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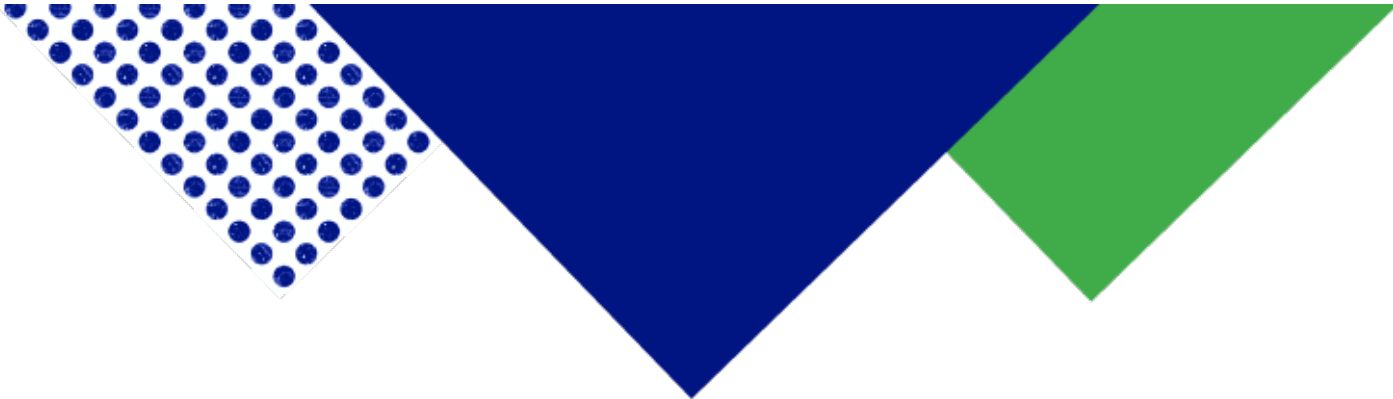
**How Managers of  
Mid-Market Firms can  
Harness the Power of their  
Thinking Styles:**

**Seeing the Forest and the Trees**



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# How Managers of Mid-Market Firms can Harness the Power of their Thinking Styles: Seeing the Forest and the Trees

For this research, we have studied an online sample of 194 managers who supervise at least four people.

## Introduction

This executive report summarises the outcome of an experimental study which forms the second phase of a major three year research project (2014-2017) examining the drivers of innovation in Australian mid market firms.

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## Report

Our programme of research consists of three studies. This article reports on the experimental study of Study Two. In Study One, we interviewed top managers from thirty-five Australian firms in 2015.

You can download our industry white paper of Study One [here](#).



One of the key findings was that human factors such as the top manager's mindset and skill, rather than Research and Development (R&D) investment or installation of top-notch technology, are crucial for the innovation in mid-sized firms. In these firms, by nature of their size, the top managers are involved in everything, and in many cases the initial founder of the firm is still highly involved.

Our Study One findings suggest that, the managers in these firms make crucial decisions:



- i) by coming up with innovative ideas themselves and then passing these ideas onto employees to implement,
- ii) to create an innovative culture where employees are constantly coming up with new ways of doing things,
- iii) by filtering ideas of employees to decide which ideas are good quality and also by making practical decisions of which ideas can be implemented within the budget, and
- iv) they also drive the innovativeness of the firm by making practical decisions on how best to implement the ideas.

## STUDY II

These findings of Study One confirm that the thinking or cognition of the manager is critical to the operations of the firm. Therefore, in Study Two, we studied the cognition of managers in the laboratory and considered potential implications for the mid-market. This was basic research which we felt was crucial to develop our understanding of how cognition underlies decision making that is relevant to mid-market leaders.

Cognition is a broad research area with a number of different avenues one can investigate. There is thinking ability, which is like intelligence, and presumably higher thinking ability in the top manager is good for the firm. Intelligence is however well explored and understood. A less explored area is the thinking style of the top manager. Thinking style differs from thinking ability because it is more like personality and is just the way a person differs from other people. Being high or low is not necessarily better or worse.



The thinking style we are particularly interested in is whether people have a local or global thinking style, because it has direct implications for managers' decision making. An individual with global thinking style focuses on the big picture whereas one with a local thinking style focuses on the details.

