Futures Thinking: Unlocked Possibilities for Business Model Innovation in VUCA World

Heidi Vähänikkilä[1] and Miia-Maija Vakkuri[2]
[1]Estonian Business School, Tallin, Estonia
[2]Laurea University of Applied Sciences, Espoo, Finland

heidi.vahanikkila@ebs.ee
miia.vakkuri@laurea.fi

Abstract: The Futures are elusive and intangible. This constrains companies' capabilities to successfully plan and implement Future proof business models. In the process of making future projections, organizations often adopt forecasting and decision-making merely based on historical performance data or short-sighted future outlooks. Previous research on business model innovation has created a wide understanding of this complicated topic from different viewpoints, yet there is still room for academic discussion on the possibilities in combining futures thinking and corporate foresight within these innovation processes. Using qualitative research design, with 24 interviews and co-creational Futures workshop with 15 participants, this study examines how Hospitality Field companies are using Futures Thinking in their Business Model Innovation activities. Central research question in this study is: How Futures Thinking can support Hospitality Field companies in designing future proof Business Models? Practitioners in managerial positions encounter numerous challenges in decision-making in VUCA environment. Findings indicate two main barriers to adaptation of Futures Thinking. A primary barrier is lack of general understanding of this topic and its possibilities. Furthermore, the financial resources needed to support the costs associated with Futures Thinking platforms, materials, and professional orchestration and facilitation remain undefined. Based on the findings, a Futures Thinking and Business Model Innovation process model was designed to explain how these may be combined. This process model illustrates the action movement that is critical to enhance future business innovation. There are five business development stages: 1) environmental scanning, 2) vision formulation, 3) knowledge alignment, 4) innovation implementation and 5) feedback and iteration. This paper shows that in a volatile, uncertain, complex, and ambiguous VUCA business environment, envisioning plausible, probable, possible and/or preferred Futures is a necessity. To overcome organizational inertia and to engage in Futures Thinking initiatives, companies must effectively leverage qualities such as open-mindedness, strategic agility, and commitment to continuous learning and knowledge creation and sharing.

Keywords: Futures thinking, Business model innovation, Foresight, VUCA, Knowledge management

1. Introduction

In 1989 Ulrich and Wiersema saw the coming decade to be “like playing basketball with a moving basket”. This scenario has changed only a little, today's outlook is the same. The only difference is that there are a number of moving baskets on the basketball court. As they declared, when the environment is undergoing dramatic and/or continuous change, flexibility in adjusting to changing competitive conditions and implementing decisions under conditions of uncertainty becomes crucial. Bennett and Lemoine (2014) describe VUCA acronym in business environment by Volatility: change is frequent and sometimes unpredictable, Uncertainty: a lack of knowledge regarding future, Complexity: multiform and convoluted network of information and procedures and Ambiguity: cause and effect are not understood and there is no precedent for making predictions as to what to expect. Today VUCA business environment may be seen as an outcome of disruptive innovation or as a driver of it. Also, it is often used as an excuse to avoid planning and action (Millar, Groth and Mahon, 2018).

Bennett and Lemoine (2014) discussed the importance of leadership in VUCA world. They highlight leaders' importance in preserving and enhancing organizational performance with scarce resources in different VUCA situations. There are several perspectives to consider when dealing with organizational level enquiry. For example, Ramus, Vaccaro and Brusoni (2017) explored how internal tensions triggered by environmental

turbulence may be managed in organizations. Their findings showed for example that possible disagreements may be tackled by collaboration in which different logics can better explain their own viewpoints. They highlight the progressive, sensitizing approach of institutional theory to provide solid foundation to discussion about managerial actions in different kinds of empirical settings.

Fergnani (2022) introduces corporate foresight to be important for research in strategy and management. It adds a future-focused ability to the dynamic capabilities framework with new possibilities for research. Corporate foresight can improve learning, creativity, innovation, and performance by offering a new way to gain competitive advantage.

