

Unitec Environmental Scan 2017
EXECUTIVE SUMMARY
March 2017



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Executive Summary

Political

- 1) **Outcomes:** Outcomes are the effect that public institutions have on the wider world (social, economic, cultural, and environmental), and in recent years, the government has become increasingly focused on tracking these. The government is focused on the “return on investment” from tertiary education; if it is funding a service, what benefits is it receiving? The number of enrolments in tertiary education is a poor indicator of overall benefits.
 - a) *What does this mean for Unitec?* We need to think about whether our planning is sufficiently outcomes-focused (outwards looking in) and whether we need to shift away from current, more institutionally-centric approaches. This can be simplified to the difference between “achieving great results for New Zealand” and “being a world-class institute of technology.”
- 2) **Flexibility:** There is growing emphasis on “flexibility” in the tertiary system (partly because this is seen as a way to achieve positive outcomes.) Flexibility is largely seen as involving easier re-allocations of funding, a constantly evolving set of qualifications and programmes, and generally greater freedom for institutions (freedom also meaning more risk.) A more flexible system is seen as being better suited to an evolving environment.
 - a) *What does this mean for Unitec?* Our Transformation is designed to make us more flexible, and better able to cope with an evolving external environment. However, flexibility has risks: how do we balance academic rigour with innovation? How might we make best use of “bulk” funding? What would be the implications of longer funding periods, with less certainty?
- 3) **Maori and Pacific:** There remain concerns about the underperformance of Māori and Pasifika in the tertiary system. Despite efforts, participation, achievement, and outcome results for these groups are lower than other demographic groups. This will be of particular concern in the future as they become a larger proportion of New Zealand's population.
 - a) *What does this mean for Unitec?* Participation and achievement scores for Māori and Pasifika are below the overall average for Unitec students. This has occurred despite a number of initiatives, and clear focus in our Investment Plans. Is sufficient attention being paid to the issue?
- 4) **Student Focus:** Related to the increasing emphasis on flexibility is an emphasis on student agency. This includes such initiatives as the Key Information Set, but is also notable in some of the recommendations of the Productivity Commission, and in the general rhetoric of the Tertiary Education's Commission “Investment Approach.” Student focus implies altering the tertiary system so it is more responsive to student needs and desires, rather than the perspectives of providers.
 - a) *What does this mean for Unitec?* Greater transparency and visibility of graduate outcomes may alter student decision-making away from more emotive factors towards clearer assessments of cost and benefit. Alternatively, regarding students as pure customers may have the opposite effect, triggering marketing wars. There are also issues to resolve in relation to student assessments of quality, as well as the positions of institutions and employers.
- 5) **Evolution:** While there is substantial emphasis on the changing nature of the tertiary system, and the need for changing policy settings, the overall political perspective is one of evolutionary, rather than revolutionary change. Major policy changes (such as those proposed by the Productivity Commission) have largely been precluded, and what remains instead is a set of minor changes, such as the ability to modify specific funding conditions. More radical moves, such as outcomes or output funding, are unlikely.

- a) *What does this mean for Unitec?* Policy change is unlikely to occur at a speed too fast for us to quickly adapt; instead, our Transformation may, depending on its success, position us in a way that enables us to quickly adapt to new policy settings and gain a comparative advantage.
- 6) **Industry:** The government wants to see the tertiary sector work more closely with industry (broadly defined). It wants to see industry-led research, industry involvement in the development of qualifications, and a better match between graduate skills and industry needs.
 - a) *What does this mean for Unitec?* We already have close ties with industry. Are these sufficient? How much authority should industry have, considering they don't directly pay us?