# ? The Leading Question

What kind of thinking styles help managers with their decision making? Some people are locally focused and some people are globally focused. It pays to use the right thinking style in the right situation.

### Findings

**Finding 1:** Global and local thinking styles are predictive of creativity and innovation.

**Finding 2:** People do not always choose the most appropriate thinking style.

**Finding 3:** People who use the wrong thinking style for the situation perform more poorly than those who use the more appropriate thinking style.

**Finding 4:** It is possible to learn how to switch between thinking styles through practice.

### Implications

**Implication 1:** Thinking style is important for fine-tuning employees' performance. When possible, give people tasks that suit their thinking style.

**Implication 2:** It is possible to change people's thinking style.

**Implication 3:** Mid-market managers can be trained to adopt different thinking styles to better suit the decision context and make better decisions.

## STUDY II

# “What kind of thinking styles help managers with their decision making?”

This has relevance to mid-market firms where top managers tend to be involved in all aspects of the running of the firm. These top managers need to see the big picture of the overall firm, have a vision for the future, and see how the details all fit together. However, mid-market top managers also need to be cognisant of the details because problems with details can also undo strategy and disrupt the smooth running of the firm.



Some research suggests that global and local thinking style are a general tendency, but also that it can be conditioned (or induced) temporarily. In our study, we wanted to examine both, because managers may have a general natural tendency to be more global or local, and it may be possible for them to be trained through repeated exposure to a particular type of global or local stimuli.

## ? Thinking Style

Cognition broadly refers to how people think, so thinking style is like people's thinking style. It refers to the processes by which individuals process and remember information. It is generally understood to be relatively consistent and enduring.

Thinking style differs from thinking ability which has a performance element and is measured through intelligence and aptitude tests. In thinking ability tests, higher scores are generally considered better, for example higher intelligence is generally considered better than lower intelligence, whereas different scores on thinking style are differences in processing style with every style having strengths and weaknesses. For example, a globally oriented thinking style tends to see the forest and a locally oriented thinking style tends to see the trees.

Thinking styles arise from particular brain regions and there is some evidence that they are hereditary. In this research, we ask the following questions:

- 1. What happens when a locally oriented person is directed to focus on the forest and what happens when a globally oriented person is directed to focus on the trees?*
- 2. Can we train people to make better decisions when working in global or local contexts?*

We then consider the management implications of this “blue skies” research.

## About the Research

For this research, we have studied an online sample of 194 managers who supervise at least four people.

We wanted to examine a thinking style called local/global thinking. A person with local thinking style is more oriented toward details. For example, if a local thinking person looks at a legal document they would focus on individual details such as the clauses and sentences. They might miss the big picture story of what the document is trying to achieve and therefore fail to protect the business.

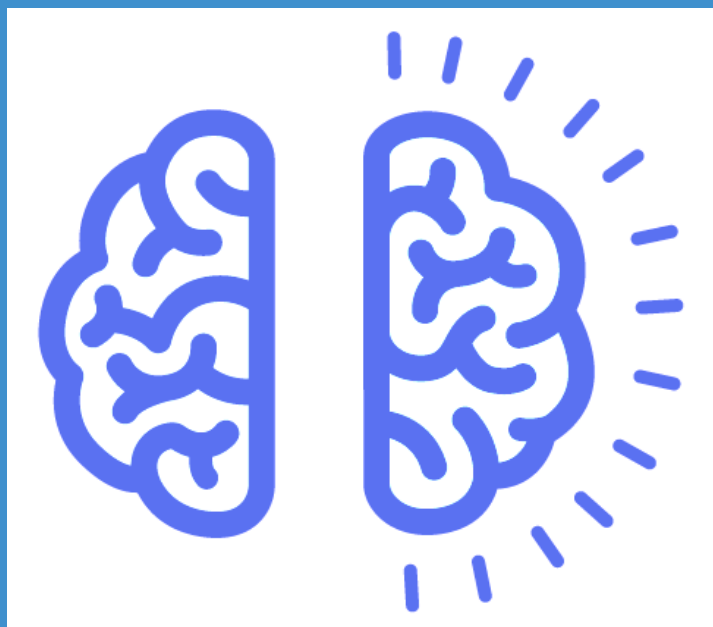
On the other hand, a person with global thinking style is more oriented toward the overall picture. For example, if a global thinking person looked at a legal document they would focus on the meaningfulness of the overall document. They might miss technical issues in the document that could lead to big problems in the future. One style is not better than the other: in some situations it is better to be global and in other situations it is better to be local. It may even be possible to come across situations where it is better to be both at the same time. The problem is that some people are predominantly global and some people are predominantly local.

