

Solving New Zealand's innovation & productivity puzzle



**A valuable new look at how New Zealand businesses can
create and harvest more profit by understanding Kiwi culture**

Prepared by



A digital version of this paper is available in the resources section of the *Forté Management* website
at <http://www.forte-management.co.nz/resources.aspx>

How Kiwi culture influences productivity, innovation, customers, motivation, profit & just about everything else you can think of ...

The number 1 driver of productivity improvement is INNOVATION. Because New Zealand appears to be so innovative, or at least “inventive”, we should enjoy high and rising productivity, economic growth and prosperity. That for decades the nation’s economic performance has been mediocre has been a puzzle for policy makers, entrepreneurs and managers alike.

Government agencies efforts to solve the puzzle have focused on “institutional arrangements” and factors like *societal wealth, industrial structure, research and development infrastructure, resource endowments, and country size*. That we have failed to significantly improve our productivity performance is a pretty strong signal that we are missing something. Something important! *Forté Management’s* research shows that national culture and how Kiwis prefer the initiation rather than implementation part of the innovation process may be the limiting factor on creating prosperity, not infrastructure, the availability of resources or our small size. At the very least, failing to take account of the particular way that Kiwis think and behave, which is in turn significantly affected by national culture, will produce less than optimum innovation and economic performance.

It should be apparent by now that we need to change our thinking and the best way to start is to change how we perceive the problem.

Kiwis think and behave in a very special way. That means we are more motivated, more excited by, draw more satisfaction from the initiation part of the initiation process (invention, creativity, discovery) than the implementation part where value is created and harvested. Kiwis have an endemic inability to identify and develop the opportunities offered by our abundance of intellectual assets, a reluctance to engage with specialists, a tendency to think for our customers, profound feedback reluctance and “pathology of serial initiation”. These and other factors conspire to create thinking and behaviours that mean less than the maximum value is created and a significant proportion of that slips through our fingers. All this while we work longer and harder hours to stand still (the second longest in the industrialised world).

This paper introduces concepts, that when combined with the proper understanding, will help Kiwi businesses create and harvest additional value without having to work longer and harder or make significant new investments.

A quick reality check

For decades New Zealand has been sliding down the O.E.C.D. per capita income rankings ladder to currently stand at 22nd out of 30. Many rationalisations have been offered for our decline. The innovation statistics are informative.

- The aggregate quality of New Zealand's formal research, based on publications and citations is sound (9th out of 19 countries measured). We are good at research and development, solving problems and inventing things.
- Our "innovation linkages" are surprisingly good, 2nd of 25 in 2001 (O.E.C.D. Main Science & Technology Indicators Volume 2003/2).
- However our level of triadic patenting was low (21st of 30) and our exports of high and medium high technology manufactures was 19th out of 19 on the O.E.C.D. STI Scoreboard 2003.
- Yet our adoption of innovation in both manufacturing and service firms is well above the international average.
- We rank number 2 of 36 in the GEM Study for early stage entrepreneurial activity. We rank 26th in the same study for high growth businesses.

So, we do good formal research and make the results of that available to the world. We have good channels for two-way exchange of knowledge through our contacts (Although our naivety probably means that we give more than we receive). Yet, despite producing an abundance of novel IP, we have an endemic failure to recognise, protect and commercialise it. This is revealed in our abysmal performance in the export of medium high/high technology manufactures. This is all consistent with having superior performance in the early parts of the innovation process rather than the later implementation parts.

That's just unacceptable for a country with so much potential. We can do much better!

There's a wedge that gets in the road of success

According to the Ministry of Economic Development, there's a "wedge" that stops us appropriating as much value from our innovation effort as similar European Union countries. Our businesses and nation do not generate as much value as EU (and many other OECD) countries would from the same amount of innovation effort. We do a similar "amount" of innovation but we create and harvest a lot less value.

We think about innovation too narrowly

Innovation theory falls into two schools, economics (resources) and sociology (cognition, behaviour). Often they are viewed as mutually exclusive. They are in fact complementary or synergistic. In New Zealand we are much more comfortable thinking about tangibles like resources than “thinking about the way we think” and behave ... so the economics school has dominated to the almost total exclusion of alternative view points. If we balance what we know about resources with more knowledge about the way we use those resources we will discover new and highly valuable ways of creating and harvesting additional profit, shareholder value and national prosperity.

It is how we think and behave, not how much resource we have that limits the profit and value we create and harvest

People often disagree with us when we make this claim. And truth be, we're inviting them to do so. After all, all the research shows that things like capital intensity are the limiting factor. That's not surprising because we have never looked at how we think and behave to see how they limit our achievements. And frankly it's not very comfortable to do so!