Economic

- 1) **Macro growth continues:** New Zealand looks set to enter its eighth consecutive year of growth. Annual GDP growth is set to top 3% over the next couple of years, as a wave of building work progresses and higher dairy prices provide some relief to rural regions. Population has boosted activity across a range of sectors, and is likely to continue to do so as long as job prospects remain favourable here. The OCR is expected to remain unchanged, but higher interest rates are likely to take the edge off house prices and consumer spending.
 - a) *What does this mean for Unitec?* At the macro level, a healthy economy means fewer people choosing tertiary education, thus reducing the overall enrolment pool (although this is still intermediated by institution-specific factors). The overall tertiary pool is likely to remain stagnant, if not in slight decline, over the next three-five years.
- 2) **Inflation low but on the way up:** Inflation, both in New Zealand and around the globe, has been running at very low levels over recent years but is on the way up. Building cost inflation is running well above the overall index due to capacity constraints. While the New Zealand dollar remains relatively high, the NZD/USD exchange rate is expected to ease back through 2017. Many Asian economies are at risk of tightening global trade restrictions, which could also impact the New Zealand dollar. As a result, the Kiwi is expected to lose some ground.
 - a) *What does this mean for Unitec?* Inflation in building costs may impose pressures on some of our major upcoming Transformation projects, and some form of re-phasing or hedging might be required. The relatively high NZD is likely to reduce New Zealand's attractiveness to international students, and although it may drop as noted, this may be counterbalanced by reductions in the strength of key Asian economies, reducing their demand for international education.
- 3) **China and India:** Both economies are expected to continue to grow substantially over the next few years, albeit at a slower rate than they have in recent times. A key attribute of growth in both economies is the development of substantially bigger and richer middle-classes. This will support continued growth in the number of Chinese students considering international education. However, there are risks for the Chinese economy stemming from Trump-proposed large trade tariffs. There has been a recent decline in arrivals on student visas. However, overall student arrivals are still expected to be higher than in earlier years owing to the global lift in the number of students studying overseas.
 - a) *What does this mean for Unitec?* As their middle classes grow, China and India are likely to produce increasing numbers of potential international students. However, the development of domestic capacity will mediate the number who will take up that option, and New Zealand as a destination may become less attractive due to policy changes. Any major trade wars triggered by the new United States administration could seriously damage the Asian international student market. Diversification into additional markets is likely to mitigate risks attached to economic downturns in particular source countries, but is unlikely to affect the impact of policy changes.
- 4) **Unemployment and labour availability:** Underlying growth in employment in New Zealand has been very strong and the ease of finding skilled labour has continued to decline, leading to moderate wage growth. Despite an increase in unemployment rate, the labour market has been tightening across the board, with capacity constraints now spreading well beyond the construction and tourism sectors. The unemployment rate is expected to decline over the next 2-3 years but there are marked regional differences.

What does this mean for Unitec? From a supply-side perspective, it is likely we will be able to place skilled graduates into a range of roles in the near future. From a demand-side perspective, however, enrolments may suffer as potential students take up employment opportunities. This is likely to have a particular impact in lower-level qualifications (certificates and diplomas) as these are the areas in which the current healthy state of employment renders a qualification unnecessary.

- 5) **Varied industry outlooks:** Job growth has been increasing for construction and related service industries, including financial services, public administration, safety, rental and real estate and healthcare. Growth in the construction and service sectors will continue to be supported by population growth, and tourism has also been in a strong growth state.

What does this mean for Unitec? Currently, our offerings span multiple industry sectors, some of them with weaker employment outlooks. It is likely that more closely linking our planning, and thus programme offerings, to industry projections will help ensure that we produce the right type of graduates for New Zealand's economic, social, and cultural wellbeing. However, there are significant risks in attempting to be too precise, and as such some degree of flexibility and generic skill development is vital.

- 6) **Storm clouds on the horizon:** Current economic forecasts are all based on assumptions of general international stability. However, the new United States administration has threatened major trade tariffs on several significant economies, including China and Mexico. The impact of these tariffs could be a disruption to the global economy, which could have cascading effects on New Zealand. While this is a worst case scenario, it is a possibility that forecast growth and employment could be slowed, or even reversed, and the world could slip into another global recession in the next few years.

What does this mean for Unitec? A global recession would likely lead to significant jumps in unemployment, which would likely drive enrolments to Unitec. However, if the recession were large enough, it might force the government to consider additional austerity measures, which might include reductions in funding to tertiary institutions. A recession would also make it more difficult for us to fulfil our primary function of placing our graduates into employment.

Social

- 1) **New Zealand Demography:** New Zealand will continue to grow relatively rapidly over the next two decades. Its population will become older and more ethnically diverse.
- a) *What does this mean for Unitec?* While there will be more potential domestic students, simply due to population increases, many of these will be in groups traditionally under-represented in tertiary education: older people, Maori, and Pacific. There may thus be opportunities to widen our catchments to better encompass these groups. Pedagogy and support services may in turn need to evolve to adapt to these different groups.
- 2) **Auckland Demography:** Auckland will follow broader New Zealand trends, only more rapidly, growing faster and with greater ethnic diversity. Much of this growth will be either in the very centre, or on the urban fringe (a donut pattern). New transport links, such as the City Rail Link and Waterview Extension, may alter movement patterns.
- a) *What does this mean for Unitec?* Auckland's traditional catchment is west Auckland, where there will be some growth, but mostly at a distance. Significant growth in the central suburbs due to intensification, coupled with new transport linkages, may make the Unitec Mt Albert campus increasingly accessible to a greater number of potential students. However, this would require competing with the existing central institutions (UoA and AUT).
- 3) **Housing Affordability:** Auckland housing is becoming increasingly unaffordable – while rent prices have lagged behind sale prices, they are now reaching levels unaffordable to some students.

