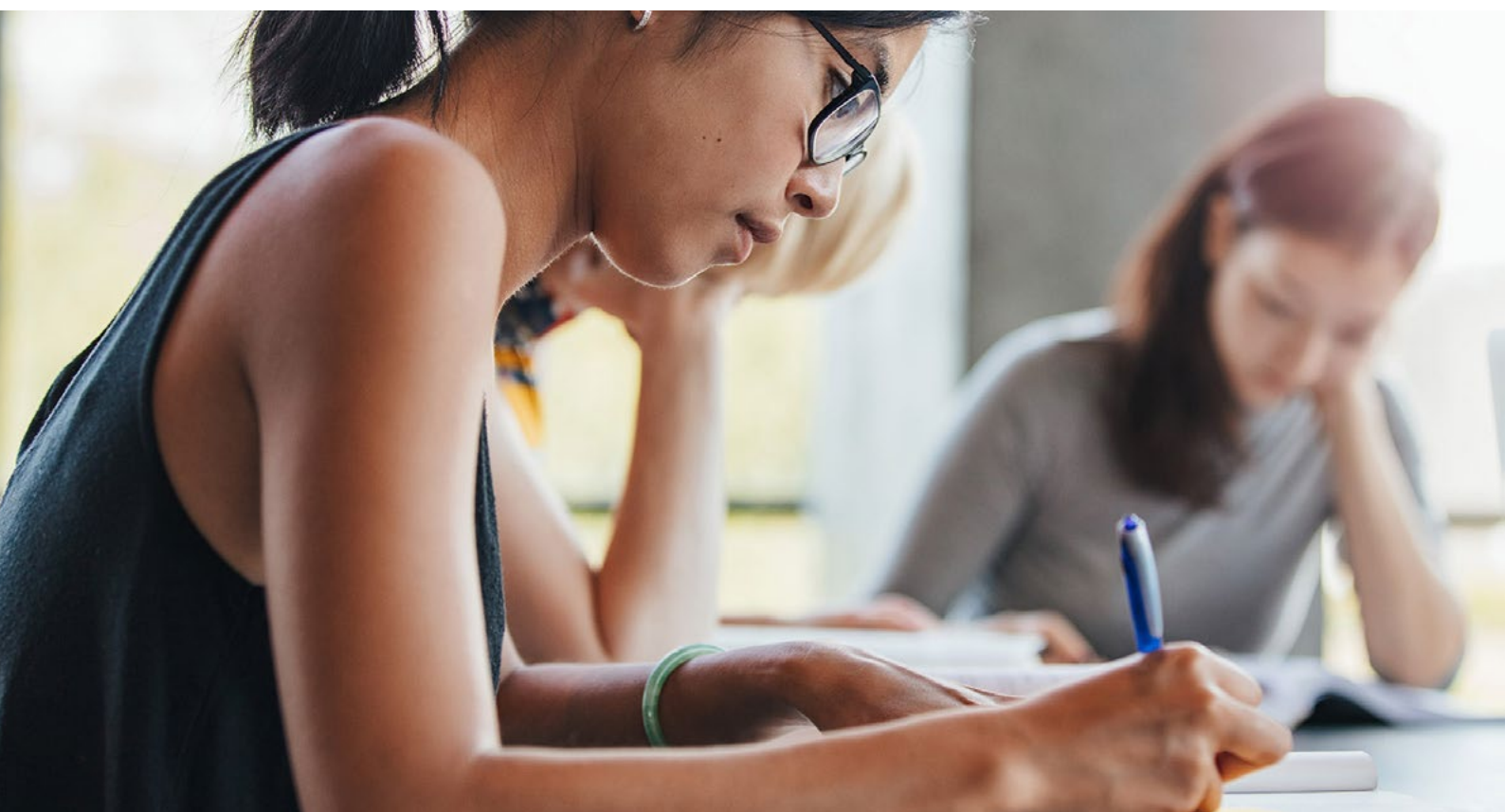
SUCCESSFUL MERGERS

System-wide restructuring tends to involve some 'some basic policy notions of what might be achieved, the planning was adaptive and pattern-based, that implementation overall was rather haphazard and that the restructuring processes themselves created action-reaction processes that by-and-large were unanticipated but highly influential for the systems and institutions involved (Goedegebuure, 2012).