Often people simply see the strengths of their thinking style and fail to appreciate the benefits of other ways of thinking.

We examined local/global thinking of the managers in two ways. We examined their general tendency through hemispheric preference (which side of the brain is their dominant side), because there is much evidence the left brain is associated with

the large letters and those participants in the local thinking style inducement condition were asked to respond to the small letters.

There were three creativity and innovativeness tasks, and participants were primed with 36 repetitions of the Navon Task before each of the tasks. The first creativity task, the Towers of Hanoi Task, is a measure of



a general tendency toward local thinking and the right brain is associated with a general tendency toward global thinking. We also designed an experiment that temporarily induced a particular thinking style. We did this using the Navon Task, which is a task of large letters made up of small letters. The participants for whom we wanted to induce global thinking style temporarily were asked to respond to

innovative thinking. The second, the Brick Divergent Thinking Task, is a measure of local creativity because it is specific to one detailed object. And the third and last creativity task, the Managerial Creativity Task, is a global measure of creativity because participants have to use global creativity that will improve the organisation as a whole.

## STUDY II

### Findings

#### 1 Global and local thinking styles are predictive of creativity and innovation

Managers are faced with a multitude of decisions that need to be made. Some are very broad and some are very specific. Our research found that global or local thinking styles are central to decision making about creativity and creativity is central to successful innovation.

#### 2 People do not always choose the most appropriate thinking style

Results showed that managers use a variety of global and local thinking styles and only some managers use the appropriate one. This finding shows that appropriate use of the optimal thinking style represents a little-known way of thinking that can improve decision making. While it might have been expected that people would use a local thinking style for a local problem solving and a global thinking style for a global problem solving this is not what was found. In reality, people approach problems from a variety of perspectives.

This counter-intuitive finding should be a warning sign that people are not always making the best use of their thinking styles when making decisions in particular situations.



#### 3 People who use the wrong thinking style for the situation perform more poorly than those who use the more appropriate thinking style

For local creativity problems, we found the best thinking style is to have a local orientation. Whilst this could reasonably have been expected we did not find that this held for global creativity problems. Here, we found that both a local and global thinking style are required for good quality global decision making. This suggests that global decisions are more complex than local decisions and require a mixture of different elements to assist with decision making.

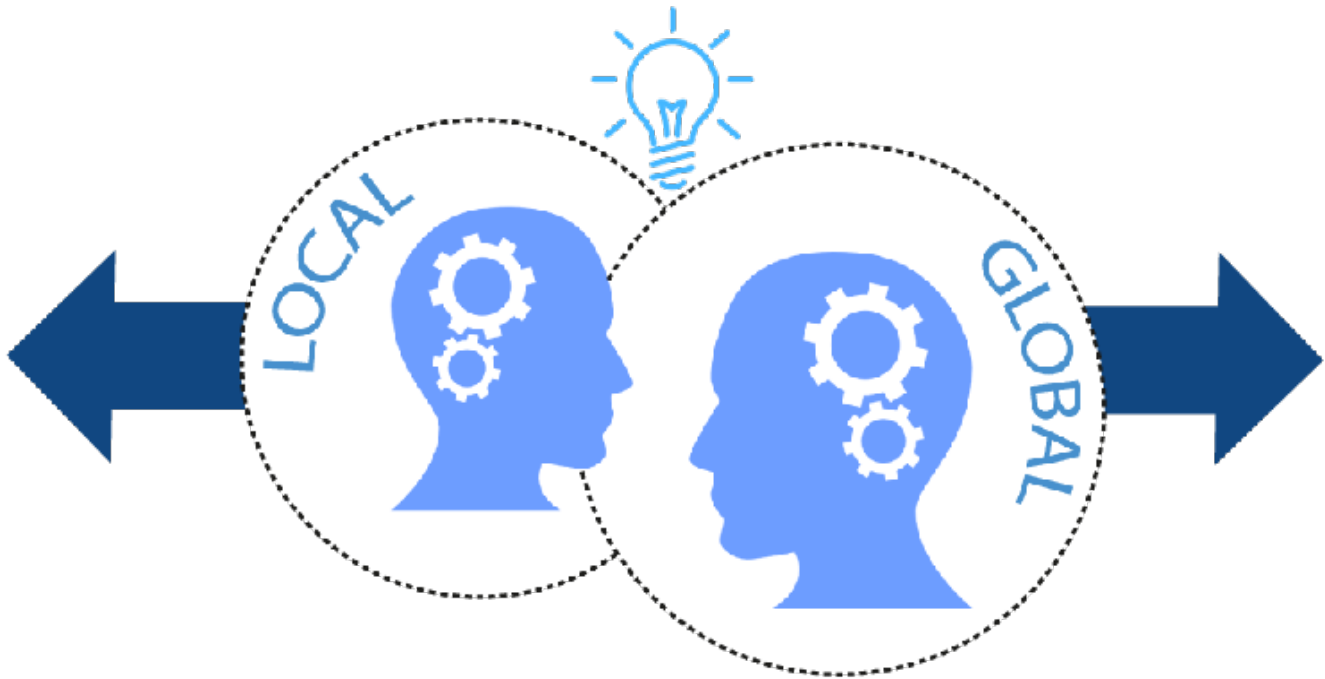
In a sense, the whole is made up of different parts, so the top manager will benefit from looking at both the details and the big picture, particularly in a mid-market firm where the top manager needs to keep an eye on everything. They need to see the minutiae and how all the details tie together to form a larger whole. In short, global problems require people to see the forest and the trees.

