

Innovation in the Insurance Industry: A Diagnostic Perspective

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ABSTRACT

Traditionally, competition in the insurance industry favoured efficiency strategies with exploitation-type business models founded on command and control management models. Managerial conversations focused on cost and risk metrics. In an industry with intangible, knowledge-rich products, 21st century digitalization, paired with the changing nature of work, offers nearly limitless opportunities for innovation. Successfully capturing innovation and growth opportunities paired with more flexibility in dealing with dynamic market conditions, requires exploration-type strategic thinking and enabling management models. Executives must engage the knowledge, skills, and resources of people in unprecedented ways. The need to transform business and management models poses a risk to insurance executives in ways that stretch beyond the experience of most senior executives. Building on dynamic capabilities concepts, insurance companies should embrace management models that remove traditional management barriers. We employ the Performance Triangle (PT), Agile Maturity (AM), and the Context Framework (CF) models to explore the industry's current capabilities and management model. We build on our previous work and conducted surveys with managerial teams in insurance companies between 2018 to 2021. The study concluded that capability-based management models with dynamic capabilities can enhance the industry's capacity to capture the benefits of digitalization and the changing nature of work. Using PT, AM, and CF frameworks and diagnostic tools we attempt to advance the understanding of management models and dynamic capabilities in the insurance industry. The results identify numerous gaps or mismatches between the current and optimal future management structures and systems needed to transform traditional command and control management styles into a people-centric and dynamic model that is needed to encourage innovation.

Keywords: insurance; dynamic capabilities; management model; VUCA; agile; people-centric

INTRODUCTION

Insurance companies were innovative in the nineteen sixties and seventies. Since then, the industry has lost the innovative capacity in favor of exploitation-type strategies predominantly focused on competition based on decreasing costs and improving efficiency (Garth, 2011). In the 21st century new technologies, readily available discounted capital, new competitors such as ‘InsureTec’, and banks have entered the industry with more innovative business models that transformed traditional value chains. Disruptive business models have caused the insurance industry to become more dynamic and competitive. Digitalization forced prices to drop which squeezed the operating profit margins of traditional insurance companies (FINMA, 2020). Declining profit margins forced established insurance companies to rethink existing business models to improve efficiencies and identify new sources of revenue more than ever before.

The choice of management model determines much of an organization’s ability to innovate (Barney, 1991). Business models and management models must align to maximize value creation. In the industrial 20th century stability, efficiency, and control dominated management thinking and models. In the 21st century the focus has shifted toward designing organizations that facilitate knowledge sharing and accelerate learning which stimulates innovation (Nold, 2012; Prahalad & Krishnan, 2008; Schramm, 2006). There is clear evidence of negative consequences resulting from traditional hierarchical structures and rigid management systems (Hugos, 2009) particularly when the operating environment of an organization demands a high degree of flexibility (Grantham et al., 2007). The high transaction, information, and communication costs with weak attempts to align management techniques with the interests of humans have been constraints on innovation and the flexibility of organizations to adapt to a changing environment (Tushman & Nadler, 1977).

The work environment has changed dramatically since the turn of the century. New technologies have reduced costs for sharing information while, at the same time, offering enhanced connectivity enabling more rapid adaptations to changing customer needs (Altmann et al., 2003). Insurance companies now have the means to engage professionals, customers, and communities remotely in activities to search for new opportunities, which allows executives to quickly act on information using robust managerial responses in a rapidly changing environment. Simultaneously, people-centric perspectives based on the behavioral theory of employees that stress purpose, awareness, trust, and choice have increased (Hamel & Breen, 2007; Michel, 2020; Pisano, 2015) along with the recognition of the importance of the need to accelerate the rate of knowledge creation and the influence of organizational culture on performance (Nold, 2012; Nold, 2013; Nold, 2018).

