NAPIER UNIVERSITY EDINBURGH

Assessment of Innovation Styles to Create Innovation Driven Enterprises

Summary Report from a binary cross sector Innovation Management Audit in cooperation with the MBPW

> **MBPW** Münchener Business Plan Wettbewerb



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Executive Summary

For the first time the Münchener Business Plan Wettbewerb (MBPW) has accomplished a cross-sector investigation of changes in innovation styles within the network of the MBPW. The recently completed study has been carried out together with Napier University Edinburgh. The findings of the comprehensive study aimed to explore changes in innovation styles as business grow in revenue, corporate size and functional complexity.

A total of 216 CEO/Managing Directors from all major industries responded to the survey. We thank them for their participation.

This executive summary highlights some of the survey's high-level findings. The body of the report explores the actual change of innovation style in the transformation from a start-up to a more mature phase of business in greater detail. Some of the major drivers for innovation and success are discussed. This offers a framework for entrepreneurs and enterpriser to identify crucial factors and capability for innovativeness. For additional information, please see the lists of contacts at the end of the report. Some of the report's key findings include the following:

- Evidence of the existence of a strong relation between innovation and success.
- The total innovativeness of start-up companies vs. mature companies.
- The change of innovation style in eleven key areas for different performance levels, including a summary of direction of change. It reveals that for example competitor orientation is a trigger for innovation in a start-up phase but has no effects on innovation and success for more mature companies.
- Ranking of the key rating factors for innovation and success. The top four drivers for sustainable growth over the entire business cycle are Knowledge, Acquiring Knowledge, Inter-Organizational Networks, and Resources for Innovations.

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Michael Lewrick Project Leader Napier University Edinburgh

Importance of Innovation

Managing and exploiting to the best effect all kinds of innovation represents a major challenge to businesses due to quickening pace of change and increased competitiveness as more countries industrialize. Young and innovative companies are the hopes of economic and technology policy. The Munich cluster with its incumbent business plan competition fosters entrepreneurship and innovative companies. The target in entrepreneurship policy is to increase start-up rates and to develop and support companies with sustainable growth. Innovative and generally successful companies are recognized as the major underlying drivers of long-run economic growth. Aggregated growth is largely driven by dynamic changes in individual businesses. A major change is seen in the transformation of companies from a start-up phase to a more mature phase of business. Different practices, capabilities and factors affect innovation and success over the firm's life-cycle. It was one of the objectives to explore practices of innovative and successful companies to learn from the best, explore the direction of change, and to show the inflated expectations of start-up companies.

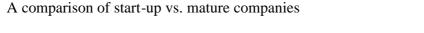
The outcomes support decision making with regard to strategic direction and consideration of the appropriate capabilities, and depict the dynamics of triggers, supporters and drivers for radical and incremental innovations.

Total Innovativeness

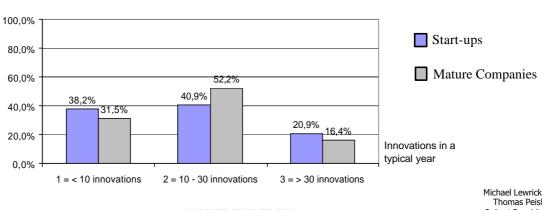
In the context of this study innovation has three levels of novelty and a clear definition what has changed (typologies of of innovation). Incremental innovations are the improvement/ expansion of existing products, technical services. processes. or administrative conditions. It does not cause a significant departure from status-quo. In contrast, radical innovations in products, services, processes, etc. are breakthroughs/ fundamental changes of a product, service of process feature. Overall innovativeness is the total of all innovations put into practice, radical and incremental in all typologies. The study revealed that start-up companies tend to come up with more radical innovations considering all typologies, while mature companies tend to realize more incremental innovations. Exhibit 1 depicts the overall summary of total innovativeness. The majority of start-up and mature companies realize between 10-30 innovations in all typologies.