2. Theoretical Background

2.1 Futures Thinking and Corporate Foresight Changing Business Model Innovation

Previous research on business model innovation has created a wide understanding of this complicated topic, yet there is still room for academic discussion on the possibilities in combining futures thinking and corporate foresight with these innovation processes. As focus on business model innovation has become one of the important priorities of leading companies trying to keep a certain balance of value creation and value capture (Zott, Amit and Massa, 2011) and business models together with innovation have become prominent topics in micromanagement discussion over last few decades (Foss and Saebi, 2017), also SME´s are allocating more resources to pro-active business model innovation in order to create competitive advantage in turbulent environment. Business model innovations have opened the door for new business opportunities far beyond product and process innovations (Freiling, 2015).

As the business environment is undergoing continual and even dramatic changes, the basic assumptions underlying strategic decision making must be reframed to incorporate new perspective on business enhancement (Ulrich and Wiersema, 1989). This does not come without challenges. Latifi, Nikou and Bouwman (2021) advise owners/managers of SMEs to concentrate either on growth or on profit to fully benefit from their BMI-related efforts after carefully assessing their specific situation. To increase velocity of change, firms may need to modularise their business model for reconfiguration and co-optation (Loon and Xiaohong, 2021). Flexibility to adjust to changing competitive conditions and the ability to assess a situation quickly and implement decisions under conditions of uncertainty become crucial success factors (Ulrich and Wiersema, 1989).

In turbulent times, the responsibility of management is to make sure the company holds the capacity for survival. Adaptation of sudden change and availing new opportunities is of importance, as Drucker highlighted already in 1980. Shifting a business model to another is often a demanding challenge that is based on dynamic capabilities (Teece, 2007), according to Foss and Saebi (2015) not all firms succeed in adapting their business model to new market demands or competitive threats. Chesbrough (2010) stated the barriers to changing the business model to be real, and tools such as maps would be helpful, but not enough. Companies must adopt an effectual attitude toward business model experimentation and organizational processes must also change. Attaining alignment with the environment is the main motivation of business model adaptation. Considering the importance of the mediating role played by organizational capabilities, it is important for managers, as well as the people advising them, to create an open, dynamic and entrepreneurial culture (Latifi, Nikou and Bouwman, 2021).

Academic research has provided insights into the necessity of corporate foresight systems (Rohrbeck and Gemünden, 2011). Rohrbeck and Kum (2018) performed a long-term study and discovered solid empirical proof that foresight enhances future preparedness and ultimately drives superior firm performance. On the other hand, corporate foresight has undergone continuous development over time (Rohrbeck et al., 2015). Taken together, foresight is seen as a proactive approach that focuses not on predicting or forecasting the future but on helping individuals explore various possible future scenarios states (Vecchiato, 2012). Fergnani (2022) explains corporate foresight to be a dynamic, firm-level capability that allows firms to evaluate future scenarios of the business environment, including systematic doomsday situated in the broader epistemological underpinnings of futures studies, theoretically inscribed in the dynamic capabilities' framework, distinguished from related constructs, and deconstructed collapses. It is defined, in its main components.

Organisational foresight can be seen to emerge as a critical product of collective knowledge creation. To understand emergence of collective foresight, understanding the social action and context of the collective is needed (Schwandt and Gorman 2004). A belief is that applying futures thinking and related tools enhances decision-making quality. Research in future studies supports this notion, providing evidence that utilizing futures thinking improves decision-making and impacts on organizations activities. (Hines, 2002.) Feuls et al. (2024) define far futures as future matters that are beyond organizations' general planning horizons and represent departure from futures that are typically addressed through organizations' future making practices. Whereas regular planning or future making activities involve repeated processes using strategic plans that may consider an event that is quantitatively different from the present.

2.2 Sensing, Seizing and Transforming: Dynamic Capabilities

Teece (1997) describes dynamic capability as "the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments". The essence of dynamic capabilities is a firm's behavioral orientation in the adaptation, renewal, reconfiguration and re-creation of resources, capabilities and core capabilities responding to external changes. The futures orientation and futures thinking can be linked to

the dynamic capabilities' theory. In this way, "Seizing" refers to Dynamic Capabilities Theory developed by Teece, Pisano, and Shuen (1997). The theory proposes that organizations need the ability to sense opportunities and change resources to integrate to progress. Futures thinking can be seen as part of the "seizing" process, where strategic options for the future are evaluated. Empirical and conceptual studies of adaptive, absorptive, and innovative capability are long-standing. Recently researchers have related each of these capabilities to a firm's dynamic capabilities but have not thus far clearly identified them as the component factors of dynamic capabilities (Wang and Ahmed, 2007).