Katz and Khan observed as early as 1987 that “Changes in the environment have consequences for the internal setup of organizations” (p.10). As the operating environment of organizations changes, managerial control systems may need to change accordingly (Child & McGrath, 2001; Towry, 2003). In a dynamic environment typical of the VUCA 21st century, businesses need flexibility in their management structure and style which traditional control fails to deliver (Hope & Player, 2012). In business environments where knowledge work dominates and is essential for success, dynamic, people enabling, management styles, structures, and systems displace or augment traditional control-based management (Benkler, 2006; Michel, 2017). Creating organizations that promote self-responsibility, personal initiative, freedom to decide, innovation, and risk-taking become more important in a knowledge-rich environment (Kilmann et al., 1995; Michel, 2020).

The relationship between innovation and success in the insurance industry has been confirmed by many studies (Garth, 2011; Pain, 2011). Moreover, a vast number of studies are published with compelling arguments and evidence that management needs to adapt to changing market contexts (Hope & Player, 2012). An increasing stream of literature emphasizes innovation and the need for dynamic organizational capabilities, but the definition of dynamic capabilities and how to develop them remains conceptual. Little research has been done that explores management models, dynamic capabilities, and outcomes related to insurance companies.

To address this gap, we conducted a study by capturing data from 192 insurance executives representing 45 insurance companies over four years and compared the data to that from a reference portfolio of 406 companies in various industries. The diagnostic instrument was designed to gain insight into participants' perception of the capabilities of their companies for innovation, their company's management models, and how both support organizational initiatives for digital transformation. To conduct the study, we relied on existing models and diagnostic instruments for organizational design, agile maturity, management models, and dynamic capabilities (Michel et al., 2018; Michel, 2021b; Nold et al., 2018). First, we describe the model, then we introduce the measurement instrument before presenting and summarizing the results and discussing the implications.

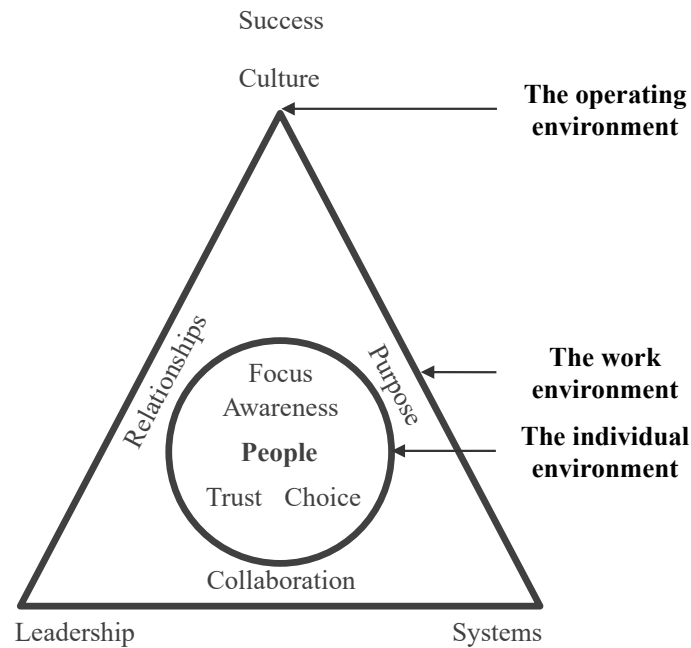
THE MODEL

The study is based on the various elements of the Performance Triangle Model and diagnostic capabilities provided by the associated diagnostic instrument (Michel et al., 2018; Michel, 2021b; Nold et al., 2018). The Performance Triangle Model provides insight into perceptions of an organization's leadership, culture, systems, and people. The Agile Maturity scale groups organizations into categories of dynamic capabilities necessary for agile management in the VUCA environment. The study explores management models and dynamic capabilities with the perspective of innovation in the insurance industry using four different management frameworks to look at the issues from different perspectives. The context frame groups companies into four basic management styles. Results help identify perceived strengths or weaknesses of dynamic capabilities in multiple dimensions within the Performance Triangle Model. The study concludes by contrasting the effects of these capabilities on performance, innovation, and growth outcomes of the insurance industry with a reference portfolio.