EXHIBIT 1



The amount of total innovativeness in three categories for start-up and mature companies



Comparison of Total Innovativeness

Innovation & Change

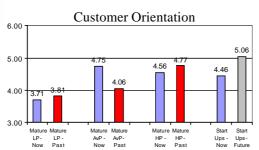
The summary report from the cross-sector IMA in cooperation with the MBPW provides the overall direction of change in eleven key areas. Exhibit 2 - Exhibit 4 outline the changes in innovation styles for *low*, *average* and *high* performing companies, comparing the current influencing practices to innovation with the past, while for start-up companies a comparison of the current status to future expectations is explored. Performance levels are characterized by company growth and sales increase.

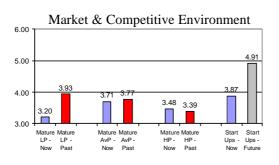
Revealed in the summary report are a number of new insights on the changes in innovation styles in distinct performance levels. The overall message is that companies have to adapt in the transformation process from a start-up to a more mature phase of business. Sustaining business growth through innovation is triggered, supported or driven by key capabilities. First, a snapshot of changes in innovation styles in conjunction with customer orientation, competitor orientation, market & competitor environment and diversification & learning are depicted in Exhibit - 2. A strong customer orientation is essential for sustainable growth and innovativeness. A decrease in competitor orientation has no negative effects on innovation. Whereby disregarding the market and competitive environment has impacts on the performance as depict for low performing companies. Essential for growth is the capability of diversification & learning. Start-up companies tend to have extremely high expectations about how they will use diversification and learning to foster growth and innovations. Exhibit - 3 to Exhibit - 4 provide the changes for the remaining 7 key areas.

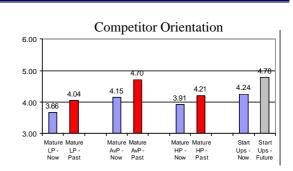


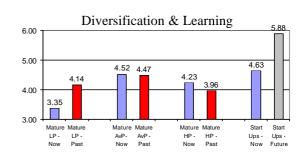
EXHIBIT 2 Changes in Innovation Styles I

The change of innovation styles over the time perpective for different performance levels









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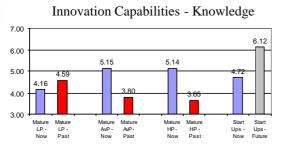
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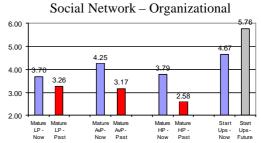


EXHIBIT 3 Changes in Innovation Styles II

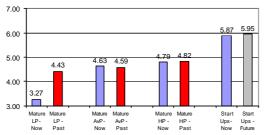


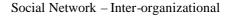
The change of innovation styles over the time perpective for different performance levels

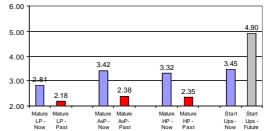




Innovation Capabilities - Management







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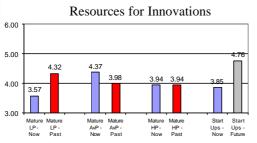
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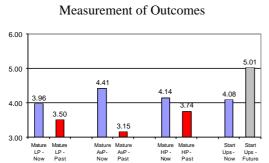
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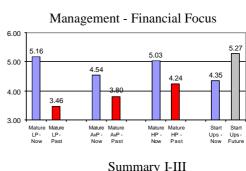


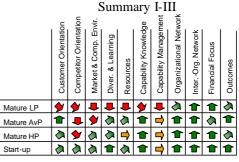
EXHIBIT 4 Changes in Innovation Styles III

The change of innovation styles over the time perpective for different performance levels









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NAPIER UNIVERSITY EDINBURGH Michael Lewrick Thomas Peisl Robert Raeside Maktoba Omar The summary I-III indicates the direction of change and the degree of change. For mature companies the summary shows the comparison between the past and now and for mature companies it compares the now to the expectations of start-ups from their current point of view. Arrows pointing horizontally indicate no change over the time perspective.

