“Why we can be so inventive but still be poor"

A valuable new look at how New Zealand firms can create extra profit by understanding how Kiwis think about innovation and engage with their customers

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By understanding how we think and behave around innovation and how we engage with our customers we can lift our performance and create a whole new value stream for our firms and the nation.

"It was actually N.Z.'s Richard Pearse, not the Wright brothers, who was first to fly. The quintessential 'mad scientist' inventor, he didn't realise the historic importance of the event and so didn't bother to have any photographs taken".[1]

Nor did he or any of those around him recognise the commercial importance so, unlike the Wright brothers, Pearse never commercialised his invention. Which sums up New Zealand's approach to innovation perfectly.

Kiwis think and behave in a very special way that makes us very good at inventing things and very poor at identifying, valuing, protecting and developing our own discoveries and intellectual assets (see www.forte-management.co.nz for more discussion), and turning that IP into profit. Intellectual assets can serve two purposes. First, they are the means of production that we apply along with physical and financial capital to transform raw "materials" into the goods and services that we sell. Second, they represent business opportunities in their own right. That is, the knowledge, systems, expertise etc that we use to make things can also be turned into high value business opportunities, possibly worth more than the goods and services they are used to make. This may be one of the two greatest opportunities to rapidly transform our mediocre economic performance. The other is learning to overcome our profound reluctance to give and receive feedback. That would allow us to listen properly and learn what our customers truly want and value about our goods and services instead of relying upon what we think they want and value.

A quick reality check

For decades New Zealand has been sliding down the O.E.C.D. per capita income rankings ladder. In 1951 we ranked number 3. By 1955 we were 8th and we currently stand at 22nd out of 30 in the OECD and 50th overall (*https://www.cia.gov/library/publications/the-world-factbook/)*. Many rationalisations have been offered for our decline. The innovation statistics are informative.

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1 Frederick, et al (2007), *Entrepreneurship: Theory, Process, Practice.* Thomson Learning, Melbourne.

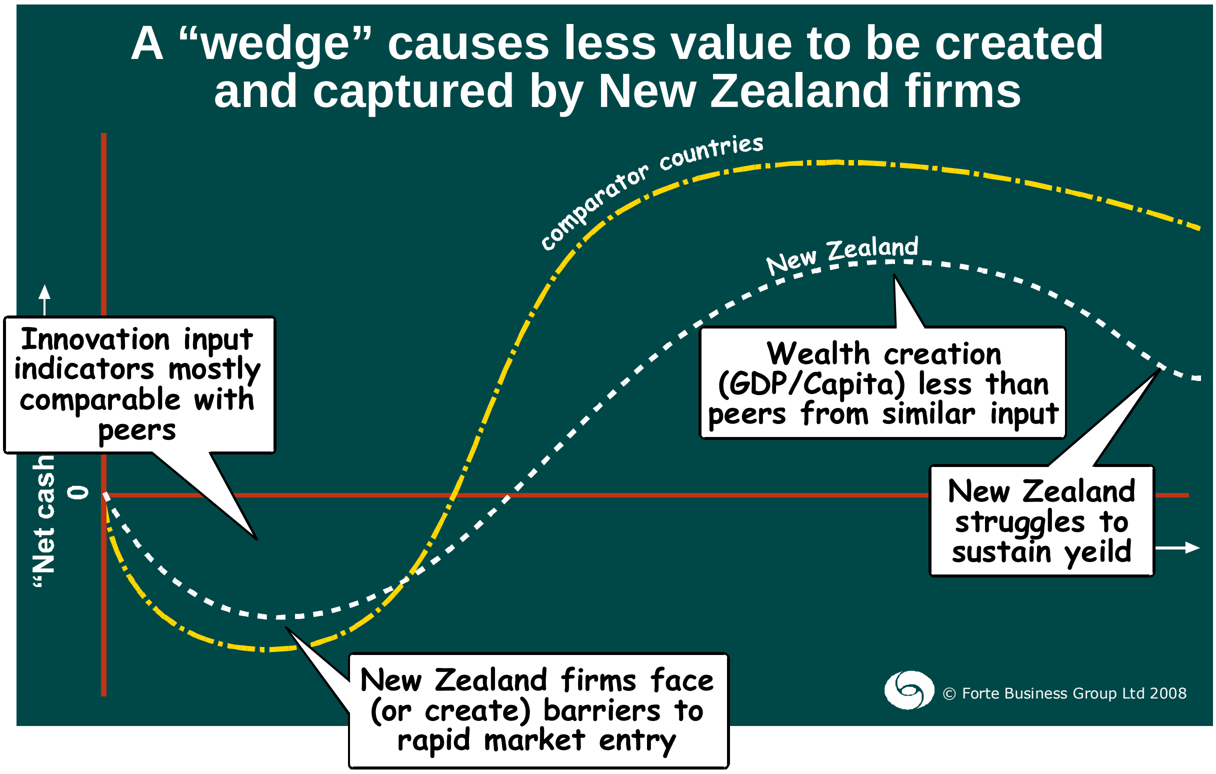
- The aggregate quality of New Zealand's formal research, based on publications and citations is sound (9th out of 19 countries measured). We are good at solving problems and inventing things.
- Our "innovation linkages" are surprisingly good, 2nd of 25 in 2001 (O.E.C.D. Main Science & Technology Indicators Volume 2003/2).
- Our adoption of innovation in both manufacturing and service firms is well above the international average.
- Yet our level of triadic patenting is low (21st of 30) and our exports of high and medium high technology manufactures ranks 19th out of 19 on the O.E.C.D. STI Scoreboard 2003.
- According to the GEM Study (2005) we rank second in the world for early stage entrepreneurial activity but 30th out of 36 for high growth business. In other words we are good at initiating businesses but not at creating growth and wealth.