The Performance Triangle Model

The Performance Triangle Model illustrates the dynamic capabilities and outcomes that constitute agile maturity. The Performance Triangle illustrates the need for speed, greater agility, and resilience as dynamic capabilities essential for superior performance, innovation, and growth that are the outcomes in a people-centric and dynamic environment (Nold & Michel, 2018; Michel, 2013). As shown in Figure 1, the Performance Triangle is composed of three primary elements: systems, leadership, and culture. At the heart of the performance triangle are people who energize the dynamic system by contributing unique skills, expertise, and experience.

Figure 1: The Performance Triangle



The individual environment defines how people engage with the rest of the dynamic Performance Triangle system. The three dimensions of the Performance Triangle set the stage for knowledge workers to use their creativity to stimulate innovation throughout the organization. The ‘right’ balance of systems, leadership, and culture should create an environment in which people can use their creativity and knowledge. When one of these dimensions becomes too strong, it dominates the working environment and inhibits the efficient flow of knowledge thereby preventing superior performance.

Organizations reach higher levels of resilience through collaboration, purpose, and relationships as cooperative strategies. Resilient organizations can reinvent themselves and find new business models that preserve and leverage the core competencies.

It is increasingly recognized that firms must be fast, agile, and resilient in a dynamic, complex, and rapidly changing environment. Speed represents the capacity to develop and implement strategy quickly. Agility provides the capacity to consistently change without having disruptive change initiatives with questionable benefits. Resilience adds stability as the capacity to absorb, react to, and potentially reinvent the business model. Speed, agility, and resilience become the key elements of an organization’s dynamic capabilities.

The Agile Maturity Framework

Agile maturity levels help to identify the dynamic capabilities within organizations to react to rapid change (Michel, 2021b). Michel (2021b) analyzed data from hundreds of participating organizations to develop a model, identified, and labeled six maturity levels with increasing dynamic capabilities: contestants, exploiters, changers, enablers, performers, and pioneers. Figure 2 compares the six maturity levels using the agile maturity scale.

Figure 2: Agile maturity levels

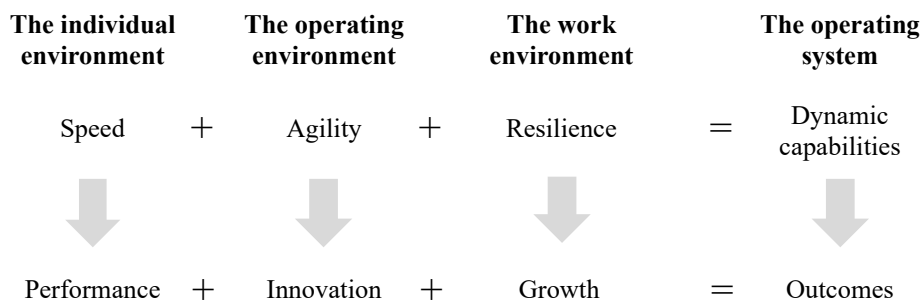
Maturity levels	Contestants	Exploiters	Changers	Enablers	Performers	Pioneers
Index ranges	0 - 50	50 - 59	59 - 69	69 - 76	76 - 81	81 - 100
Average index: 65	42	55	64	73	79	87
Reference portfolio	13%	20%	31%	19%	10%	8%
Management context	Rules	Rules	Change	Engagement	Capabilities	Capabilities
Business model	Exploitation	Exploitation	Exploitation	Hybrid	Hybrid	Exploration

The agile maturity index summarizes 27 capabilities and 3 outcomes on a 100-point scale in one figure. Higher scores indicate greater sophistication of dynamic capabilities essential for organizational agility. The levels have been constructed through statistical cluster analysis from a sample (reference portfolio) of 406 organizations. The reference portfolio represents organizations of all sectors across the world that performed the Performance Triangle Diagnostic between 2011 and 2021. Each level differs with respect to dynamic capabilities, outcomes the dominant management model, and business model.