- a) *What does this mean for Unitec?* If rental prices continue to climb, students may increasingly vote with their feet and relocate to smaller regional centres, where student-type work is easily available, but the cost of living is reduced. There were some indications of this in the 2016 dip in EFTS across three Auckland institutions. Unitec might need to consider the provision of additional student accommodation in the future.
- 4) **Financial Pressures on Students:** Recent surveys, both nationally and at Unitec, indicate that students perceive significant financial pressures. These pressures can impact on decisions to continue studying (or take up studying in the first place).
 - a) *What does this mean for Unitec?* The greatest direct costs facing students are fees and housing; as noted above, student housing is one possibility. In terms of fees, there may be a need to explore scholarships, particularly for priority groups. Other options might include expanding those support services that enable financially-constrained students to study here, such as the childcare centre.
- 5) **Our Students:** Student and graduate NPS are trending downwards, largely due to general perceptions of disorganisation and chaos, some linked to the construction and changes associated with Transformation. Recent internal research has indicated that the traditional stereotype of 18 year-old, socially active school-leavers does not apply significantly to our student body, but that there are instead five distinct segments.
 - a) *What does this mean for Unitec?* If NPS continues to decline, future enrolments are likely to follow, as word of mouth is a key information source. The diversity of the Unitec student population indicates that a generic approach to support services, timetabling, and marketing is unlikely to be optimal, and as such a greater degree of targeting might be beneficial.

Technological

- 1) **5th Generation Wireless:** 5G may increase global wireless capacity to a point where it is capable of creating an “always connected” world, with potential impacts on technology and social patterns.
 - a) *What does this mean for Unitec?* 5G is a key enabler for the Internet of Things; Unitec needs to consider the effect this might have on both pedagogical and back-office functions.
- 2) **Internet of Things:** A growing number of otherwise “dumb” items are becoming internet-connected (fridges, televisions etc.) This creates opportunities for information sharing and co-ordination, as well as risks.
 - a) *What does this mean for Unitec?* The IoT will likely require the teaching of new content, at the same time as it facilitates new ways of teaching. As technology becomes even more a part of everyday life, broader philosophical and ethical issues will require greater attention.
- 3) **MOOCs:** MOOCs have been around for almost a decade, and are steadily growing. Rather than replacing traditional universities, they seem to be shifting towards ongoing professional development and bite-sized learning.
 - a) *What does this mean for Unitec?* MOOCs are unlikely to disrupt Unitec’s business model entirely, but at the same time, it is unlikely that Unitec would be able to establish successful MOOCs due to a lack of brand reputation. Rather, it is vital to consider which current Unitec niches might lend themselves to MOOC exploration.
- 4) **Physical and Digital Worlds:** Virtual, Augmented, and other realities are creating new industries but also new pedagogical opportunities.
 - a) *What does this mean for Unitec?* New digital realities present an opportunity for innovative pedagogy, particularly in applied fields, that could greatly facilitate student success. However, they are unlikely to be cheap, and a careful analysis of cost versus benefit might be useful.
- 5) **Technology and Employment:** There is substantial rhetoric about the disruptive effect of technology on the employment environment. However, data indicates that the employment environment remains relatively stable, with no increase in velocity whether in New Zealand or the United States.

- a) *What does this mean for Unitec?* Any analysis of future employment needs to be carefully developed and avoid being too easily captured by marketing froth. Hard numbers are likely to be the best predictor of future economic trends.
- 6) **BYOD, Learning, and Technology:** An increasing number of institutions are introducing BYOD policies, and some students prefer the freedom of using their own devices.
 - a) *What does this mean for Unitec?* Good BYOD policies involve a balance between efficiency and ease-of-use, and equity issues. While BYOD may reduce institutional costs, and be more convenient for some students, those without resources to acquire devices may be disadvantaged.