Dynamic capabilities are necessary as those enable the firm to integrate, build, and reconfigure internal and external resources to address and shape rapidly changing business environments. Ordinary capabilities are described to be about doing things right, dynamic capabilities on the other hand are about doing the right things (Teece and Leih, 2016). What is required for sustained profitability is that the business enterprise be built to respond to the unexpected by establishing and maintaining flexible systems, which are hallmarks of strong dynamic capabilities (Teece and Leih, 2016).

High-order dynamic capabilities guide second-order dynamic capabilities. in which management, supported by organizational processes, senses likely avenues for the future, devises business models to seize new or changed opportunities, and determines the best configuration for the organization based on its existing form and the new future plans. Highest-order capabilities - sensing, seizing, and transforming competencies – are the most relevant for innovation and selection of business models that address the problems the company is endeavouring to solve/exploit (Teece, 2018).

2.3 Knowledge Management

Theories help us to understand how organizations learn and create knowledge (e.g., organizational learning—Argyris (2005); managing organizational knowledge—Nonaka (1994), how they are structured, and how managers organize their work in them. Theories can help us to gain a competitive advantage and evaluate degree of success. Knowledge-Based Theory of the Firm focuses on resources and organizational capabilities as the principal sources of competitive advantage and the foundation for strategy conceptualisation. Theories of the firm are models of business enterprises which explain their structure and behaviours. The knowledge-based view of the firm (KBV) is different from other theories where the issues are the organizational factors in the production of competitive advantage. KBV focuses on internal organization, and the firm is in the theory of complex organization encompassing multiple individuals (Grant 1996).

A knowledge-based approach offers a theoretical basis for understanding several recent organizational innovations and trends. These include empowerment and the development of new organizational forms for the firm. The primary task of management is finding the coordination necessary for this knowledge integration. Coordination is the main implication, especially when tacit knowledge is involved (Grant, 1996).

While existing knowledge-based theory (Grant, 1996) focuses on the efficiency of hierarchy in economizing on knowledge exchange, this contribution of Nickerson and Zenger (2004) develops a theory of the firm that focuses on the efficiency of alternative organizational forms in generating knowledge or capability. The authors of the paper (Nickerson and Zenger, 2004) shows that they develop a knowledge-based theory of the firm that addresses these shortcomings. They explain how a firm's prospective objectives for knowledge formation dictate the choice of how to organize. Here the question is not whether knowledge should be owned or acquired in the market or how the exchange of knowledge should be facilitated, but rather how a manager should organize individuals to generate knowledge that the firm seeks.

Argyris (2005) proposes a double loop learning theory which communicates learning to change underlying values and assumptions. The focus of the theory is on solving problems that are complex, and which change as problem-solving advances. An example of single-loop learning would be to correct an error in an existing strategy without altering the underlying governing variables of strategy. Double-loop learning occurs if, to correct errors, it is necessary to change the underlying assumptions and values that govern the actions of the strategy. A thermostat is a single-loop learner. It is programmed to turn the heat up or down depending on the temperature. A thermostat would be a double-loop learner if it questioned the existing program that should measure heat (Argyris 2005). Double-loop learning recognizes that the way a problem is defined and solved can be a source of the problem. This type of learning can be useful in organizational learning since it can drive creativity and innovation, going beyond adapting to change to anticipating or being ahead of change.

Nonaka (1994) defines that an organization's competitiveness for innovation is based on its capability to create and share knowledge. This process occurs through interaction between individuals and groups, especially by

combining tacit (personal, experience-based) and explicit (formal) knowledge. Knowledge creation is not just a technical process but also a human and social reality that requires shared context and purpose. Foresight renders tacit knowledge about changes in the environment explicitly, helping organizational members to realize that there are more choices than previously thought (Vecchiato, 2015).