Capabilities and Outcomes

The capabilities to operate successfully in a dynamic environment are speed, agility, and resilience (Michel, 2017). Operational performance, innovation, and growth become the relevant outcomes and indicators of value creation. Speed results from accelerated learning with operational performance as the outcome. Agile organizations develop innovation capabilities and innovation requires agility. Resilience is the foundation for internal growth. Figure 3 illustrates the proposed framework and the relationship between dynamic capabilities (speed, agility, resilience) and outcomes (performance, innovation, growth).

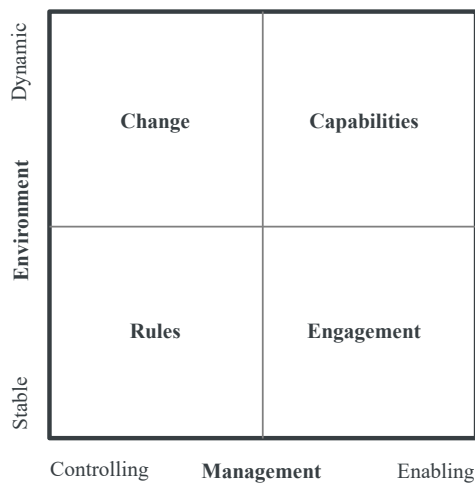
Figure 3. Capabilities and outcomes



The Context Framework

The context frame illustrates four management models in general modes of operation. Michel et al (2018) suggested “that fundamental choices for the selection the right mode of operations are the degree of the external challenges and the distribution of knowledge in organization” (p.5) and proposed four generic management models. To gain insight into the different modes of operation respective managerial responses are grouped into four general categories as shown in Figure 4.

Figure 4: The context frame



Rules-based management works well in a stable environment where knowledge is concentrated with managers at the top of the organization organizing, planning, coordinating, and controlling all decisions and activities of employees. When things change, executives fix the specific gaps by adding more rules or systems to tighten efficiency and improve quality. We have identified eight distinct features of rules-based management: command, procedures, targets, change, efficiency, bureaucracy, power, and standards.

Change-based management styles dominate when volatility, uncertainty, and ambiguity in the internal or external environment increase. In response to rapid change, the focus of management shifts from control to change needed to adapt to new conditions. Managers restructure the organization, reallocate resources, and refine processes in response to the environmental changes. Executives tend to be reactive rather than proactive with limited learning from prior actions leading to a never-ending series of disruptive change initiatives of questionable value. We have identified eight distinct features of organizations in the change-based mode of operation: command, procedures, targets, change, emergence, self-organization, delegation, and options.

Engagement-based management is preferred by knowledge-driven organizations that operate in a stable environment. In a modern people-centric environment where knowledge sharing is key for success traditional, formal, command and control approaches become less effective. Self-responsibility and personal recognition are key motivators for knowledge workers to perform. Engagement-based methods combine informal and formal controls on knowledge inputs, behaviors, and outputs to align individual interests through visions, beliefs, boundaries, and values. We have identified eight distinct features of engagement-based management: self-responsibility, teamwork, attention, capabilities, efficiency, bureaucracy, power, and standards.

Capability-based management dominates when knowledge is widely distributed throughout the organization as complexity increases. The focus of management shifts to enabling collaboration and relationship building paired with a deep sense of purpose. Under these conditions, management transforms organizations in support of fast decision-making and proactive, flexible action which lead to robust outcomes. Capability-based management becomes the foundation for innovation in organizations. We have identified eight distinct features of capability-based management: self-responsibility, teamwork, attention, capabilities, emergence, self-organization, delegation, and options.

An analysis of the reference portfolio with 406 companies across the globe shows that 39% of companies operate in the rules-based mode, 16% in the engagement mode, 19% in the change-based mode, and 26% in the capabilities mode. Most financial services companies operate in the change-based mode.

METHODOLOGY

To gain insight into the digital readiness of the insurance industry, a validated diagnostic assessment instrument for scoring managerial contexts, agile maturity, dynamic capabilities, and outcomes were used. The Performance Triangle Diagnostic is a validated standardized assessment tool that reviews up to 102 elements related to people-centric, agile, and dynamic capabilities (Nold et al., 2018). Comparing results from insurance executives with results from a reference portfolio of 406 organizations in many industries it is possible to assess digital readiness relative to a much larger and more general population. The results provide a point of view on how to compete in the future. The study provides insight into three questions.