The design and execution of a merger process has a significant bearing on its success (OECD, 2016). Mergers are time-consuming processes characterised by risk, uncertainty, negotiation, leadership and planning (Harkin et al, 2015).

The abandonment of existing forms of governance, changes to institutional norms, objectives and academic programmes, and the modification of organisational procedures, means that merger processes seldom occur without disruption (Skodvin, 1999). Experiences from the USA, Australia and the Netherlands demonstrate that it can take up to ten years after a merger 'for the wounds to heal' and for the new institution to operate as a cohesive, well-integrated whole (Skodvin, 1999); (Harman & Meek, 2002).

Stakeholder 'buy-in' is critical. Leaders and decision-makers should be aware of the ways merger activity will affect an institution's history, culture and people (leadership, faculty staff and students) (Stephenson, 2011). A case study of the Tairāwhiti Polytechnic and EIT merger in 2011 noted that the emphasis placed on partnership, respecting history and culture and understanding the strengths and weaknesses of both ITPs during the planning and implementation processes was central to the success of the merger (NZQA & Ako Aotearoa, 2014).

We look in this section at the key things that should be done to ensure mergers are successful, what ought to be avoided and what preconditions need to be in place (see Table 4). Others have provided more comprehensive lists including (Millet, 1976), (South Africa, 2004), (HEFCE, 2012), (Deloitte, 2012) however these appear to be the most salient and commonly cited.

Table 4: Key behaviours associated with successful mergers

Do	Avoid	Recognise
Focus on the core academic mission	Assuming economies of scale or greater effectiveness	Policy settings and incentives matter
Encourage institutional initiative	Thinking you will save money	The tradeoffs inherent in consolidation
Move quickly	Discounting the potential value a partner can add	Distance can hinder effective collaborative behaviour
Recognise the essential humanity of those involved.		
Manage and resource the process well		
Provide clear breakpoints		

What should you do

The following provides a summary of the relevant literature on what needs to be in place to maximise the success of mergers. Some of our findings are equivocal, decisions about what weight to put on different aspects are context-dependent.

Focus on the core academic mission

Effective mergers are often based on a compelling unifying vision that shapes administrative and organisational structures in a way that facilitates (rather than disrupts) the academic mission (Koontz, 2009), (HEFCE, 2012), (Pruvott, et al., 2015), (Azziz, et al., 2017). Importantly these visions need to be authentic, when the stated driver of a merger (e.g. save money) differs from the more obvious, actual goal (e.g. geographic proximity) disengagement can easily ensue (Min, 2017).

The success of mergers is dependent on persuading a range of stakeholders. Because of the central role that the mission of tertiary education organisations plays in the identity of staff and students, these academic objectives need to be foremost, ahead of efficiency and cost concerns (HEFCE, 2012), (Weinblatt, 2012).

Encourage institutional initiative

Mergers are more likely to succeed when their implementation is led by the participating institutions, presumably because of the understanding of local leaders about what is required to effectively plan and execute mergers in their organisations (see Skodvin (1999), Harman and Harman (2003), (Williams, 2017), (Ernst & Young, 2018)).

This perspective values the principle of subsidiarity, that decision-making in large, complex organisations ought to be made at the lowest level where an issue can be addressed effectively, and co-creation approaches, where those involved processes should shape them (Goedegebuure & Schubert, 2017).

Some caution may be warranted as incumbents may tend to favour approaches that adapt the status quo, such as shared systems as opposed to shared corporate services, a network of institutions rather than a consolidation merger, and shared online development and marketing rather than combined enrolments (Goedegebuure & Schubert, 2017).

