

New Zealand Productivity Commission's Inquiry into Frontier Firms

Personal Submission by Professor Tava Olsen, University of Auckland

I have seen a copy of my University's submission and endorse it fully. However, I wish to focus this submission around my own area of expertise, Supply Chain Management. This submission reflects my own opinions rather than those of the university as a whole. It is narrowly focussed on matters I feel I can speak to, rather than the broader report. In particular, I focus my thoughts around important drivers of productivity (and lack there-of) and policy levers I believe matter the most and have the largest potential impact.

The Productivity Commission and David Skilling's reports both acknowledge lack of managerial capability as a key factor in limiting firm productivity in NZ. Yet the proposed government interventions in Table 6.1 "Examples of policy settings that could influence firm-level productivity" do very little to address this factor. In my opinion, NZ's lagging productivity is not about not having enough smart ideas, it is about being able to harness those ideas to build and run successful companies. And that takes both capital and managerial know-how (both in standard best practices and new process innovations). Some of our frontier firms have excellent managerial know-how, but most of our non-frontier firms have significant gaps in this regard in my experience. Even some of the frontier firms rely heavily on their novel product (or service) and get by with rather mediocre processes.

A Need for Managerial Education

When moving back here from the US, I felt I had stepped back in time 10-15 years. NZ companies were highly focussed on rolling out lean programmes that should have been invested in at least a decade earlier. One company I visited proudly explained how their recent lean initiative had produced 75% time savings on a particularly product (that is, the product was now taking a quarter of the time to produce). How the system could have been allowed to run previously with that level of inefficiency was rather baffling to me.

Another example of lack of managerial know-how dooming a NZ company is Pumpkin Patch; the children's clothing company that went into receivership in 2017. Quoting from Wikipedia "Founded in New Zealand in 1990 as a mail order catalogue by Sally Synott, Pumpkin Patch quickly grew to become a highly popular brand. At its peak, the company was valued at over \$NZ830 million and employed over 2,000 people. It operated over 180 stores across Australia and New Zealand, as well as in Asia, Ireland, the Middle East, South Africa, the United Kingdom and the United States." While there were a number of issues reported with Pumpkin Patch, most of them centred around its managerial expertise. From my own observations (which it should be emphasised are as an outsider rather than an insider, so should not be taken or quoted as definitive fact) they appeared to have no cohesive supply chain strategy and no awareness that one was even necessary. They proudly displayed a photo of a huge pile of individual FedEx packages of clothing as their inventory replenishment strategy because they had adopted a lean/just-in-time approach and were replenishing US stores by individual inventory shipments from NZ. Clearly, this is a very high cost approach to inventory replenishment. Yet, the price they could charge for their clothing was not so great to be able to accommodate such a high-cost supply chain. Had they thought about their supply chain strategy they would probably have set up a warehouse in the US (or at least contracted with a 4PL to provide this), but as far as I could tell no one at their top table had any operations or supply chain background. **People don't know what they don't know.**

In an effort to address this general lack of managerial expertise, I co-developed and launched the Strategic Supply Chain Management Executive Programme (SSCMP), here at the University of Auckland. The programme was launched in 2012 and grew out of a conversation I had with the head of supply chain at one of the major supermarket chains. This executive pointed out that (a) many top supply chain executives at NZ companies, like himself, are hired from overseas; (b) while the top supply chain executives know each other there is no strong network among the next tier down; and (c) there is no good educational programme to move mid-career supply chain professionals upwards in their thinking.

The programme is highly experiential with site-visits and many guest speakers from industry. It seeks to equip mid-career supply chain professionals to contribute at a strategic level to their company. It is designed to be both practical and relevant and give supply chain leaders the tools to contribute to C-Suite decision making, both functionally and across the business. The SSCMP has been used as a model to develop what are now referred to as Auckland University’s Executive Education “C-suite Programme”, offering programmes in HR (People Strategy for a Changing World), information (Strategic CIO programme), and finance (Strategic CFO programme).

However, enrolments in these programmes are small, in part because they are quite expensive to run (and so fees are relatively high). Co-funding from government would go a long way in addressing this issue and allowing a wider reach for these programmes, particularly into SMEs (currently enrolments pull mostly from large companies who are aware of their managerial deficits).

Figure 1 (below) was prepared for the supply chain advisory board (all C-suite programmes have an industry advisory board) and shows the ecosystem building that has been occurring in the supply chain space due to this close collaboration between academics, industry, and executive education. I firmly believe this is a key way to improve NZ firms’ productivity.