3. Data and Methods

To gain in-depth understanding of the practices of developing future proof business models, we employed a qualitative research design. A combination of data collection methods was employed, including themed interviews and co-creation Futures workshops. This multimethod approach was chosen to gain a holistic view of the business model development in Hospitality Field companies, by including reflective real-time dynamics. In the first phase, in 2023-2024 total of 24 interviews (table 1) were executed in Finland focusing on understanding generally the viewpoints of interviewees to business model innovation practices, to futures thinking and to sustainability linked to these topics. The primary group of interest was executive level Hospitality Field practitioners. One interview was conducted by telephone, 15 face to face and 8 by Teams online system. Discussions lasted between 50 minutes to 1 hour and 25 minutes. A themed interview model was chosen to cover the framework of themes using a structured interview guide with pre-formulated open questions: 1) Business Model Innovation: How turbulent business environment has changed business model innovation practices in your company?, 2) Futures Thinking: Is Futures Thinking (and related tools) actively used in your company and how?, 3) Sustainability: What role sustainability has in business enhancement activities in your company?.

According to Hirsjärvi and Hurme (2022) benefit of a themed interview is that it does not restrict the depth of the interview. Instead of very specific questioning, it allows discussion to flow freely, keeping with the themes set beforehand. Construction of questions along the interview taking place may differ in different interviews according to interviewee's responses.

Table 1: List of interviews

interviewee	business field	interviewee position	interview duration in minutes	interview channel
a	hotel	Front Office Manager	60	face-to-face
b	restaurant and catering	Sales Executive	55	face-to-face
c	hotel	Financial Director	65	Teams
d	hotel	Sales Manager	75	face-to-face
e	travel agency	Sales Manager	60	Teams
f	restaurant and catering	Team Leader	58	face-to-face
g	restaurant and catering	Sales Executive	50	Teams
h	events	Customer Manager	70	face-to-face
i	events	Head of Customer Success	50	face-to-face
j	hotel, events	Team Leader	70	face-to-face
k	restaurant and catering	Entrepreneur	85	face-to-face
l	events	Technical Lead	60	Teams
m	travel agency	Sales Executive	60	Teams
n	restaurant and catering	Head of Catering	64	face-to-face
o	restaurant and catering	HR Director	54	phone
p	events	Head of Production	70	Teams
q	events	Manager	60	face-to-face
r	events	Customer Experience Lead	55	Teams
s	hotel	Head of Marketing	78	face-to-face
t	restaurant and catering	Sales Team Leader	55	face-to-face
u	hotel	HR Manager	59	Teams
v	restaurant and catering	Sales Executive	57	face-to-face
x	hotel	Team Leader	60	face-to-face
y	events	Financial Controller	60	face-to-face

To analyse collected data (table 1), an inductive thematic content analysis was performed. Insight from the interviews was used as a starting point for planning the second phase of the research. Patterns in uncertainty as a common theme in understanding the meaning of Futures Thinking for Business Model Innovation emerged at this point, and these findings were later confirmed by the second phase of the study.

In the second phase, in spring 2025, co-creational Futures workshop was organized with Hospitality field professionals in Espoo (Finland). Twenty Hospitality Field professionals were invited to participate through previous contacts in the field. 15 accepted the invitation to work together on futures canvas work and discussions. During the 2,5-hour long workshop, participants were divided into 4 teams in which they worked on two Futures Canvases ("Getting to grips with a trend" and "Foresight Zoo") by Finnish innovation fund Sitra. Preliminary findings on phase 1 were confirmed, as this group also shared similar experiences, both in challenges and opportunities in combining Futures Thinking to Business Model Innovation activities.

4. Findings

4.1 Decision-Making in VUCA Environment in Hospitality Sector

The central research question in the beginning of the study was: How Futures Thinking can support Hospitality Field companies in designing future proof Business Models? Examples from the Hospitality field and VUCA relevance to decision-making (table 2) show that practitioners in managerial positions encounter numerous challenges in decision-making in VUCA environment.