Nonetheless, even voluntary mergers often have some underlying external compulsion which provides a frame of permissible action (Weinblatt, 2012). This dynamic is consistent with advice to governments that they encourage collaboration and mergers through incentives before attempting more coercive measures. This approach prioritises institutional autonomy focusing government effort on creating a framework of incentives for self-regulation (Pruvott, et al., 2015), (Williams, 2017).

Move quickly

There is a general consensus that moving quickly toward new institutional arrangements minimises the negative impacts on key stakeholders. While change needs to be managed quickly, effectively and with great sensitivity to the existing cultures and traditions (Koontz, 2009), mergers are often explored as the option of last resort when all other options have been considered (Azziz, et al., 2017). These elongated transitions are problematic because they have been found to heighten the risk of hostility among staff and stakeholders (Min, 2017).

Once a decision to merge is taken, the time needed to integrate separate organisations is almost always underestimated (Centre for Education and Industry, 2003), (Ernst & Young, 2018). Setting an ambitious timeline can be a blessing in disguise as it provides incentives to focus on the immediate challenge of what is needed to function as a single entity from a fixed point (a cliff-edge event), such as the start of the next academic year in the case of the EIT and Tairāwhiti merger (NZQA & Ako Aotearoa, 2014).

Recognise the essential humanity of those involved.

'Higher education mergers are not a bold collision of magnates. They are nervous, protracted affairs requiring a special courage, deep pragmatism, and many sensitive deliberations.' cited in (Swanepoel, 2004).

The likelihood of a successful merger is increased by a closely communicated vision, mission and goals, consistent and open communication, a careful socialisation process for the new identities that are formed, a nuanced understanding of the cultures and subcultures with the organisations, and careful stakeholder management (Cai, 2007), (Koontz, 2009), (Ahmadvand, et al., 2012), (Marshall, 2015), (Pruvott, et al., 2015), (Min, 2017), (Leslie, et al., 2018).

Moving forward without these elements can have negative impacts including high levels of stress and organisational dysfunction, promote a sense of disconnection from communities, negative feelings about the merger even after several years and, to the extent that the old identities remain, be destabilising (Roche, 2003), (Koontz, 2009), (HEFCE, 2012), (Weinblatt, 2012), (Grey, 2015), (Pruvott, et al., 2015). Repeated dramatic change can lead to withdrawal and resistance (Marshall, 2015).

The underlying intent of the merger also matters. Those that are driven by funding constraints rather than 'pedagogical' and 'public good' values are associated by staff with poorer outcomes for students and communities (Grey, 2015).

Although mergers require deep cultural change (Ernst & Young, 2018), cultural integration planning tailored to each merger process is often a missing link as organisations focus on system, processes and programs (Pruvott, et al., 2015), (Knilans, 2016). These plans need to involve rituals, ceremonies, storytelling, language, communication strategies, and symbolic and value-based management (Min, 2017).

Such plans would do well to incorporate research on effective collaboration in the New Zealand context which identified the importance of mutual respect, understanding and trust, establishing clear processes for working together, collaborating through interaction, decision-making and self-monitoring and considering the sustainability of collaborative effects (Fraser, et al., 2015).

Many would expect that failing to engage and inform stakeholders in policy development would alienate them; actual experience provides a more nuanced picture. There are many cases where government and institutional leaders have driven transformative processes with relatively little consultation such as Australia, Finland, Flanders, and France which were broadly successful (HEFCE, 2012).

Whichever approach is taken, some degree of internal consultation is essential. The extent of that consultation may be fungible and dependent on the context and intensity of the merger (Williams, 2017). Merger proponents are encouraged not to overcommit their limited time and energy, particularly for policy-induced change that inevitably requires a top-down approach (Pruvott, et al., 2015).

Conversely broad structural change is more likely to require 'bottom-up' approaches involving extensive consultation and engagement ((Boudard and Westerheijden, 2017; Nokkala and Välimaa, 2017; Skodvin, 2014) cited in (HEFCE, 2012).