When we suggest that it's our thinking and behaviour rather than resources that are the limiting factor on the results we achieve from our innovation effort we are by no means dismissing the role or importance of resources. Whether it is resources or cognition and behaviour that are THE limiting factor is actually a red herring. Systems all operate with limiting subsystems. Horse power and speed is a great example. As the speed of a vehicle increases, the effects of increasing drag (a limiting subsystem) means that more and more horsepower must be applied to achieve each additional Km/hr. The same applies with productivity. We've directed much of our innovation effort at product and process improvement (mainly efficiency) while almost completely ignoring customer and channel innovations. We've harvested the low hanging fruits from our current innovation efforts and entered the zone of diminishing returns. We now need to look to different strategies and different thinking to capture new low hanging fruit. And that low hanging fruit is in the form of creating and harvesting additional value, not driving additional efficiencies.

When we apply the right thinking, even under some resource constraint, success is still possible. But even in conditions of unlimited resources, success will be constrained in the absence of the right thinking. We would suggest that most iconic if not all business successes have been achieved under conditions of resource constraint. The key to success has been the quality of the thinking and behaviour. And that thinking and behaviour is for us as a nation, statistically significantly skewed in favour of the earlier initiation stage and away from the later accumulation of profit and prosperity. So we need to exceed a certain threshold of resources, but beyond that our thinking and behaviour will determine how successful we are at accumulating profit and value and building prosperity.

We cling to lots of myths about innovation & business

They make us feel good ... but they get in the road of clear thinking.

Four of the most damaging are ...

1. We view innovation as a single process. In practice it has two important, albeit overlapping and interconnected parts – initiation and implementation. **The two parts require different thinking, behaviour, resources and motivations to achieve optimal performance.** We assume that being good at one will automatically make us good at the other. This is not so, at least for Kiwis. We are very good at one part, poor at the other. Being reasonably good at both may deliver better economic results. We are highly inventive ... but that won't make us rich. The Industrial Revolution is an object lesson. Most of the inventions occurred in France, but the implementation and value accumulation occurred in the UK because of culture and attitudes and capital markets underpinned by the scientific spirit pervading the national culture at the time. This is New Zealand's story in reverse!
2. The Number 8 gauge wire mentality proves we're innovative. Actually it's really about resourcefulness and practicality. Our ability to go out into the garden shed and knock up something useful out of makeshift resources for our own use. More likely than not "borrowing" someone else's IP. That used to be a nation defining competitive advantage. Now it's becoming a millstone around our necks.
3. Everyone else is just like us. Thinks like us. Values the same things. Takes the same things for granted. Surely? That leads us to "think for our customers" and that makes them think we don't listen and don't care. It denies us the opportunity to tailor our products and value proposition for best possible alignment to create and harvest maximum value.
4. We have built and perpetuated a myth that our most successful entrepreneurs, sports people, scientists are just ordinary Kiwis that tried harder, got some lucky breaks. This is dangerous. It not only degrades their achievements but it stops us looking for and finding the real factors that make these people exceptional and learning from them. Most importantly, our successful entrepreneurs are not ordinary. They move on from "do-it-yourself" even if they started out that way. They learn to delegate and rely upon others for their success, to think bigger than themselves. Most of all, they have remarkable immunity to the Tall Poppy Syndrome.

These suggest that we've been looking for the answers in all the wrong places.

How we think, interpret the world around us, solve problems, our values and what motivates us are all determined by a combination of our unique life experiences and our national culture. One makes us different, the other makes us similar.

Culture literally affects **how** the neural pathways form during critical development phases and therefore determines **HOW** we think.

National culture provides the lens through which we view the world around us, the mental models that we use to interpret everything that we hear, see and experience, to solve problems and survive in the world.

National culture and the way people interpret what they see and hear, how they solve problems, how they relate to one another varies significantly from nation to nation and so too do relative strengths and weaknesses in the two parts of the innovation process.

There are statistically significant correlations between national culture and innovation and especially between culture and the initiation & implementation stages respectively.

They are diametrically opposite!

By understanding the influence of national culture, we can develop strategies and apply tools to leverage maximum value from what we are inherently good at and compensate for what we are not.

National cultures can be ranked or classified and compared using empirically verifiable, largely independent “dimensions”. Kiwis particular combination of cultural “dimensions” that so strongly favour the initiation part, combined with our particular set of “institutional arrangements” may be unique, making consideration of the role of national culture more important in New Zealand than in any other industrialised nation.

NZ's dominant (Kiwi) culture has the following characteristics. We are strongly individualistic but at the same time egalitarian. The Tall Poppy Syndrome may be the egalitarianism keeping the individualism in check. We accord respect on the basis of achievement, especially practical achievement but not business success and wealth accumulation. We are universalist and tend to believe that there is one right or wrong for every

situation (black or white) and that all people do or should think and behave just like us. In the commercial context we have very low assertiveness but high action orientation (just get on with it!). We are very loathe to express emotion at work. We have a very short time horizon and place low value on time.

We are high on affective autonomy and have low work centrality which means that we prefer the individual pursuit of pleasure and an exciting and varied life (outside of work) rather than co-operation and work. This doesn't mean that we don't work hard. Quite the opposite. We do. It does mean that our efforts are redirected from pursuit of work goals and professional development goals to personal and recreational pursuits at a relatively low threshold of prosperity. Consequently we do not pursue personal satisfaction and respect (refer to Abraham Maslow's work on motivation) through work and wealth accumulation in the way many North and South American, European or Asian people do. We unwittingly let a lot of value slip through our fingers, often to be appropriated by other companies in other nations.