Table 2: VUCA in Hospitality sector decision-making (composed by authors following Bennett and Lemoine, 2014)

	Definition of the Acronym by Bennett and Lemoine (2014)	Effects of VUCA, insights from Hospitality Field Business Model Innovation (BMI)	Manifest in decision-making within Hospitality sector management
Volatility	"Relatively unstable change; information is available and the situation is understandable, but change is frequent and sometimes unpredictable."	COVID-19: new kind of hazard, BMI processes were disturbed. Pressure of quickly changing national and regional guidelines for sustaining and creating business opportunities makes long-term planning unpossible.	**Agility:** Exponential growth in agility of decision-making. Best practices have remained in post-pandemic market, such as decentralized decision-making -> local managers have been authorized to make decisions that "before" were made in regional headquarters. This enables faster modifications to excisting Business Models. Activating Futures Thinking as a means of preparing supports decision-making in challenging times.
Uncertainty	"A lack of knowledge as to whether an event will have meaningful ramifications; cause and effect are understood, but it is unknown if an event will create significant change."	War and violence in different forms around the world has brought upon dramatical changes, such as in customer segments creates new challenge to BMI.	**Information:** Knowledge creation and transfer challenged. Possibility to make judgement based on bias or uncomplete information. This may render long-running challenges. Onboarding new, digital platforms for knowledge transfer is a necessity in supporting BMI decision-making.
Complexity	"Many interconnected parts forming an elaborate network of information and procedures; often multiform and convoluted, but not necessarily involving change."	Value creation strengthened by new forms of co-operation and partnerships shape BMI: such as hybrid events in partnership with conference hotels, local producers in co-operation with restaurants and grocery stores.	**Restructuring** of internal resources and capabilities opens possibilities for decision-making towards finding new, additional co-creational opportunities. Operating in silos in a VUCA world limits benefits occurring in Business Ecosystem Thinking.
Ambiguity	"A lack of knowledge as to 'the basic rules of the game'; cause and effect are not understood and there is no precedent for making predictions as to what to expect."	Digitalization: Meeting and exceeding customer expectations via use of robots in restaurant services (line of visibility, both in backstage and frontstage operations), Artificial Intelligenge (AI) and automation must be regocnised in BMI.	**Experimentation** is a key to success, this brings new challenges to decision-making. Polarisation of discussion in-house may lead to "stand still". Inertia must be overcome and this craves for new kind of managerial qualities such as open-mindedness, curiosity and tolerance to failure which may be seen as a threat to advancing business.

Insights from the Hospitality Field express examples of real-life effects and manifest to decision-making (table 2). *Volatility*, quick and unpredictable changes challenge agility of decision-making. Ideally managers are to seek out possible solutions beforehand, to prepare possible future business challenges arising from the ever-changing environment. This challenges established routines and thinking. Decision-making chains must be realigned, and empowerment of more localised decision-making is to be enhanced. Experiences from the interviewees highlighted good experiences from COVID-19 in such changes. *Uncertainty* and need for speedy decision-making is another hurdle. Knowledge creation and transfer inside and outside of the company in various forms must be done in more efficient way. Interviewees highlighted the pressure of decision-making with limited access and understanding of the current situation. Digitalization, especially new platforms support knowledge transfer. *Complexity* has awakened managers to utilize power of multi-level relationships. Rather than working in silos, systems may create possibilities for new Business Model Innovation avenues. Trust is a key factor in these

endeavours. Change is not automatic; it requires a lot of time and trust between multiple stakeholders. *Ambiguity* may embrace inertia, which may become a barrier to Business Model Innovation decision-making. In VUCA world, managers are expected to hold new qualities such as open-mindedness, curiosity and tolerance to failures in fast experimentation.

4.2 Barriers in Using Futures Thinking

Findings from the interviews and co-creational Futures workshop created understanding of the topic from the point of view of Hospitality Field practitioners. In general, participants of this study were open-minded to the possibilities of combining Futures Thinking and Business Model Innovation processes and activities even though many had little experience in applying it at their workplace.

