White paper

What it means to be an **ambidextrous** innovation leader

For sustainable development in a rapidly changing world

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Key research insights

The key research insights covered in this white paper include:

About the research program

A key aim of this research was to identify how to assist leaders with building a sustainable innovation culture.

The studies

The research phases included:

66 innovation leader interviews:	semi-structured interviews with global innovation leaders to identify paradoxical innovation traits
2 year-long case studies:	immersion in innovative organisations to understand the dynamics of how innovation paradoxes are navigated by leaders
2 measures developed:	designed to assist with identifying ambidextrous innovation leadership strengths & challenges
1071 survey responses:	to check validity of first measure and identify ambidexterity in the general population
118 innovation leaders focus:	to identify the specific ambidextrous traits of innovation leaders

The findings

The initial finding of the research program supported the idea that ‘ambidexterity’ is important for innovation. It was identified that being able to balance key innovation paradoxes successfully assists with leadership ambidexterity, and that identifying unique innovation orientations can provide valuable feedback for leading innovation. This approach enables greater agility for sustainability in a rapidly changing world.

Through the study the dimensions of innovation ambidexterity leadership were identified and designed into an ambidexterity measure, which was tested extensively and validated, providing a useful tool for innovation management.

Details

Innovation is essential for survival

Innovation is required more than ever in order to survive.

Rapid change and complex contemporary environments require quick adaptive thinking. Yet ironically these complex environments can also lead to greater ambiguity and associated tensions, which make it difficult to innovate effectively.

It has become clear that leaders of the future will be required to develop *ambidextrous* responses to deal with complexity and rapid change at all levels.[i] That is, they will need to know how to recognise and effectively navigate competing demands to stay ahead.

Despite the critical importance of managing these competing demands for better innovation and growth,[ii] leaders are often ill-prepared for identifying and dealing with them.[iii]

Innovation requires Paradoxical Innovation Orientations (PIOs)

Leaders are better resourced to respond to complex issues once the specific underlying challenges have been identified and addressed.[iv] Yet not many are able to identify the deeper roots of dissention because few can see the full picture.

Although innovation is typically seen as taking risks, pushing the boundaries and generating breakthrough new ideas, there is actually also an important flipside to this idea of innovation that is equally important. Innovation is also about having the focus to build on existing ideas and systems for incremental sustainable growth. Research has revealed that there are two predominant polar orientations related to innovation, which we have identified in our research as Paradoxical Innovation Orientations (PIOs), and trying to balance these polar positions can readily lead to tension.

Organizations and their leaders will certainly need to explore new opportunities and rapidly develop original new products and services in order to remain competitive (an innovation orientation referred to as ‘Exploration’), yet at the same time they will need to utilise and gradually develop existing products and ensure sustainable systems and practices through incremental change (an innovation orientation referred to here as ‘Preservation’).[v]

As an example, rapid globalisation and technological development has meant leaders need to continue to push the boundaries to avoid irrelevance or obsolescence due to disruptive innovation, yet they also need to be able to continue to ensure the organisation can perform reliably and sustainably.[vi]

Though these paradoxical elements are contradictory they are also complementary. Like the magnetic fields around the earth, which demonstrate how opposing forces can work in alignment (north and south poles), there needs to be synergy between the Exploration and Preservation orientations to fuel sustainable innovation and growth.

While much of the research to date addresses the macro level of ambidexterity in organizations, this paper focuses on the micro level – on unravelling the ambidextrous innovation leader’s DNA.

Innovation leaders are ambidextrous

Innovation leaders learn how to constantly balance the volatile dynamic between both elements simultaneously.

A typical response to paradoxical tensions such as these is the practice of 'splitting',[vii] which can include creating dual structures at the organizational level.[viii] For innovation leaders this practice involves a focus on *either* Exploration *or* Preservation as demonstrated by an operational focus on development *or* efficiency in organizations.[ix]

Splitting may help to minimise conflict by preventing interaction between the two orientations,[x] but a more powerful process of *dynamic equilibrium* can be reached through s*ynthesis*.[xi]

An application of the paradox theory involves identifying tensions that create polarisation, recognising potential dynamics that could be reinforcing these tensions, and finding solutions that might help to deal with the tensions simultaneously.[xii]

The Innovative Change Leader Inventory (iCLi) measures ambidexterity

Innovation leaders can identify how to balance Exploration and Preservation requirements by focusing on the critical dimensions of these two perspectives.

This research focused on the identification and investigation of underlying paradoxical tensions that can characterise innovation and their dimensions to help address the need for more leadership awareness in this area.