It may also be necessary to retain some local or regional branding (Ernst & Young, 2018), but if a new brand identity is preferred it should be fresh, rather than a deconstruction of older ones (Pruvott, et al., 2015).

Manage and resource the process well

'...merger processes are often 'spiced' with small and large problems and conflicts.' (Skodvin, 1999)

Mergers processes in tertiary education are complex and highly contentious. Some of the stated policy goals are inherently difficult (such as capacity consolidation), the outcomes are often measured in terms of missions rather costs and benefits, and they can have particular legal ramifications (McBain, 2009), (HEFCE, 2012), (Williams, 2017).

The prospects of success are contingent on their particular context and the quality of their design and implementation (Leslie, et al., 2018). Yet a review of structural changes in tertiary education across developed countries found that serious implementation cost analysis, risk analysis and due diligence was inconsistent (Williams, 2017).

Even the simplest merger will require planning and delivery of an academic and business case, costing and resourcing of the process, designing and establishing working structures, governance and leadership teams, undertaking, sometimes extensive, internal and external communication and engagement strategies and some monitoring and evaluation (Deliotte, 2012), (Pruvott, et al., 2015).

Considerable effort needs to be put into governance and programme management. Strategies proposed in the literature include 'shadow' structures (a separate Council and management team) to plan and oversee the merger, the early transition to a new credible and authoritative Chief Executive and leadership team able to execute the required transformational change in a sensitive way, and rigorous programme management methods including shared data systems (HEFCE, 2012), (Weinblatt, 2012), (Pruvott, et al., 2015), (Williams, 2017).

These processes are resource intensive with one set of mergers at the state level in Australia estimated to cost (AUD) $350m (Ernst & Young, 2018). Staff directly involved in planning the integration of systems and processes often need to do so on top of their business as usual work. Even staff who are directly involved will experience greater workloads as they manage the consequences of the connected changes (Pruvott, et al., 2015).

Provide clear breakpoints

The process of merging two or more, potentially very different, organisations is fraught with challenges. These can arise because of a lack of resources, poor transport links, cultural differences, leadership changes, poor project management and a consequential loss of productivity (Pruvott, et al., 2015).

Stakeholders will hold perceptions of what is reasonable and appropriate, and advocates need to recognise that mergers are only one option among many. Care must, therefore, be taken to ensure options to change course are kept open, i.e. to avoid path dependency (Frolich, et al., 2016).

What should you avoid

The following provides a summary of the relevant literature on what should be avoided when planning and executing mergers.

Assuming economies of scale or greater effectiveness

"We know surprisingly little about mergers and acquisitions, despite the buckets of ink spilled on the topic. In fact, our collective wisdom could be summed up in a few short sentences: acquirers usually pay too much. CEOs fall in love with deals and don't walk away when they should. Integration's hard to pull off, but a few companies do it well consistently." (Bower, 2001).

Many TEOs share common characteristics that are cumulatively financially disadvantageous such as a small size, virtually open enrollment, declining state support, declining local student-age populations, lack of stable institutional leadership, and no clear brand differentiation (Azziz, et al., 2017). These characteristics can lead to emerging or realised financial challenges which in turn can be a trigger for serious consideration of structural changes, often to achieve economies of scale.

Some argue that the decision to merge two entities with similar problems can create a larger entity with the same underlying attitudes, challenges and weaknesses, including financial problems (Goedegebuure, 2012), (Carter, 2016). Other types of changes, including the 'type' change that led to the establishment of the Auckland University of Technology (AUT), can involve an extended period of adjustment (Smart, 2009).

In the New Zealand context (Abbott, 1999) argues that the search for greater cost efficiency through scale is a central challenge for ITPs – with examples including those cited in (Smart, 2009), and the former Aoraki Polytechnic (Aoraki Polytechnic/CPIT, 2015). Increased scale is seen as a key way for ITPs to achieve lower unit costs. Along with offering degree programmes and international student recruitment, mergers are an important tool but one that New Zealand ITPs have historically been more tentative than their peers in Australia or the United Kingdom to pursue (Abbott, 2003).