#### 4 It is possible to learn how to switch between thinking styles through practice

An important finding is that it is possible to change peoples' thinking styles so that they can become more local or global in their thinking. In this study, we conditioned specific local or global responses by instructing people to think locally or globally. This research suggests that thinking styles are trainable with likely increases in performance when trained appropriately.



## STUDY II



### Implications

#### 1 Thinking style is important for fine-tuning employees' performance

An implication of the study is that it may be good to give employees tasks that suit their thinking style. Thinking style is a variable where individuals differ. Some people have more of a local thinking style whereas other people have more of a global thinking style. It may be good to try and determine which staff members have more of a local thinking style and which have more of a global thinking style. Then, tasks and projects can be allocated that suit their thinking style. Also, hiring can potentially be conducted with thinking style in mind because the business for example may need people with more of a global thinking style. If hiring a new top manager, then the hiring committee can assess how much of a global thinking style the person has and whether the person is still able to sufficiently grasp the details. Businesses may not have thought much about global and local thinking to date but now might be the time to

start thinking along these lines. Better employee performance can lead to better organisational performance.

#### 2 It is possible to change people's thinking style

A second implication relates to the fact that we found that it is possible to temporarily induce or change people's thinking styles. This is important because it means that, while people have a general tendency toward a particular thinking style, thinking style is not set in stone. Rather it can be adjusted to suit the situation. This fits with theory that suggests that people have an innate predisposition in terms of their thinking style, but it can also be adapted based on requirements from the external environment. The external environment can of course include the business environment and what kinds of decisions are required. This suggests important applications of our work to help train people in business to make better decisions.



## STUDY II

3

Mid-market managers can be trained to adopt different thinking styles to better suit the decision context and make better decisions

Identifying that a local thinking style assists with local decision making is a useful outcome because it suggests that people with a local thinking style could be put onto projects that require local decision making, and also that potentially activities could be engaged in to assist with local decision making.

Moreover, in Study 1 that we previously conducted, one issue we found is that mid-market firms have limited resources, whether that is human resources (because they often cannot afford to pay staff as much as the larger firms) or budgetary resources. So, determining how to find local solutions is likely to be a low-cost way of innovating while staying on budget. Big global plans may not suit small mid-market budgets!