As a part of the research, dimensions of the Paradoxical Innovation Orientations (PIOs) related to Exploration and Preservation were identified.

A key aim of the research was to build an instrument that measures the dimensions of Paradoxical Innovation Orientations (PIOs) as identified in qualitative interviews. An analysis of 66 interviews with innovation leaders from a range of different types of organizations revealed four paradox pairings comprising eight dimensions nested within the Exploration / Preservation orientations.

The predominant four paradox pairings identified from the interviews were: (1) Freedom & Control; (2) Openness & Focus; (3) Collaboration & Independence; and (4) Flexibility & Stability. The dimensions that aligned with Exploration were Freedom, Openness, Collaboration and Flexibility. The dimensions that aligned with Preservation were Control, Focus, Independence and Stability.

The interviews provided insights into the cognitive, behavioural and affective structure of innovation orientations. It is anticipated that these insights may help to enable a greater awareness of leadership actions related to innovation and their impact.

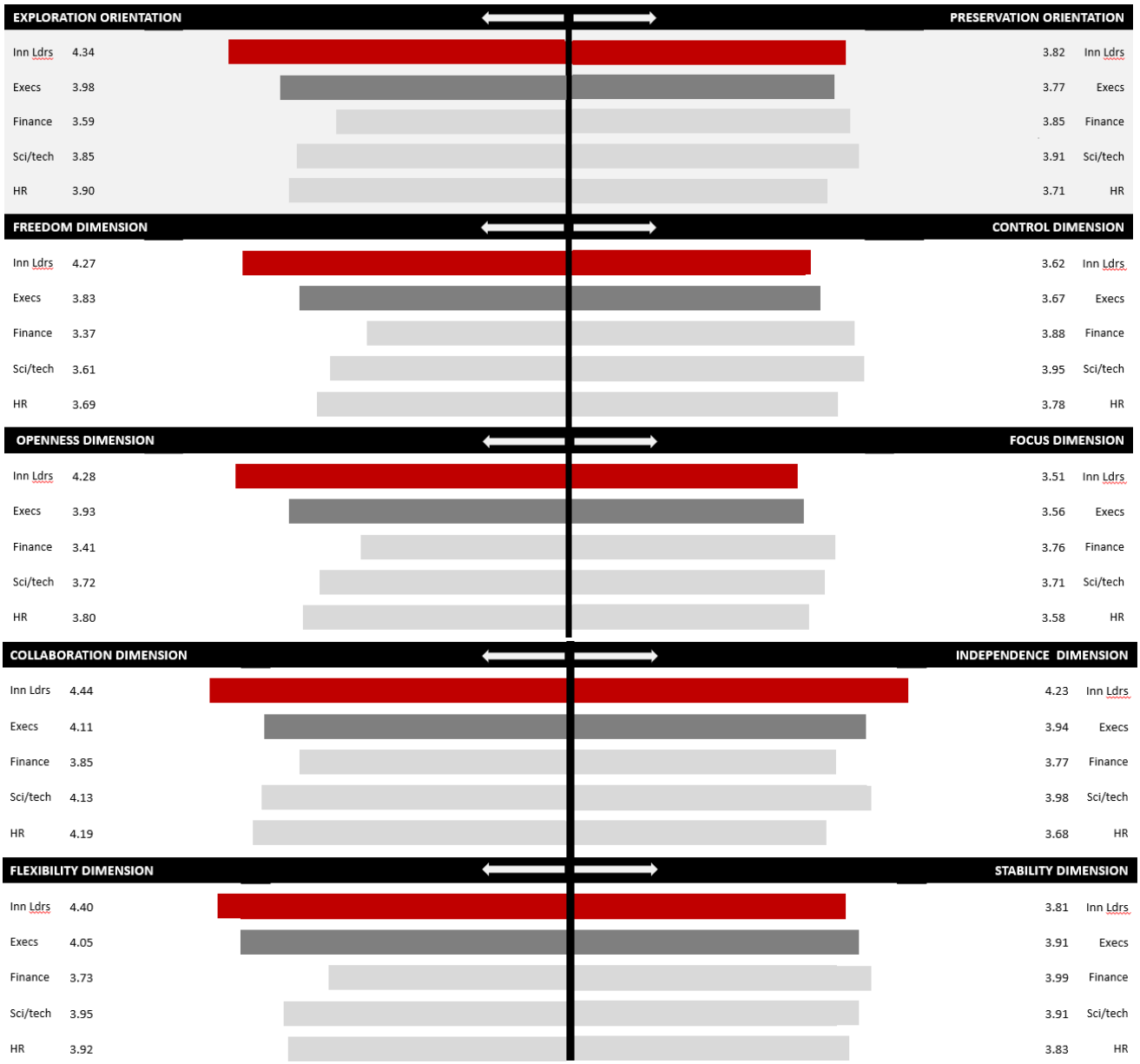
One intended application of this instrument is to provide a measure for reflection and a model for informed action that supports innovation leadership and management in complex change contexts.