Mergers may play a role in helping institutions grow to an optimal size from the perspective of the efficient use of resources, although it is difficult to ascertain what this optimal size might be. One estimate suggests student numbers as high as 25,000 but noted limitations in terms of sample sizes and the idiosyncratic impacts of funding systems (Tirivayi, et al., 2014).

There are conflicting assessments of the extent to which the potential economies of scale are realised. A comprehensive analysis of the post-merger efficiency of 'pre-1992' universities in the United Kingdom showed that units that merged were more likely to achieve efficiency gains (Papadimitiriou, 2018). Other studies point to a failure to realise these gains such as (Yang, 2015) and (Russell, 2018).

The gains from economies of scale appear to attenuate beyond a certain volume (for examples relating to New Zealand ITPs see (Abbott, 1999) (Abbott, 2003), (Smart, 2009)). Analysis of the potential economies of scale of ITPs using data from 1995 to 2002 suggested that the markets of most ITPs were too small or competitive to allow sufficient growth, and many larger ITPs had likely realised most of the potential economies of scale. Mergers might be a viable avenue although multi-campus environments could present barriers, unless there were geographically close (such as the mergers that created UCOL and Weltec, and brought Wellington Polytechnic into Massey University) (Abbott, 2003).

In the US context, steep declines in average cost per capita up to 2,000 students and thereafter declining economies of scale up to 10,000 have been reported (Patterson, 2000). Others suggest that significant economies of scale do not arise until 9,000 students are enrolled and may only begin to diminish at around 20,000 students (cited in (Lang, 2003)).

The actual costs and benefits can be very difficult to quantify, changes in costs and revenue are influenced by many external factors and benefits tend to be indirect (best practice processes, transfer of knowledge, reduction in market uncertainty, increased student choice, diversity of institutional type) (Patterson, 2000), (Weinblatt, 2012).

Wider measures of efficiency are no more clarifying. Systematic analysis of the technical efficiency of TEOs suggests that even the merger of poorer performing ITPs with more successful ones may lead to lower total factor productivity overall (Smart, 2009).

Conversely, a review of the experience in England reported that it was unclear whether the financial benefits of economies of scale were realised, but that they can be important for critical mass, attracting good staff, winning contracts, enabling cross-disciplinary work, and building international reputation, and availability of specialist facilities (HEFCE, 2012). One study also found that consolidation was associated with greater spending on student support and thereby generated better learner outcomes (Russell, 2017).

Even these positive outcomes come with caveats. The concentration of activities on particular campuses can mean that smaller (branch) campuses become increasingly unviable with significant impacts for communities, particularly those in smaller, more isolated and economically disadvantaged areas (HEFCE, 2012). One study found that the degree of compulsion appeared to influence student outcomes with involuntary mergers associated with poorer results (Capuccinello & Bradley, 2014).

Thinking you will save money

Mergers and acquisitions are a popular tool in the private sector to create value by making better use of capital, production systems and influencing the price paid for goods and services (Chatterjee, 1986).

Analysis of post-merger benefits in the private sector suggests that estimates of potential gains need to be treated sceptically. Mergers are subject to execution risks (an average merging company loses 2-5% of its combined customers – a similar trend was found among higher education institutions in Brazil (Ribeiro, undated)), costs tend to be underestimated, the wider market influences changes in market share and revenue. To mitigate these risks, some suggested approaches include benchmarking cost savings across comparable mergers, involving expert managers in the estimation process and aggressively pursuing cost savings in the first year, post-merger, lest this opportunity be lost permanently (Christofferson, et al., 2004).

The process of change needs to recognise that rationales such as economies of scale and systems that are somehow better need to be accompanied by an understanding of what drives the system's concept of self (Goedegebuure, 2012). These conceptions involve the identities of the participants, their alignment with the mission of the organisations and the stated goals of education and other publicly funded systems.