Ranking of the Rating

The ranking of the rating provides a summary of the important factors for innovation and success. The summary depict in Exhibit 5 derivates from an in-depth exploration of triggers, supporters and drivers for innovation and success. The two most important factors for innovativeness are knowledge and the capability to acquire knowledge. Tapping in into the extensive pool of knowledge becomes crucial for success. The way a company gathers shares and exploits knowledge has a huge impact on innovativeness. Also the inter-organizational network is of paramount importance to enable innovation success, because it provides the company access to knowledge and information. The challenge in innovation-minded organizations is to shift from mere communication to coordination and from this coordination to authentic collaboration. organizational Another essential driver for success and innovativeness are resources for innovation. Resources are crucial on two dimensions: First to reduce the risk associated to innovation implementation and to manage the cost of innovations as well the possibility of failure. Secondly resources are crucial for time to market, because they enable the allocation of resources in a more flexible and target oriented manner. Another significant driver for innovativeness and success is customer intelligence. The process oriented and structured collection of information about current and potential customers enables companies to gain new ideas, and improve existing products, services and solutions. Next, sustained learning is crucial to stimulate innovativeness and is essential to create a greater knowledge base. The non financial

measurements are important because in the first place innovations require resources and cost. Innovations enable companies to gain advantages on their competitors which are important for sustainable growth. Market performance and employee retention are essential, because successful innovations put companies in the light of a high performing company – a factor which is essential to bind high potential employees to a company.

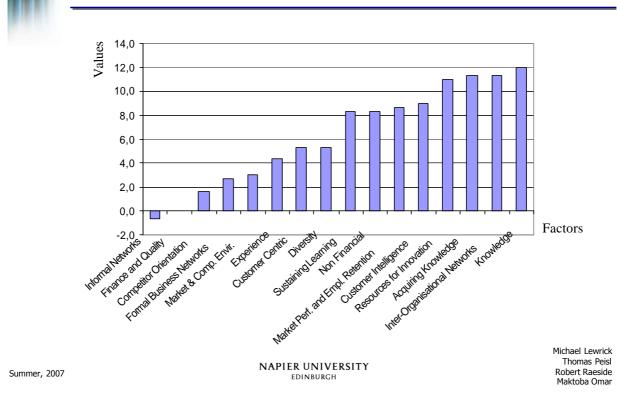
Also vital for innovativeness are the factors: diversity, experience, market & competitive environment, and formal business networks. Diversity creates a knowledge base within the company and promotes the diffusion of diverse ideas. The factor experience equips managers with a diverse set of ideas, methods and learning from failure and success to carry into their companies. The market & competitive environment influences the behaviour of companies regarding innovation, for example: uncertainty in the market is a stimulus for companies to start innovation initiatives with the aim of protecting them against uncertainty. Formal business networks are an important resource in order to drive innovativeness. Less crucial are the factors related to competitor orientation (pressure in the environment forces companies to search for new method, superior alternatives and/or new business lines to generate cash flow) and & quality. Strongly negative finance correlated are informal networks (e.g. golf course effect) with regard to innovativeness. This might be caused by difficulties in managing the informal social contacts best to leverage relevant external ideas and expertise.

"The top four factors for innovation and sustainable growth over the entire business cycle are Knowledge, Acquiring Knowledge, Inter-Organizational Networks, and

Resources for Innovations".

EXHIBIT 5 Rankings of the Ratings





The ranking of the ratings provide a short list of important factors for innovation and success

The rankings of the ratings are excellent indicators for creating innovation initiatives within start-ups and mature companies. It offers a framework for entrepreneurs and enterprisers to identify crucial factors and capability for innovativeness. The ranked factors show the complexity of influencing factors. Innovation goes well beyond a stringent product development process. It is the management of multiple interfaces, the capability to adapt the organisation, and subject to change in many key areas as illustrated in Exhibit 2-4. The study has been pioneering in undertaking an extensive investigation of the transformation from a start-up to a more mature company, however

it must be said that all companies (start-up and mature) operate in a complex system where success depends on many factors, and even the best company has a chance to fail because it seems true that: *"Luck is what happens when preparation meets opportunity"* – but what helps the best preparation when opportunity will not come?