> *"The future is interesting, but it is difficult to think 40 years ahead. The business environment may change radically even within a year." - interviewee "k"*

> *"As far as I know, the future is not studied in any way, but assessments of the state of the economy and its weakening and recovery are monitored, because it directly affects the consumer's everyday life and thus consumption." - interviewee "p"*

Several participants highlighted Futures Thinking to be intangible and difficult to understand, as companies are still tied to short-term projections with limited resources at hand to widen their perspective to distant Futures. Uncertainty may give a feeling of "storytelling", Futures Thinking and Corporate Foresight are still something managers need professional guiding and training in.

Furthermore, the second barrier are the financial resources needed to support the costs associated with platforms, materials, and professional orchestration and facilitation. To fully be supported by highest level of company executives, the gains must be presented when new investments are presented, as for example programs and professional training to Futures Thinking. Still, the challenge is that examining the Futures is not a short-term win approach, but it may prove to be well justified investment in the long run as companies are looking for competitive advantage.

4.3 Futures Thinking and Business Model Innovation process model

Findings of this research show that foresighting the future is an essential action in the business world. For that reason, managers must create new ways to build opportunities for using foresight methods beginning from the early stage of the business model innovation process. The following model illustrates how future thinking and business model innovation process can be linked. It introduces two phases: A) strategic and B) tactical. Companies must have a big picture of the future-oriented planning and also the practical implementation guidelines. In this process model there are five business development stages: 1) environmental scanning, 2) vision formulation, 3) knowledge alignment, 4) innovation implementation and 5) feedback and iteration (figure 1).

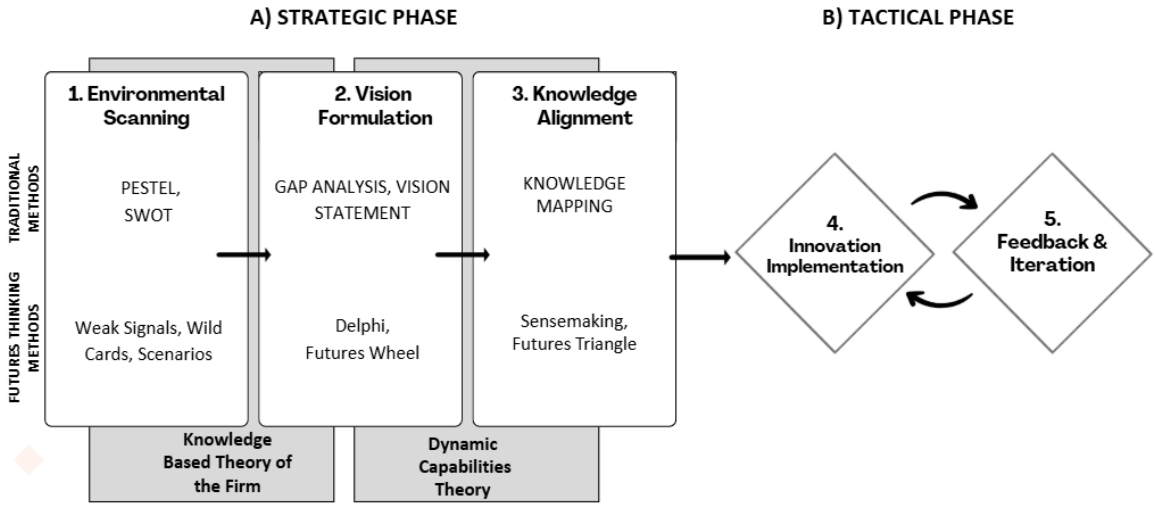

Figure 1: Futures Thinking and Business Model Innovation process model (Vähänikkilä and Vakkuri 2025)

The future thinking and business model innovation process model (figure 1) illustrates the action movement that is critical to enhance future business innovation. Futures Thinking and Business Model Innovation process model

is grounded on theoretical support of knowledge based theory of the firm (Grant, 1996) and dynamic capabilities theory (Teece at all, 1997).

4.3.1 Strategic phase, stages 1-3

This part consists of three essential stages that guides a company toward future-oriented decision-making. 1) Environmental Scanning in systematically observing and analysing external trends, drivers, and uncertainties that may affect the business. 2) Vision Formulation is creating a future vision based on insights from the environment. 3) Knowledge Alignment is about internal knowledge, competencies, and resources to support the strategic vision.