Examinations of economies in mergers suggest that few, if any, recurrent savings result. The only area where research suggests significant tangible savings is in the maintenance cost of new buildings or after the disposal of surplus property. Economies in staffing costs depend not unexpectedly on academic decisions that may have nothing to do with physical mergers (Fielden, 1991 cited in (Weinblatt, 2012). For example, (Smart, 2009) argues that low-volume degree-level provision can be counterproductive as it is presumably associated with higher, more expensive, staffing and quality assurance requirements.

It is often noted that in merger processes the costs come early, and benefits come late - time matters, the benefits of mergers may take ten years or more to recoup the costs (Millet, 1976), (Goedegebuure, 2012).

Discounting the potential value a partner can add

Thinking about the underlying purpose of mergers has evolved from an emphasis on addressing the financial disarray of one party to a mutual benefit model, a mission-complementary approach where the merger parties are stronger together (Weinblatt, 2012). Indeed, besides the wider potential benefits noted above, mergers allow the sharing of risk through sharing costs, acquiring expertise or capacity, achieving critical mass or accelerating development (HEFCE, 2012).

These kinds of mutual benefits require a foundation of mutual respect, openness to change and a desire to preserve the best elements of each merger partner (NZQA & Ako Aotearoa, 2014), (Pruvott, et al., 2015). A key example of collaborative practice was the adoption by the newly merged EIT of the Tairāwhiti Polytechnic's strategy of a network of rural programme delivery utilising community facilities such as marae. This strategy contrasted with EIT's traditional expectation that learners travel to the main campus or suburban learning centres (NZQA & Ako Aotearoa, 2014).

What should you recognise

The following provides a summary of the relevant literature on what organisations and government need to recognise when pursuing mergers.

Policy settings and incentives matter

Government policy has a key role in mergers processes by setting a clear vision, providing a predictable environment and offering direction and support.

Government needs to position structural change within a broader system vision. This positioning allows TEOs to understand how they can contribute through collaboration to the achievement of goals they are unable to deliver working separately (HEFCE, 2012).

Successful mergers appear to rely on a stable, predictable environment. Observers point to the deleterious effects of uncertainty around future policy direction and funding rules, poorly sequenced reforms and the risk of overburdening institutional leaders with multiple, sometimes contradictory initiatives (Christofferson, et al., 2004), (Smart, 2009), (HEFCE, 2012), (Williams, 2017), (Min, 2017).

Government can also directly support mergers. This support might include funding certain minimum requirements (such as business cases), developing guidelines, mandating particularly types of governance, programme management and staff transition arrangements, interceding with stakeholders offering incentives, providing merger benchmarking and avoiding onerous monitoring requirements (HEFCE, 2012), (Williams, 2017).

The tradeoffs inherent in consolidation

There are strong pressures on TEOs to both differentiate themselves from competing organisations, and to mimic those institutions that appear to be successful (Frolich, et al., 2016).

Calibrating the balance between these two competing pressures can be difficult. The potential gains of consolidation (potential economies of scale and other positive outcomes discussed above) needs to be weighed against the potential loss of diversity in access points, opportunities for experimentation, the creation of a single or few points of failure and loss of a local voice (Goedegebuure & Schubert, 2017), (Ernst & Young, 2018).

Distance can hinder effective collaborative behaviour

Geography appears to influence merger processes strongly. The availability of merger partners is often understood in terms of their geographic proximity (Frolich, et al., 2016). Other innovative partnerships such as corporate-public mergers (Weinblatt, 2012) are often discounted. For example, deep research and education collaborations across national boundaries appear rare (Ferlie & Trenholm, 2018).

Some have found that organisations that are geographically near find it easier to merge, indeed even short distances and travel times can be a constraint (Abbott, 2003), (HEFCE, 2012), (Weinblatt, 2012). The relationship is not linear however given the examples cited in (Smart, 2009).

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