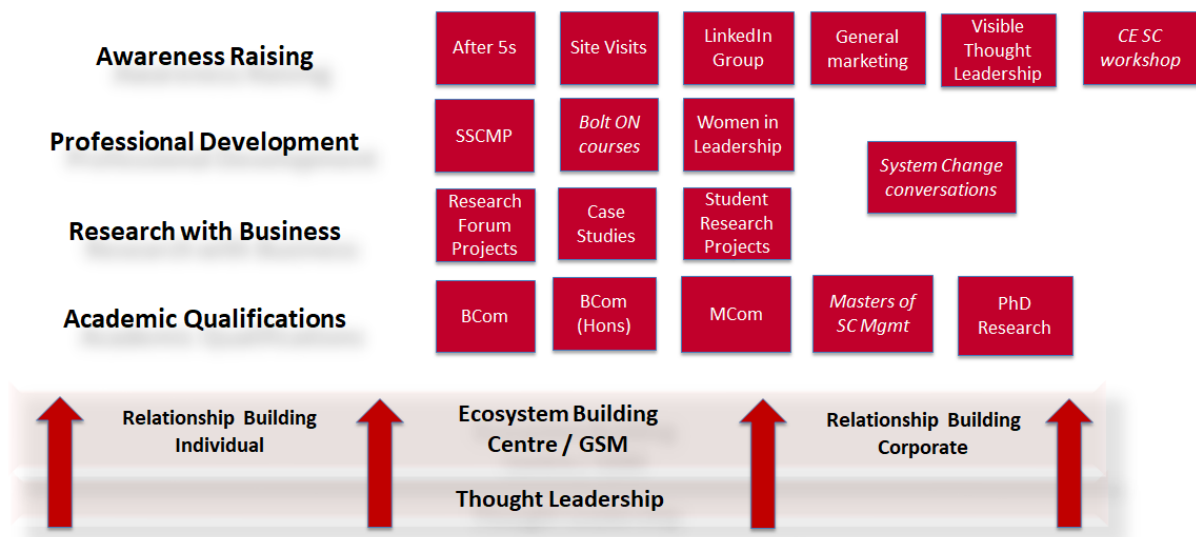


Figure 1: Supply Chain Ecosystem Building

I therefore endorse the University’s suggestion of **the provision of education vouchers**. However, it is important that these are directed towards research-informed programmes. In my experience there are a lot of snake-oil salesmen in the executive education space, selling slick programmes that do little for improving a company’s performance. Management education needs to be grounded in the theory of what actually works in practice.

Research Funding to Improve Managerial Expertise

In addition to dissemination of managerial best practices there is a desperate need for more investment in managerial research in NZ. I had a colleague with a PhD student ready to be embedded in a NZ company doing management research but whose application was declined by Callaghan Innovation because management research is not classed as “research”. Yet the work he does is publishable in top international management journals.

As noted in the University’s submission, “the R&D tax credit and other related policy instruments emphasise science based research and do little to incentivise firm engagement with universities on a wider range of research problems involving social science and business disciplines, that could result in identifying new markets, aid internationalization, or lead to incremental innovations and process improvements.” I therefore endorse the university’s recommendation to **review R&D tax credit and grant schemes**.

In general, the landscape for funding management research is quite unfavourable in NZ. In Northern Europe when companies have a tricky problem, they think first of going to a University for help. In NZ they go to the management consulting companies or number-8-fencing-wire it. Part of the reason companies work with Universities so readily is the funding available for this in Europe. A close relationship between industry and business schools both grows managerial capacity and improves business research. Process innovation is a very underappreciated area for productivity improvement, and yet a key research area within business schools.

Relatedly, I would also suggest **reviewing the Marsden Fund panels** to carve out a separate panel for business. While business is listed in the topics for the Economics and Human and Behavioural Sciences (EHB) panel, the awards skew significantly towards psychology and anthropology. There was zero funding allocated to Business Schools in the 2018 round from this panel. This is despite there being applications that were invited to the second round and that were ranked as excellent by expert referees. The panel rejected 43 of 46 Expressions of Interest (EOIs) from The University of Auckland, the country’s largest Business School, submitted in 2017, 2018, and 2019. However, our Business School enjoys an excellent international reputation and employs world-class researchers, many of whom are more than capable of producing exciting blue-sky research.

Finally, the University’s submission suggests **reviewing the National Science Challenge (NSC) model**, stating that “there is mounting evidence to suggest that the Centre of Research Excellence (CORE) programme has been more successful in producing high quality, IP rich research.” This has certainly been my own experience as a funded PI in both Te Pūnaha Matatini CORE and NSC Science for Technological Innovation (SfTI). My personal experience with SfTI was less than pleasant, having my funding pulled before completion of the three-year project (highly unusual in most funding models), in large part because working with Fonterra was not seen as sufficiently helpful for the NZ economy. The NSC SfTI seems to focus a whole lot on technology and not much on process (a focus on “people running around in black skivvies” as a colleague described it). Whereas Te Pūnaha Matatini has been able to develop truly interdisciplinary teams and has been leading in both advising the government on its response to COVID-19 and in communicating the science behind that advice. While not directly management related, it does serve as a model for successful interdisciplinary research. Research that successfully bridges between the STEM subjects and business could be hugely beneficial for the NZ economy. This requires acknowledging management research as a credible and important research area in its own right, rather than as an afterthought or add-on, as often occurs.