There's no life style advantage in that!

Unique K-Code[©] Kiwi culture makes us good at invention and not so good at creating and harvesting value and building prosperity ...

Kiwi culture is unusual because all of the important dimensions strongly favour initiation at the expense of implementation...

And remember that value is created and harvested in the implementation stage!

We are intensely self reliant. That plays out in the ownership and capital structures that we adopt, our reluctance to delegate, to collaborate and even to succession plan. We adopt capital structures that force us to be risk-averse and we compete amongst ourselves because we lack the trust needed for collaboration. We like to do things ourselves, even when that doesn't make economic sense. We pay insufficient attention to detail, preparation and presentation, having a preference for substance over form that may not align with our customers' expectations.

We tend to sell "things" while many trading partners seek solutions. We resort too quickly to price instead of value – too quickly to contracts instead of building relationships. Of course some people prefer to do business the same way we do. The secret is in knowing which is which and adapting accordingly.

The Tall Poppy Syndrome results in under-performance. It makes us reluctant to be seen to excel (stand out from the crowd) and discourages the emergence of champions and leaders. We prefer generalists to specialists, breadth to depth, information to knowledge, simplicity to complexity and widely adopt do-it-yourself and make-and-use (versus make-and-sell) approaches including do-it-yourself management and design that all too often becomes make-do. In the UK the term "*Jack of all trades*" was invariably

accompanied by the qualifier “*but master of none*” and implied someone who wasn’t much good at anything. In NZ it is a term of unqualified approval.

Low assertiveness has many manifestations, the most significant being our weak negotiation skills, under-selling and understating, and lack of confidence to launch products early, trapping us in a pathology of serial initiation – returning repeatedly to the development process instead of facing exposure to the scrutiny and comment of customers. Our natural comfort zone is in the “safety” of the lab or workshop, not out in the harsh hurly-burly of the market place as it might be for instance, for Americans. This, combined with our narrow capital structures delays market entry even though speed to market is increasingly a competitive necessity.

We have a particularly negative attitude towards failure – a certain irony given our preference for trial and error R&D! That is a barrier to the transition from the relatively safe stage of creativity to the riskier stage of implementation. We have an endemic and striking inability to provide and receive constructive criticism. We therefore have a significant barrier to organisational learning, product development and refinement, and aligning our *supplier value proposition offer*[®] with the *customer’s value proposition demand*[®].

Understanding culture and the role it has in the way that we think about and practice innovation holds the promise of:

- **Increasing the returns on marketing and sales efforts**
- **Speeding new product development and the value created and harvested**
- **Increasing staff performance**
- **Liberate the value “hidden” in businesses intellectual assets**

With the right thinking we can build new innovation, business and market engagement models for New Zealand and New Zealand businesses. This won’t happen spontaneously but it can, with the right thinking and leadership, be made to happen with neither disruption to the existing economy nor with outrageous public sector expenditure.

Prepared by



Tony Smale MBA (Henley), AECD (NZ)

Forté Management

(A service of Forté Business Group Ltd)

tony@forte-management.co.nz

0274 967 821

www.forte-management.co.nz and www.enzyme-intellect.co.nz

Forté Management provides consulting services to help businesses and sectors prosper by achieving balanced, optimised and fully integrated:

- customer & stakeholder relations,
- continuous renewal, development & innovation,
- financial management, and
- business 'processes'

At the regional and national level they provide professional economic development advice, policy development & review and planning/implementation.

Forté Management has a special focus on innovation management and the role of Kiwi culture in influencing innovation and productivity. Working with clients they help gather and analyse the facts, opinions and perceptions, identify business capabilities, strengths and weaknesses and true competitive advantages, then help develop and implement strategies to -

- Increase the returns on marketing and sales efforts
- Speed new product development and increase the value created
- Increase staff performance
- Liberate the value hidden in business's intellectual assets

Intellectual assets are all the knowledge, production and quality systems, designs etc, whether registered or not, that are used to transform physical and financial assets (capital) into business success.

Tony's MBA Dissertation was entitled "*The Influence of National Culture on New Zealand's Innovation Outcomes*". Combining this research work with thirty years of management and business experience and over twenty years of economic development and management consulting experience he has developed a high level of expertise in understanding how Kiwi firms and sectors work, and where their strengths and weakness lay. He particularly advocates strategies that leverage Kiwi strengths in the early stage of the innovation process and compensate for the institutional and "mindset" barriers to the capture of firm wealth and national prosperity.

As well as his MBA Tony has science qualifications, the post-graduate Diploma in Health Administration, NZDMA Certificate in Direct Marketing, and is an Accredited Economic Development Professional.

Tony has recently authored the NZTE publication "*Playing to Our Strengths: Creating value for Kiwi firms. A report on how Kiwi culture can translate into creating successful and internationally competitive business models.*"