Question 1: Does the insurance industry have superior dynamic capabilities to compete in a dynamic market environment? By comparing the industry's agile maturity scores and the Performance Triangle dimensions scores it is possible to assess the insurance industry's current dynamic capabilities relative to those of other industries comprising the reference portfolio.

H1a: The insurance industry demonstrates significantly greater dynamic capabilities than the reference portfolio as measured using the dimensions of the Performance Triangle.

H1b: The insurance industry demonstrates significantly greater dynamic capabilities along the agile maturity scale than the reference portfolio.

Question 2: Do the insurance industry's current dynamic capabilities yield superior outcomes? The study tests the relationship between capabilities and outcomes, assuming that the industry's dynamic capabilities are unrelated to current performance, innovation, and growth outcomes.

H2: The insurance industry demonstrates significantly greater outcomes than the reference portfolio.

Question 3: Does the current management model fit the prevailing operating environment? The study identifies the current operating mode and assesses whether the current operating mode limits or enhances the insurance industry's ability to drive innovation and benefit from digitalization and the changing nature of work.

H3a: The insurance industry demonstrates a significantly stronger fit with operating modes for people management than the reference portfolio.

H3b: The insurance industry demonstrates a significantly stronger fit with operating modes for management in a VUCA environment than the reference portfolio.

The diagnostic instrument used to gather data on all three questions was one instrument that reviews dynamic capabilities, agile maturity, and the dominant operating mode. The diagnostic instrument is a standardized assessment tool that has been statistically validated, reliable, and proven in practice for over 20 years (Nold et al., 2018). The online survey consisted of 47 questions that were answered on a 9-point Likert-type scale.

Question 3 explores the current management model and whether the management model fits the needs for more innovation in a dynamic volatile, uncertain, complex, and ambiguous (VUCA) environment. The operating mode data provides insight into the current management model maximized the capabilities of people and fits the VUCA environment that characterizes the 21st century business environment. Participants answered bi-polar questions on management levers or styles to identify whether the company uses either traditional or people-centric management styles. The combined results indicate the dominant management model. Traditional management levers employ command and control techniques to control people and organize operations while people-centric managers rely on self-responsibility and self-organization that allows people to apply their capabilities and creativity to improve operations through innovation. Similarly, efficiency, power, and bureaucracy work well in a stable environment whereas operations in a dynamic environment require delegation, options, and self-organization.

For the purpose of presentations, the responses were normalizing on each element on a scale from 1 to 100. A score of 1 indicates that the organization has no capabilities while a score of 100 indicates excellent capabilities. The sample of insurance companies included data from 45 different insurance companies by 192 executives who participated in the survey between 2018 and 2020. 20 companies were based in Switzerland while the others were from various European countries. Most of the Swiss companies operate globally. Every participant company received a narrated report with results presented in a managerial style with visual thinking aids that were designed for executive purposes. The reference portfolio consists of a mix of 406 organizations in many industries, of all sizes, all types primarily located in Europe. The following results are presented more scientifically by applying descriptive statistics.

RESULTS

Dynamic Capabilities

Tables 1 and 2 show descriptive statistics comparing the insurance industry to the reference portfolio relative to the Performance Triangle elements, dynamic capabilities, and outcomes. The sample of the insurance industry (N=45) is compared with the reference portfolio (N=406). Since the samples are different sizes, the scores are averages for both groups and do not suggest attributes that are required to compete in a dynamic environment with innovation capabilities. T-tests, ANOVA, and correlations were performed to compare the insurance industry with the reference portfolio.