Organisational

- 1) **Positive Graduate Outcomes:** Unitec's primary function is to equip students with the necessary skills for employment, and latest results indicate significant successes in this area. Raw graduate employment rates were up, and even when adjusted for the healthy external employment environment, showed continued improvement. We exceeded our target.
 - a) *What does this mean for Unitec?* We are achieving our primary purpose, and can be relatively confident that our teaching practice remains fitting for the external environment. We need to ensure that as we transition to new pedagogies, we are still achieving these positive graduate results.
- 2) **Declining EFTS:** EFTS numbers dropped significantly in 2016, and domestic EFTS have been declining for some years. International EFTS are much more volatile. There is significant decline in EFTS in lower-level qualifications, and particular networks have seen very sizeable drops.
 - a) *What does this mean for Unitec?* This steady reduction in EFTS, particularly domestic EFTS, is of major concern given the implications for our financial sustainability. The relative strength of longer (degree-level) qualifications vis a vis shorter qualifications (certificates and diplomas) is counter-intuitive, as it is increasingly believed that longer, less flexible qualifications are not suited to the market.
- 3) **Increased Research:** Research outputs in 2015 and 2016 reached previously unattained levels due to a combination of improved reporting and greater focus. External research income and the number of industry partnerships have also increased.
 - a) *What does this mean for Unitec?* Research differentiates Unitec from other ITPs, and early signs are that the new research strategy is achieving significant gains. Due to the lag effect of staff departures, however, it is likely vital that close attention is paid to this as the loss of a few staff could cause reductions in output quantity and quality.
- 4) **Declining Educational Performance Indicators:** Unitec is experiencing an unusual reduction in key EPIs, including course completion, progression, and retention. While reductions in progression may be simply due to an improved economy, drops in the others are of concern and may indicate increasing student dissatisfaction with their Unitec experience.
 - a) *What does this mean for Unitec?* EPI losses may mean a loss of performance based funding, but might also have significant reputational effects if they continue. Unitec is faced with a conundrum as declining EFTS impose pressures to drop entry standards, while improving EPIs may require increasing standards.
- 5) **Environment:** Unitec has embarked on an ambitious One Planet strategy. Results in 2016 were mixed, with highlights including a substantial reduction in carbon (including air travel) and the achievement of Carbon Neutral status. There were less positive water and waste results.
 - a) *What does this mean for Unitec?* One Planet is a very ambitious strategy, whose goals will require significant changes in working practices. It may be necessary to initiate more substantial projects to achieve these goals, as otherwise their achievement is unlikely.

- 6) **Low Staff Morale:** Our 2016 mini-survey indicates that staff Net Promoter Score remains extremely low at -56; in the absence of a full survey, reasons for this cannot be confirmed, but are likely to be similar as those in the 2015 survey. There have been incidents, such as what occurred at Waitakere campus, that indicate that staff are very unhappy with some strategic decisions.
 - a) *What does this mean for Unitec?* Staff are one of our four Critical Success Factors, and low morale and engagement may be a major hindrance to achieving our other goals. In particular, the impact of low-morale staff on students, given their frequency of interactions, may be negative.
- 7) **Staff Demographics:** The ratio of academic:allied Full Time Equivalents (FTE) remains below 1 (more allied than academic staff). Our ethnic mix remains diverse. However, there remain significant gender inequities in relation to remuneration. Unitec's remuneration structure also appears to be becoming less linked to overall performance.
 - a) *What does this mean for Unitec?* Academic staff deliver Unitec's primary services, and thus care must be taken to ensure there is an adequate front office:back office ratio. Issues of remuneration may cause staff resentment or may be indicative of more significant underlying difficulties in calculating value.

Competitor

- 1) **Declining Market Share:** Unitec's share of EFTS – whether in Auckland, as part of the Metro Group, or as part of the broader ITP sector – is in decline, with the most significant drop between 2015 and 2016. The decline is particularly apparent in domestic EFTS
 - a) *What does this mean for Unitec?* Domestic EFTS are the lifeblood of institutions, given the volatility of international markets. If Unitec's share continues to decline in a flat-to-declining overall market, it will face significant financial pressures.
- 2) **Brand Perceptions of Unitec:** Awareness of Unitec has dropped in recent years, while consideration has improved. First choice has remained very low, and is the same, or lower, than institutions with much less awareness.
 - a) *What does this mean for Unitec?* Unitec is well known, but not well-loved. Word of mouth is key to institutional reputation, and efforts to improve this may be key, rather than formal marketing.
- 3) **Lack of Unique Offerings:** Unitec has few unique offerings either in Auckland or nationally, and will be losing its monopoly on one of those programmes in 2018.
 - a) *What does this mean for Unitec?* In the absence of unique offerings, Unitec must compete on brand and reputation. This poses difficulties given the issues with perceptions noted above.
- 4) **Universities Valued Over ITPs:** In general, a very small proportion of intending students prefer ITPs over universities. While this is not reflected in overall enrolment numbers (i.e. universities are not growing at a dramatic rate), this may simply indicate an inability or unwillingness of universities to absorb all potential enrollees.
 - a) *What does this mean for Unitec?* Unitec failed to become a university of technology in the early 2000s, and as a result, is still perceived as being of lesser quality. Given broader perceptions of ITPs, there is likely to be a ceiling of likely enrollees for Unitec, except in cases of significant economic distress.
- 5) **Key Decision-Making Factors:** Student decision-making is complex, but often focuses on cost, location, timing, and the degree of academic support.
 - a) *What does this mean for Unitec?* There is relatively little competition on cost in New Zealand, but Unitec has potential advantages with location (green spaces, free parking) and timing. These might provide areas to build a competitive advantage.

This document was produced by Unitec Institute of Technology. All opinions herein are the opinions of the lead writer only and do not express the views of any other Unitec employee, the Unitec Council, or any of the contributing writers.

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