Ambidextrous innovation leaders have a unique profile

The table below shows the dimensional profile of some different occupational groupings on each of the dimensions and on the PIOs as a whole. The results revealed that Innovation Leaders have a unique profile (as represented by the red bars in the graph below).

Innovation Leaders show a strong Exploration orientation (they reported higher means on Exploration overall as shown in the top section of the graph), along with a strong orientation to both the Independence and Collaboration orientations. They had a higher means on this polar dimension than all other groups studied.

The strong Exploration orientation indicates that there is a foundation for generating novel creative ideas in collaboration with others, but the strong Independent streak would also enable the drive to push innovation projects through to implementation. This result supports the assertion that leading innovation requires greater ambidexterity in balancing the tension between the PIOs overall, and between Independence & Collaboration in particular.[xiii]



Models for building ambidextrous competence:

The study revealed how ambidexterity can be developed.

The results of the statistical analysis were checked against the interview data, and they supported the finding that the PIOs are both multi-dimensional and interrelated. This is in line with the recent growing body of research on the multifaceted and often-messy context for contemporary organisation leadership.[xiv]

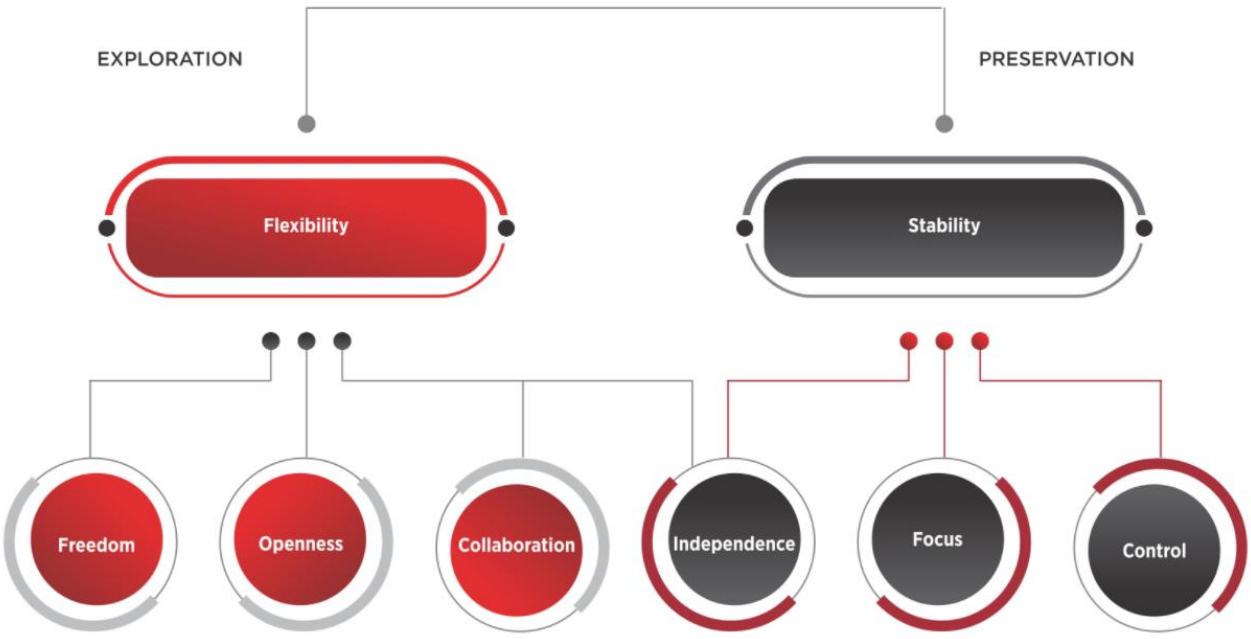
1. The Higher Order Innovation Model

An interesting outcome was that Independence was found to function as a dimension of both the Preservation and Exploration orientations in the context of the overall innovation paradox (see the simplified Higher Order Innovation Model diagram below).