Table 1a: The Performance Triangle Elements Descriptive Statistics and t-test

	Insurance Industry (II)		Reference Portfolio (RP)		Variance Analysis		Test	
	Mean	Std Dev	Mean	Std Dev	Var II-RP	Var %	t-Test	Sig.
PT Elements	72.74	7.16	66.96	4.59	5.8	7.9%	4.29	0.002
Success	64.8	11.9	66.9	17.1	-2.2	-3.3%		
Culture	69.4	11.4	61.3	19.8	8.2	11.8%		
Leadership	66.7	12.8	61.5	18.0	5.2	7.8%		
Systems	64.4	12.4	62.8	15.6	1.6	2.5%		
Collaboration	74.4	15.5	65.2	21.0	9.2	12.4%		
Purpose	77.0	14.2	69.5	18.8	7.5	9.7%		
Relationships	79.6	12.2	71.6	19.0	8.0	10.1%		
Focus	61.5	13.5	62.9	20.7	-1.4	-2.3%		
Awareness	74.0	15.6	68.5	19.1	5.5	7.4%		
Trust	82.7	13.7	74.6	18.9	8.0	9.7%		
Choice	79.2	13.9	71.8	20.0	7.3	9.2%		

Table 1b: The Performance Triangle ANOVA, and Correlation

Source	ANOVA					Correlation	
	DF	SS	MS	F-value	Sig.	Corr	Sig
Regression	1	346.41	376.41	24.75	0.001	0.86	0.001
Residual Error	9	136.88	15.21				
Total	10	513.29					

Table 1a shows that most of the insurance industry's Performance Triangle elements are 5.8 points (7.9%) $t=4.29$, $p=.002$ better than the reference portfolio. Table 1b shows that there is a positive correlation; 0.86, $p=.001$ between the two groups. The insurance industry's results were

greater than the reference portfolio in culture, leadership, collaboration, purpose, relationships, awareness, trust, and choice. Success and focus are the only dimensions where the reference portfolio scores were greater than the insurance industry. H1a is accepted with the determination that the insurance industry’s dynamic capabilities are better than those of other industries.

Agile Maturity

With an Agile Maturity index of 68, the insurance industry reaches the ‘Changers’ level on the Agile Maturity scale. The agile maturity aggregate index score is computed as the average of the dynamic capabilities and outcome scores shown in Table 1. Figure 2 in the model section of this paper introduced and describes the Agile Maturity scale giving the reader insight into the agile maturity level construct.

Table 2 summarizes the elements that make up the Agile Maturity index. While the insurance industry scored 3.8 points (5.5%) higher than the reference portfolio; $t=1.67$, $p=0.344$ indicates that the difference between the groups is not significant. Consequently, H1b must be rejected.

Table 2: Agile Maturity Elements Descriptive Statistics and t-Test

	Insurance Industry (II)		Reference Portfolio (RP)		Variance Analysis		Test	
	Mean	Std Dev	Mean	Std Dev	Var II-RP	Var %	t-Test	Sig.
Agile Maturity	68.2	6.4	64.4	3.3	3.8	5.5%	1.67	0.344
Operations:								
Dynamic Capabilities	72.7	5.3	66.7	4.3	6.0	8.3%	5.54	0.032
People: Speed	74.3	11.1	69.5	13.7	4.8	6.5%		
Organisation: Agility	66.8	9.8	61.8	14.8	5.1	7.6%		
Work: Resilience	77.0	11.4	68.8	15.9	8.2	10.7%		
Outcomes	63.6	8.2	62.1	4.3	1.5	2.4%	0.68	0.566
Performance	72.2	13.5	66.7	19.3	5.5	7.7%		
Innovation	55.8	18.6	58.1	21.2	-2.3	-4.1%		
Growth	62.9	15.6	61.5	19.9	1.4	2.3%		

A composite mean of 68.2 for the insurance industry places the industry into the Changers level of agile maturity. Changers have a design for disruption. Whenever leaders believe that change is required they alter structures and reallocate resources in response to the changed conditions. As the environment evolves, changers keep restructuring in a never-ending cycle of organizational disruption. The fix for changers is almost always more control, increased direct leadership influence, and relentless customer focus.

The results suggest that the insurance industry is not significantly better positioned to adapt to changes in the operating environment than other companies. The changer’s maturity mode is insufficient for the insurance industry to be considered innovative.

