

The culture of science – the science of culture



How where we come from influences the way we innovate and manage

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The Plan

1. An introduction to national culture.
2. A brief walk through the innovation process.
3. A look at how national culture influences the way that innovation is practised.



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National culture as an alternative perspective

Default

We get a lot of valuable additional information when we slice and dice from different angles.

Looking at innovation from a national culture perspective is one of those different angles.

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How where we come from influences the way we think and behave

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National Culture

Our “software of the mind”

(Hofstede)

- Learned set of shared mental models.
- “Rules of thumb” and reference points.
- Interpretation & response.



The role and power of mental models ... Culture is not trivial

*“The culture a person grows up in **strongly** influences his or her brain wirings, or **neural pathways**, in the early years of life.”*

Zaltman G (2003) – Professor of Marketing & Fellow Mind, Brain, Behaviour Initiative – Harvard University in *How Customers Think*



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The role and power of mental models ... Culture is not trivial

More influence on how we think
than
Age
Race
Gender
Religion
Education
Occupation

(Trompenaars & Hampden-Turner (1998) in *Riding the Waves of Culture*)



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The role and power of mental models ... Culture is not trivial

People from different cultures can
come to different conclusions about
the same dataset.

(Eg Hofstede, Sutton, Putnam)



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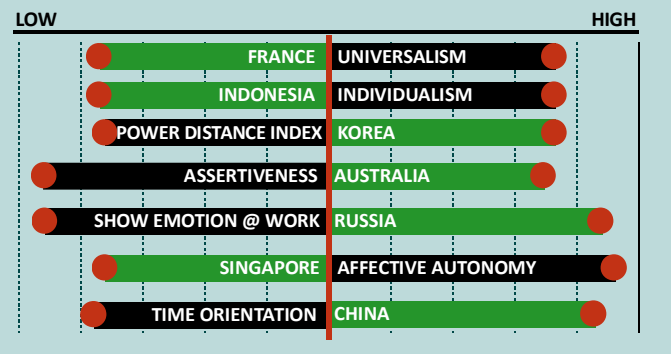
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Measuring national culture

Examples of dimensions that impact the innovation process

Kiwi National Culture Dimensions - rankings and comparators



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Opening our minds to a different view of the innovation process



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The innovation process

Terms are used carelessly and interchangeably.

***Innovation process* – idea inception to adoption and diffusion.**

Psychological & social process involving cognition & behaviour of individuals & groups of people.



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The Innovation Process

Psychological & social process involving cognition & behaviour of individuals & groups of people.



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The innovation process

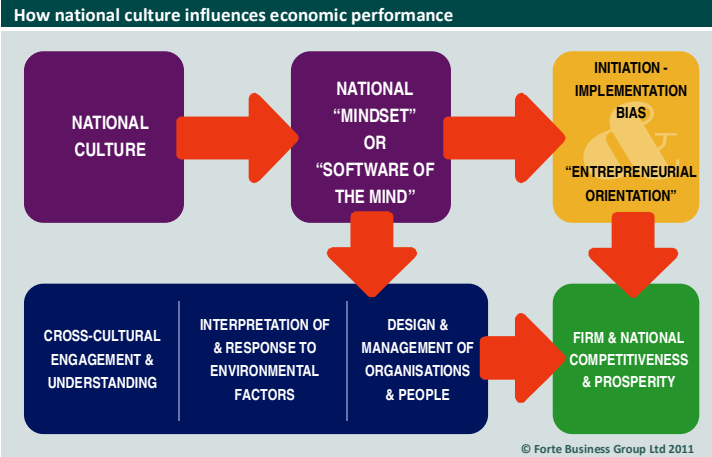
- 2 key stages – *initiation & implementation.*
- No automatic conversion.
- Different resources required.
- Correlations with national culture.



How culture influences the *Innovation Process*



National culture is totally pervasive



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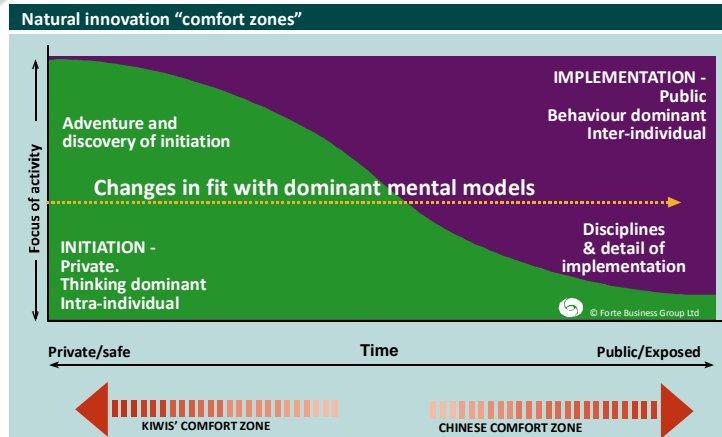