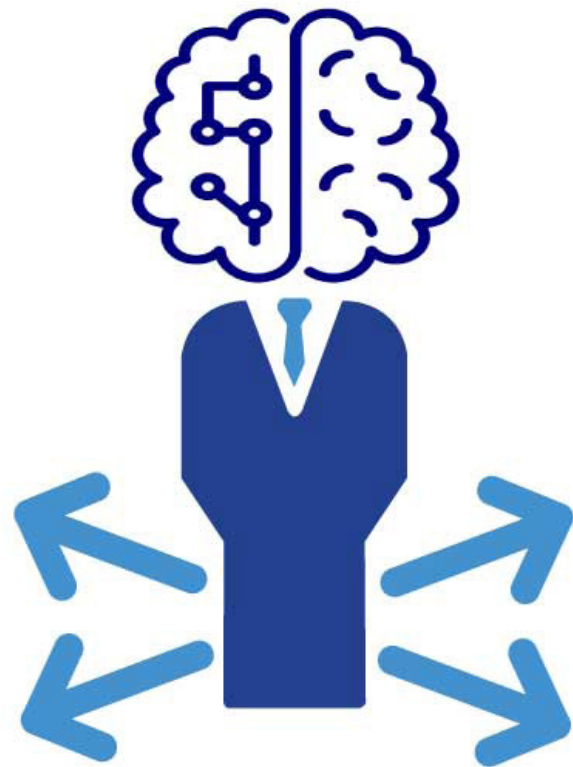
On the other hand, confining to local thinking can also be a mistake. Research shows that

# How Do You Process Info ?

## What do you see?

E  
E E  
E E  
E E E E  
E E E  
E E

## A big 'A' or small 'E's?



managers who innovate only in terms of incremental change can be missing the advantages of “big picture” innovation which is sometimes required to maintain competitive advantage. Interestingly, our research shows that people involved in such innovations need to focus on global and local details to perform well. Such results are in line with latest management thinking that strategic leaders interested in large scale innovation need to also focus on technical and managerial details in order to be successful (Goleman, 2013).

Further research is needed on what specific practical interventions would work and how they would improve decision making. Our study shows the importance of global and local decision making in creativity which is an essential first step in the innovation process. Managers might not have thought much about their thinking styles, but they should think about them more if they want to ensure they focus appropriately. It will be a mistake to focus on the forest when the trees are important or vice versa.

**One style is not better than the other: in some situations it is better to be global and in other situations it is better to be local.**

## Further Reading

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## Project Details

This executive report summarises the outcome of an experimental study which forms the second phase of a major three year research project (2014-2017) examining the drivers of innovation in Australian mid market firms. The first phase was an interview study and the third phase will be a two wave survey study of firm leaders. The research is supported by an Australian Government (Australian Research Council) grant (LP140100838). We wish to thank our linkage partner Pitcher Partners who are thought leaders of mid-market needs, wants and future vision. The researchers are based at the School of Management, UNSW Sydney.

## Looking Forward: Study 3

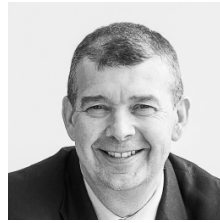
In Study Three, we also plan to examine global and local cognition as Study One found the top manager is highly important for mid-market firms and Study Two found that global and local cognition are important for making particular types of decisions. Study Three is a survey study with two time-points. We will examine how cognition influences innovation, and how various other factors mediate and moderate the relationship. Study Three will provide more applied evidence to support these preliminary findings from Study Two.

# The Research Team



**Lead Researcher**  
**Steven Lui**

Associate Professor Steven Lui's research focuses on interfirm cooperation, trust, and innovation. His research examines how cooperation leads to innovation and when trust becomes a liability in cooperation.



**Chris Jackson**

Professor Chris Jackson's research focuses on cognition, change, innovation, and performance. Chris led this particular project within this programme of research.



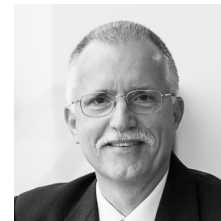
**Salih Zeki Ozdemir**

Dr Salih Zeki Ozdemir investigates how the overall structure of social networks and organisations' positions within these networks affect the strategic decisions they undertake and the evolution of these social networks based on performed actions.



**Benjamin Walker**

Dr Benjamin Walker (Research Fellow) investigates personality and cognition and how they predict outcomes such as creativity and innovation. Ben and Chris have written much of this report with great support from the other team members.



**George Shinkle**

Associate Professor George Shinkle investigates strategic goal setting, strategic agility, innovation, strategy formulation, and strategy implementation, particularly in turbulent environments. His research targets the nexus between strategic management and organisation theory.

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