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.

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 (EU) countries. Our businesses and nation do not generate as much value as EU and many other countries do from the same amount of innovation effort. We do as much innovation but we don't do it as well.



We think about innovation too narrowly

<u>Innovation theory falls into two schools, economics (resources) and sociology (cognition, behaviour).</u> Often they are viewed as mutually exclusive. They are in fact complementary or synergistic – two sides of the same coin. The former, which is dominant in N.Z., argues that national differences in innovation are the result of industrial structure, societal wealth, research and development infrastructure, resource endowments, and country size. The sociological school on the other hand argues that human dynamics and culture play a major role and that creativity and innovation are culturally moderated responses to environmental stimuli. In practice, it seems probable that the results of innovation effort and therefore economic performance are a result of the dynamic between the way people behave and think around innovation and the utilisation of the resources at their disposal. 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 profit and shareholder value.

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

People often disagree with us when we make this claim. And truth be, we’re inviting them to do so. After all, most if not all of the research shows that things like capital intensity are the limiting factor. That’s not surprising because the answers are determined by the questions. We have never looked at how we think and behave limits 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. We do need to have access to resources above some minimum threshold. But, with the right thinking, even under some resource constraint, success is still possible. And even in conditions of unlimited resources, success will be constrained in the absence of the right thinking. We suggest that most iconic 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 wealth/implementation phase.

We cling to lots of myths about innovation

They make us feel good … but they get in the road of clear thinking. Three of the most damaging are …

- We're the most innovative country in the world. *Aren't we?* It's hard to tell because no one is certain how to measure innovativeness. But the UK, Australia, Canada and the USA share that same belief. About themselves! We <u>are</u> highly inventive … but that won't make us rich. The Industrial Revolution is an object lesson. Most of the <u>inventions</u> occurred in France, but the <u>implementation and value accumulation</u> 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!
- Number 8 gauge wire mentality proves we're innovative. Actually it is a metaphor for our resourcefulness and practicality, and that's not the same as being inventive or innovative. It represents our ability to go out into the garden shed and knock up something useful from of makeshift resources <u>for our own use</u>. More likely than not "borrowing" someone else's IP. That used to be a nation defining competitive advantage. It's still important but unless we can transform it into a 21st century version it risks becoming a millstone around our necks.
- Everyone else is just like us. Thinks like us. Wants the same things. Surely? That leads us to substitute our own thinking for that of our customers and that makes them think we don't listen and we certainly aren't good at tailoring our products to the demands of people in our markets.

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 provides our shared Kiwi identity.

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

Culture provides the lens through which we view the world around us, and how we interpret everything that we hear, see and experience.

People from different cultures can examine the same "data set" and come to quite different conclusions. We make the mistake of buying into the PC notion that we should concentrate on the things that we have in common, where as there are in fact surprising differences between us and even people like Australians and in particular Americans, let alone those who do not share an Anglo-Saxon heritage. Not understanding that gets us into a lot of trouble, costs us a lot of value, and is one of the reasons that we are trapped in a commodity trading mentality.

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

They are diametrically opposite!

In other words, culturally determined characteristics that make us strong at initiation equally make us weak at implementation.

We invent things in the initiation stage. We create value in the implementation stage. We're really good at one and not the other. It's not hard to figure out which. We are really good at invention. And comparatively poor at creating profit and value. That doesn't mean we can't do it. There are just a number of management practices that stand in the road of us creating and capturing as much value as we could. That is why we can be so highly inventive but mediocre economic performance.

But fortunately there's a solution – a better way of doing things!

National cultures can be ranked or classified and compared using empirically verifiable, largely independent *"dimensions"*. 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 rather than co-operation and work. This doesn't mean that we don't work hard. We do. It does mean that we do not derive our sense of self from work and our prime source of motivation doesn't come from creating business success and making money.

Unique *K-Code*© Kiwi culture makes us good at invention and not so good at creating value and profit …

Kiwi culture is unusual because all of the important dimensions strongly favour initiation at the expense of implementation… And value is created in the implementation stage!

We are fiercely self reliant. When it comes to creating wealth that's not the asset it might appear to be. It plays out in the capital structures that we adopt, and 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 prefer transactional relationships and to sell things while many trading partners seek solutions and long-term trust-based relationships. We resort too quickly to contracts and to price instead of value and trust. Some trading partners of course share our way of doing business. The secret is in knowing which is which and adapting accordingly.