Business developing methods and tools for proceedings at strategic phase (A) has been divided to two sections, to traditional methods and future thinking methods. In this phase there are mentioned selected illustrative future thinking methods for each stage of the process. Traditional methods are more of management and market analysis approach to data gathering. Future thinking tools, on the other hand, are more oriented toward exploring uncertainties, envisioning alternative futures, and supporting strategic foresight. Companies use both traditional method tools like PESTEL analysis and future thinking tools like wild cards because they serve different but complementary purposes in strategic planning and foresight. Together, they help companies build resilient and agile strategies that consider both likely developments and surprising disruptions.

The ability to use a future-oriented vision to understand and critically discuss potential scenarios is a key strategic competence in today's business environment (Moritz, 2005).

4.3.2 Tactical phase, stages 4-5

The tactical phase (B) translates strategic intent into action and learning. It includes two key stages: 4) Innovation Implementation, which focuses on executing the innovation strategy by developing and launching new solutions, services, or processes within the organization. After implementation last stage is 5) Feedback and Iteration, where outcomes are monitored and evaluated. Feedback is used to refine, adapt, or scale the innovation, ensuring continuous improvement and responsiveness to change. This process is not usually a step-by-step process. Instead, it often involves going back and forth between stages, with overlaps along the way. In many cases, innovation becomes connected in everyday service practices, rather than being a separate or isolated activity.

5. Conclusion

Our research findings support earlier work by scholars such as Millar, Groth and Mahon (2018) in their findings of VUCA environment of being difficult to grasp and therefore action taking being difficult. Midst all the turbulence, collaboration and leadership are key factors in-organisation strategy building and business model innovation as stated by Ramus, Vaccaro and Brusoni (2017) and Bennett and Lemoine (2014). Fergnani (2022) explains corporate foresight to be a dynamic, firm-level capability and its importance should be spread across the organization – it is not on the agenda only for the top management. Several Futures Thinking and Foresight actions can be supported by staff members at all levels, such as Weak Signal spotting as an example. Our study highlighted two main barriers to adaptation of Futures Thinking. Based on the findings, Futures Thinking and Business Model Innovation process model was created. It adds new view to the ongoing academic discussion of Futures Thinking and Business Model Innovation by combining these two. This novel viewpoint also combines previously well examined theoretical base of dynamic capabilities and knowledge-based theory of the firm together with Futures Thinking and Business Model Innovation. A new process model with five stages is aimed at both scholars and practitioners introduces both "traditional" and modern Futures Thinking methods which can be of use in different phases of the process. Limitation of this study is a narrow research setting, focusing on solely to Hospitality Field companies. To further examine the possibilities for adapting the newly built model outside of the Hospitality Field, further research is to be carried out in economic sectors beyond hospitality. Also, empirical testing of the model needs to take place.

Ethics declaration: Ethical clearance was not required for the research.

AI declaration: Authors of this article used Microsoft 365 Copilot to structure the article contents they had written into coherent storyline. The tool was used to provide suggestions for improvements to text flow. The output from this tool was checked and modified by both authors, no direct text/content was used in the final article.

Acknowledgements

Authors wish to thank double-blind reviewer for insightful recommendations and constructive advice.

References:

Argyris, C. (2005). Double-Loop Learning in Organizations. Editor: Smith, K. Great Minds in Management: The Process of Theory Development, edited by Michael A. Hitt, Oxford University Press, ProQuest Ebook Central.

Bennett, N. and Lemoine, J. (2014). What a difference a word makes: Understanding threats to performance in a VUCA world. Business Horizons. 57(3). 311-317.

Chesbrough, H. (2010). Business Model Innovation: Opportunities and Barriers. Long Range Planning, Vol. 43. 354-363.

Drucker, P. (1980). Managing Turbulent Times. Routledge.

Feuls, M., Hernes, T., & Schultz, M. (2024). Putting distant futures into action: How actors sustain a course of action toward distant-future goals through path enactment. Academy of Management Journal.

Fergnani, A. (2022). Corporate Foresight: A New Frontier for Strategy and Management. Academy of Management Perspectives. 36(2). https://doi.org/10.5465/amp.2018.0178

Foss, N.J and Saebi, T. (2017). Fifteen Years of Research on Business Model Innovation: How Far Have We Come, and Where Should We Go?. Journal of Management. 43(1), 200-227.