Previous studies have found that Exploration is important in innovation contexts, but a unique contribution of this research is that a dimension of the Preservation orientation also contributes to innovation. This demonstrates the importance of the often-unexplored flipside to innovation.

These results reveal how it is possible to develop both Exploration and Preservation orientations for ambidextrous leadership through focusing on developing both Independence and Collaboration, as well as by ensuring there is a focus on the development of the other dimensions of Exploration.

THE HIGHER ORDER INNOVATION MODEL



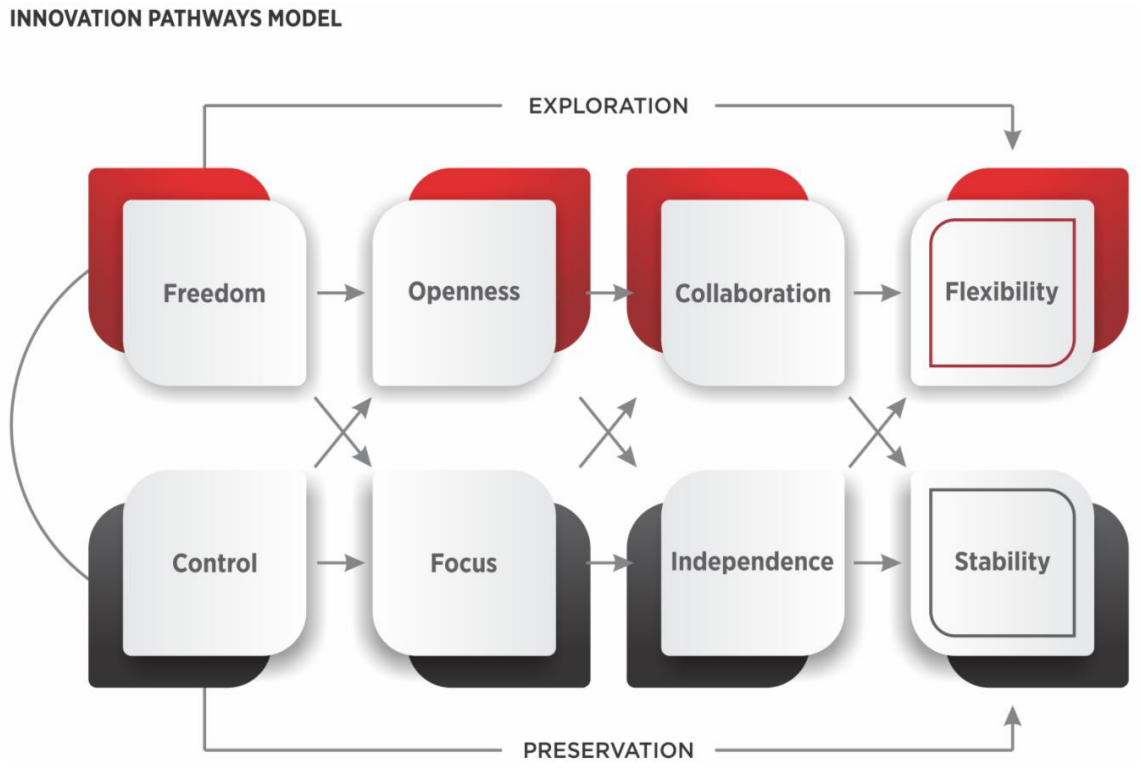
2. The Innovation Pathways Model

The study also demonstrated the importance of developing all dimensions of Exploration and Preservation simultaneously by revealing how they may be interrelated.

The dimensions within each orientation (Exploration and Preservation) were significantly positively correlated with each other, which indicates that the dimensions of each orientation are a good fit. This finding demonstrates that these dimensions appropriately represent the PIOs, and thus that they are appropriate measures of the PIOs.

A unique additional finding was that there were also statistically significant relationships between the dimensions of *both* polar orientations, and that these relationships impacted each other. The Innovation Pathways Model (IPM) as shown below supports a model where the dimensions of the PIOs impact and build on each other. Only some of the interrelationships were tested, so it is anticipated that there may be many more complex inter-relationships that could be studied in further research.

The causal pathway that emerged indicates that a foundation of Freedom can lead to Openness and Collaboration, which can finally result in Flexibility. Flexibility has been found to be the most critical requirement for innovation.[xv] Similarly, for the Preservation orientation, there was the indication that Control can lead to Focus and Independence, which can then result in Stability, which has also been found to be the strongest dimension of the Preservation orientation.