We routinely substitute our thinking for that of our customers assuming that they will value the same things as us, share our priorities and preferences. As a result we fail to understand our true value proposition that is closer to words like "integrity" than it is to "low cost".

The Tall Poppy Syndrome has many impacts including promoting under performance, a reluctance to be seen to excel (stand out from the crowd) and **a particularly negative attitude towards failure** – that is particularly tricky when our innovation model relies upon trial and **error**. 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 that is so essential to productivity at the implementation stage. This all contributes to our **profound feedback reluctance** that makes us loath to give or receive constructive feedback. Many of the people we aim to do business with see us as "beating around the bush" or even being elusive. Alone this is one of the greatest barriers to creating wealth. 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 and lack of confidence to launch products before we believe they are perfect, irrespective of what the customers think, trapping us in a pathology of serial initiation - in other words going back repeatedly to the lab or workshop to add more bells and whistles or refinements when we should get into the market and learn from our customers exactly what they think (which is almost certain to be different to us). This approach combined with our narrow capital structures delays market entry even though speed to market is increasingly a competitive necessity.

Low work centrality and preference for pleasure and individual pursuits (outside of work) does notmean we don't work hard because we do. It does mean that we draw our sense of being from outside of work pursuits and we reach a threshold of "enough" at a much lower level than most other nations. At that point our motivation switches from creating additional wealth to leisure and personal pursuits. It's called *satisficing*. **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.

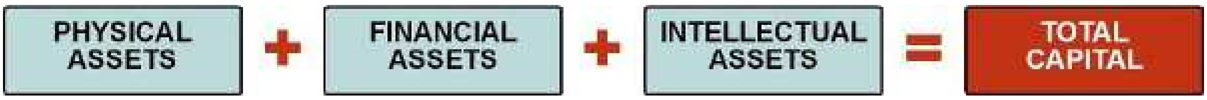
There are a number of strategies that can be applied to exploit what we are good at and compensate for the things that we are weak in. None is more important than extracting new value from the intellectual assets that we already possess and create anew every day.

Unlocking the value in Intellectual Assets

The strategic process of creating, identifying, protecting, developing, and managing the firm's intellectual assets to optimise the creation of value.

All organisations and sectors rely upon intellectual assets and they are increasingly recognised as key corporate assets. Intellectual assets are what investors really should care about, but they are rarely identified, understood and managed as the key to business success that they are.

Intellectual assets are the total information and knowledge (whether or not documented, registered or "owned"), skill and experience, systems and processes, relationships and other intangibles. Intellectual assets, intangible assets and intellectual capital are very similar concepts. Intellectual property is a subset of intellectual assets. A firm's total capital is comprised of physical, financial and intellectual assets and combined constitute the organisation's core competency and competitive advantage. Intellectual assets are the knowledge, processes etc that are used to transform financial and physical assets into business outputs and ultimately into profit.



The Intellectual assets strategy is a plan aligned with the broader business strategy to manage the productivity of the intellectual assets at the firm's or sector's disposal and to optimise the profit and value creation from those assets.

The process begins with the intellectual assets assessment

Forté Management's carefully structured six step process identifies and records the assets in the portfolio. The portfolio categorises the assets, records whether the range of assets are registered, owned or codified, how critical they are to the firm's success and the firm's/sector's resilience if the assets are lost, damaged or disrupted. Then each asset is reviewed to determine whether it represents a direct opportunity for commercialisation.

For most firms, just documenting the portfolio adds greater material value to the firm or sector than the cost of the assessment.

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.

End Note:

Since conducting the research the opportunities to observe Kiwi culture in action have proven very fruitful. Perhaps the most significant has been publication of NZTE research showing that Indian people view Kiwis as:

- Having a preference for transactional vs long-term relationships;
- Are high risk averse;
- Are weak negotiators;
- Are reluctant to understand Indian culture;
- Have an inflexible "take it or leave it" approach;
- Are less fun to do business with than Australians!

Sadly, this is exactly what the *Forté Management* research predicts!

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Over the last decade Tony has been deeply involved in economic and sustainable development initiatives including membership of various advisory groups and representing NZ at overseas forums. Since 1991 he has been the principal consultant and director at *Forté Management – Management and Marketing Consultants*. *Forté Management* is a general management, innovation and marketing consultancy. Ever since reading Crocombe, Enright and Porter's '*Upgrading New Zealand's Competitive Advantage'* in 1991 Tony has been troubled by the paradox between New Zealand's apparent innovativeness and mediocre economic performance. Undertaking the research for his MBA dissertation provided the opportunity to explore this paradox resulting in his dissertation entitled *The Influence of National Culture on New Zealand's Innovation Outcomes*. His conclusion was that it is cognition and behaviour attributable to Kiwi national culture not resources that is the limiting factor for the success of the New Zealand National Innovation System. Application of the findings offers the opportunity to craft a significant paradigm shift in the national innovation system, export market engagement and to develop a unique New Zealand management model.

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