Freiling, J. (2015). "Business Model Innovation – A Concept Between Organizational Renewal and Industry Transformation," Journal of Entrepreneurship, Management and Innovation. 11(1), 3-10.

Grant, R. (1996). Toward a knowledge-based theory of the firm. Strategic Management Journal, 17, 109-122.

Hines, A. (2002). A practitioner's view of the future of futures studies. Futures, 34(3-4), 337-347.

Hirsjärvi, S. and Hurme, H. (2022). Tutkimushaastattelu: Teemahaastattelun teoria ja käytäntö. Gaudeamus e-book.

Freiling, J. (2015). Business Model Innovation – A concept between organizational renewal and industry transformation. Journal of Entrepreneurship, Management and Innovation.11(1), 3-10.

Latifi, M-A., Nikou, S. and Bouwman, H. (2021). Business model innovation and firm performance: Exploring causal mechanisms in SMEs. Technovation. Vol. 107.

Loon, M. and Xiaohong, I. (2021). Theorising Business Model Innovation: An Integrated Literature Review. Australian Journal of Management. 46(3), 548-577.

Millar, C., Groth, O. and Mahon, J.F. (2018). Management Innovation in a VUCA World: Challenges and recommendations. California Management Review. 61(1). 5-14.

Moritz, S. (2005) Service design—practical access to an evolving field. Köln International School of Design, Köln

Nickerson, J. and Zenger, T. (2004). A Knowledge-Based Theory of the Firm—TheProblem-Solving Perspective. Organization Science Vol. 15, No. 6, November–December 2004, pp. 617–632.

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization science, 5(1), 14-37.

Ramus, T., Vaccaro, A. and Brusoni, S. (2017). Institutional Complexity in Turbulent Times: Formalization, Collaboration, and the Emergence of Blended Logics. Academy of Management Journal. 60(4). 1253-1284.

Rohrbeck, R., Battistella, C., Huizingh, E. (2015). Corporate foresight: An emerging field with a rich tradition. Technological Forecasting and Social Change, 101, 1-9.

Rohrbeck, R. and Gemünden, H.G. (2011). "Corporate foresight: its three roles in enhancing the innovation capacity of a firm", Technological Forecasting and Social Chang, 78(2). 231-243.

Rohrbeck, R., Kum, M. E. (2018). Corporate foresight and its impact on firm performance: A longitudinal analysis. Technological Forecasting & Social Change, 129, 105-116.

Schwandt, D. and Gorman, M. (2004). Managing the Future: Foresight in the Knowledge Economy. Edited by Tsoukas, H. and Shepherd, J. Blackwell Publishing.

Teece, D.J., Pisano, G. and Shuen, A. (1997). Dynamic capabilities and strategic management. Strategic Management Journal. 18(7).509-533.

Teece, D. and Leih, S. (2016). Uncertainty, Innovation, and Dynamic Capabilities: An Introduction. California Management Review. 58(4). 5-12. https://doi.org/10.1525/cmr.2016.58.4.5

Teece, D. (2018). Business models and dynamic capabilities. Longe Range Planning. 51(1).40-49.

Ulrich, D. and Wiersema, M.F. (1989). Gaining Strategic and Organizational Capability in a Turbulent Business Environment. Academy of Management Perspectives. 3(2), 115.

Vecchiato, R. (2012). Environmental uncertainty, foresight and strategic decision making: An integrated study. Technological Forecasting & Social Change, 79(3), 436-447.

Vecchiato, R. (2015). Creating value through foresight: First mover advantages and strategic agility. Technological Forecasting and Social Change, 101: 25–36.

Wang, C.L and Pervaiz K.A. (2007) Dynamic capabilities: A review and research agenda. International Journal of Management Reviews. https://doi.org/10.1111/j.1468-2370.2007.00201.x

Zott, Christoph and Amit, Raphael and Massa, Lorenzo (2011). The business model: recent developments and future research. Journal of Management. 37(4), 1019–1042.