Overall, the research provided unique new insights into the complex paradoxical nature of innovation. It also helped to reveal some of the unique interrelated dimensions embedded in ambidextrous innovation and change management.

Applications for leadership & culture development

IMPACT ACTIONS

The PIO principles identified through this research can be applied through practical action areas such as:

Profiling
Individual profiling of ambidexterity can be conducted using the iCLi (Innovative Change Leader Inventory) measure, and team / organization profiling can also be conducted using the iCi (Innovation Culture Index) to identify individual / team / organization strengths and fit. A 360-degree version of the iCLi version is also available for comprehensive feedback. Useful for feedback, coaching, recruitment, individual and team management etc: https://the-innovation-race.com/icli-survey/

Awareness Education
Education sessions, workshops and/or motivational presentations help to introduce the concepts and build awareness of the need for ambidextrous approaches to change and innovation leadership at all levels. These can assist individuals and teams with managing uncertainty and change for sustainable innovative development through a business simulation approach and / or by providing practical strategies and tools.

Strategic Planning Models
The Higher Order Innovation (HOI) and Innovation Pathways (IPM) Models developed from the research provide valuable frameworks for development. It is possible to build innovation leadership and a sustainable innovation culture by following the recommended development approach and using the summary checklists for guidance.

Navigation Tools
The Polar Positioning (PoP) tool developed from this research enables discussion of mapping current state, ideal future state and action steps needed to reach the desired state. This can be done with individuals, teams and – and is especially effective with senior executive teams. The extended workshop session can include case studies and interactive exercises designed to provide practical navigation insights and strategies

Individual & Team Development
The insights gained from the tools and workshops can assist with identifying areas for individual development, as well as how to put together and develop innovative teams for projects, for more effective business units, etc

Measurement & Evaluation
Through this process it is possible to assess areas of need, target appropriate actions, and measure progress. The instruments provide useful feedback and assessment tools for the process.

INTEGRATED IMPLEMENTATION STRATEGIES

Extended organization intervention programs have demonstrated how these actions can be integrated for a comprehensive culture development, change management and / or innovation development journey.

Integrated implementation strategies can include:

STAGE 1: **Diagnosis of current state and needs**
Can include profile assessments, interviews, focus groups, observations, surveys etc

STAGE 2: **Co-design of integrated development program**
Feedback of initial research results to key leaders, and co-design of integrated program in consultation with relevant stakeholders – eg can use design thinking model to identify target areas

STAGE 3: **Delivery of integrated development program**
Focus can be on awareness education (workshops, seminars, motivational presentations), coaching, strategic consulting, analytical redesign plans etc

STAGE 4: **Evaluation of development program**
Can include follow up profile assessments, interviews, focus groups, observations, surveys etc to measure shifts and identify recommendations – delivered as report

References

This paper is a summarized and adapted version of material from the following full academic papers:

Grant, G. & Dowson, M. (2018). Paradoxical Innovation Orientations: Developing, validating and applying a multidimensional measure of innovation leadership and management *(Forthcoming)*

Grant G. (2018). From detecting dichotomies to navigating dipoles: Developing a theoretical and practical model for illustrating how top management teams experience the competing demands of innovation, *34th European Group for Organizational Studies (EGOS) Colloquium*, Tannin, Estonia, 7th July 2018 *(Forthcoming)*

Grant G., Knight E.R.W. and Cuganesan S. (2017). Vision, mission, passion: How top management teams experience paradoxical demands in strategising, *33rd European Group for Organizational Studies (EGOS) Colloquium*, Copenhagen, Denmark, 8th July 2017 (Also presented at PROS, Greece, June 2917)

Case studies, checklists and practical strategies can also be found in the following resource book:

Grant, A. & Grant, G. (2016). *The Innovation Race: How to change a culture to change the game.* Brisbane: John Wiley & Sons.

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(Note that the innovation paradox referred to in the academic literature is 'Exploration-Exploitation', which relates to product development but is not as appropriate for describing innovation culture – hence the shift by this author to 'Exploration-Preservation')

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FOR MORE INFORMATION

On how to develop ambidextrous leaders & build an ambidextrous culture:

Contact Gaia Grant: gai.grant@sydney.edu.au / ggrant@tirian.com

Contact Tirian: info@tirian.com

Related workshops: www.the-innovation-race.com

Try the iCLi profile: 'Are you an innovative change leader?':

https://the-innovation-race.com/icli-survey/

Read the book: The Innovation Race: *How to change a culture to change the game*