"Innovation is like playing chess – you need a set of skills, like the capability to calculate urge for competition, knowledge, a board to give it a try, hard work, fantasy, etc."

Summary

The findings from the assessment of innovation styles revealed new insights about the transformation process from a start-up company to a more mature phase of business. As businesses grow various capabilities, skills and factors function as triggers, supporters or drivers for innovation and success. Innovation and success rests on many pillars, reaching from active knowledge seeking to sustained learning. However, the outcomes of the actual change in innovation styles indicate that these capabilities need continuous attention and adoption. In addition, some drivers for innovation lead mainly to incremental innovations; others are more powerful to realize radical innovations. For example, diversity has a huge impact on radical innovations, but is less influential on incremental innovations. Customer intelligence in contrast is crucial for incremental innovations but lacks on the impact to put radical innovations into practice. The outcomes and underlying patterns support strategic decision making. The pattern is a good starting point to implement some appropriate trigger, supporter or driver for innovation and success. The captured changes in innovation styles show the dynamics of innovation and the necessity to adapt the strategy of the company to this pattern in order to reap the benefits of innovativeness. This requires a culture which is open for change for new processes and different behaviours. Resistance to change becomes an obstructive factor which leads to a loss of competitive advantage. Especially as companies grow in revenue, company size and functional complexity, they become more bureaucratic, and the focus on the change process might impact the power structure of managers up to the top of the organisation. This might lead to resistance to change to avoid the loss of power and status, therefore there needs to be full commitment from everyone in the organisation, or the change process can not be successfully implemented. Further, the findings provide fundamental "ingredients" to build more sophisticated and holistic innovation models/frameworks. A departure from specialized frameworks around certain elements or features to a more open and wider framework is already seen in contemporary innovation management. In conclusion, the findings of the research on innovation styles build not only on the current empirical and practical knowledge on innovation management, but provide fresh insights that might be the starting point of a fundamental change in assumptions regarding the role of innovations in the performance of start-ups and mature companies. There is a need for a departure from a rigid contemplation towards a more dynamic perception of innovations.

Survey Methodology

The survey on the platform of the MBPW utilized two Innovation Management Audits (IMA start-up and IMA mature) which have been tested intensively in a pilot. Both IMAs have been translated into German and transferred into an html page with a unique access code for every participant to prevent multiple submissions. The programming proved to be supported by multiple platforms and browsers. The IMA was presented in logical way indicating the current status of processing the questionnaire. Survey method used seven Likert scale and collected both quantified selection option answers and narrative-type questions. If applicable, each bloc of questions stated exact definitions to prevent misunderstanding and confusion about the context. The response rate is 216/530. Participation was voluntary and anonymous.

	Start-up Companies	Mature Companies
Company Data - Sector	Percent	Percent
Health Care, Medical Industry	7.3	15.5
Biotech, Pharmaceutical Industry	7.3	5.2
IT, Software, Computer	10.9	12.9
Financial Services	9.1	4.3
Automotive Industry	5.5	5.2
Consumer Goods Industry	16.4	6.0
Service Industry	12.7	25.0
Leisure, Lifestyle, Entertainment Industry	10.9	9.5
Water, Wind, Energy Industry	10.9	5.2
Others	9.1	11.2
Total	100.0	100.0

Responses were as follows:

	Start-up Companies	Mature Companies
Company Data - Position	Percent	Percent
General Manager/CEO	78.2	59.5
Manager/Employee	5.5	24.1
Co-owner	12.7	14.7
Others	3.6	1.7
Total	100.0	100.0

For more Information

This study is part of an extensive work and research on changes in innovation styles. For more information on this survey or boarder thinking on innovation, please contact any of the following experts in the arena of innovation management:





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