Moderators of *initiation & implementation*

When Cultural Dimension is LOW will favour	... is HIGH will favour
Individualism	IMPLEMENTATION	INITIATION
Power Distance Index	INITIATION	IMPLEMENTATION
Uncertainty Avoidance	INITIATION	IMPLEMENTATION
Masculinity	INITIATION	IMPLEMENTATION
Action Orientation	NEUTRAL	IMPLEMENTATION



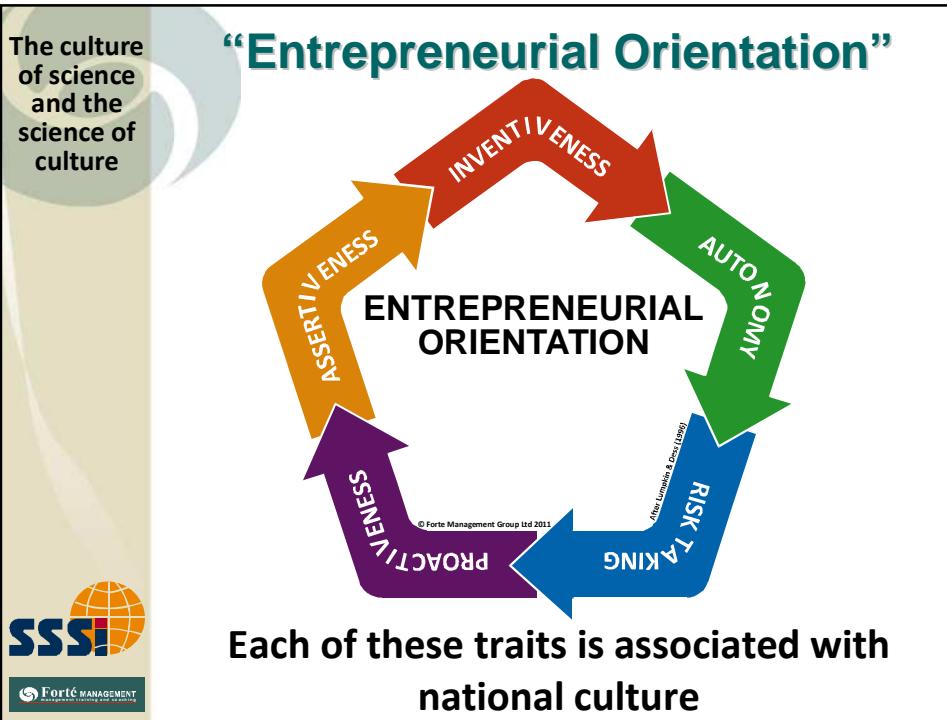
Natural "COMFORT ZONES"



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Entrepreneurship

- Converts inventions and discoveries into commercial & socially valuable and viable outcomes.
- Early stage entrepreneurship does not automatically convert into the latter stages.
- National culture and entrepreneurship correlations as well.



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Entrepreneurship

Consider New Zealand:

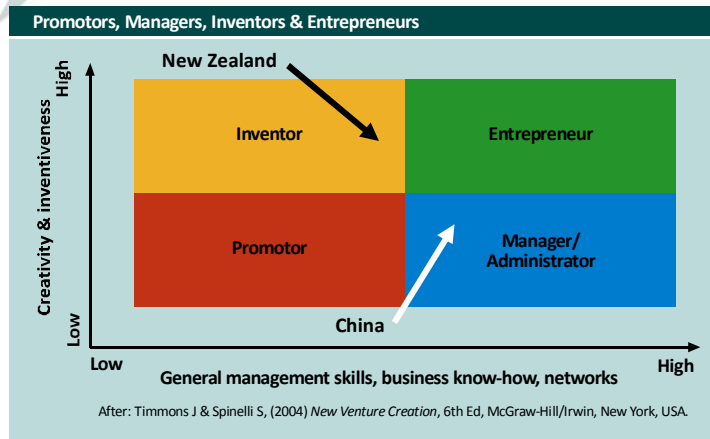
Inventiveness	High
Autonomy	High
Risk taking	Moderate
Proactiveness	High
Assertiveness	Very Low

Explains why can rank #2/36 for early stage entrepreneurship but 26/36 for high growth. (GEM Study)

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Entrepreneurship

Timmons & Spinelli (2004)



New Zealand & China are approaching “entrepreneurship” from different directions.

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Conclusions

To optimise innovation performance we must:

- Recognise the different stages of the innovation process.
- Understand the impact of the cognition and behaviour of individuals and groups and the role of their national culture.
- Design strategies & policies and manage the innovation process accordingly.

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