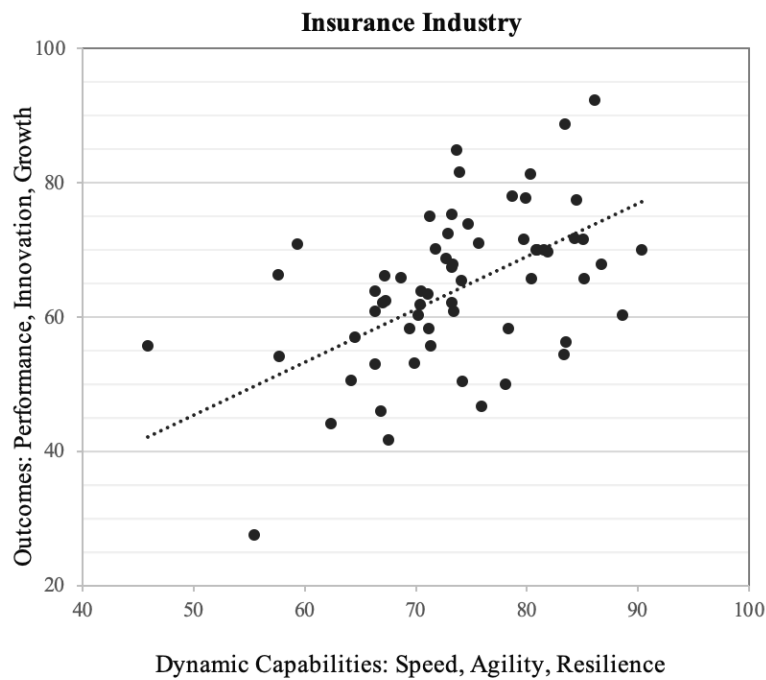
Capabilities versus Outcomes

Question 2 explores the insurance industry’s dynamic capabilities and how they translate into outcomes relative to the reference portfolio. Table 2 summarizes results from comparing the two groups. The data indicates that the insurance industry exhibits significantly greater levels of dynamic capabilities than the reference portfolio ($t=5.54$, $p=0.032$). However, the data indicates that while outcomes are greater than the reference

portfolio, the difference is not statistically significant ($t=0.68$, $p=0.566$). What this means is that the insurance industry lags the reference portfolio in converting dynamic capabilities into superior outcomes. Therefore, H2 must be rejected.

Figure 5 plots the dynamic capabilities and outcome results for all 45 insurance companies. Figure 5 shows that there is a wide range of individual characteristics among insurance companies. The differences within the industry are large. Some companies have clearly developed dynamic capabilities and deliver outstanding performance, innovation, and growth while others clearly are lagging.

Figure 5: Dynamic Capabilities and Outcomes



The Operating Mode

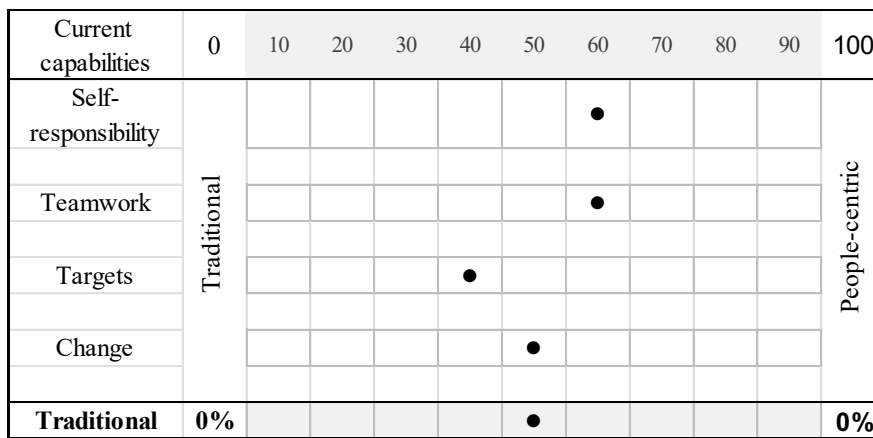
Operating Mode, People - Table 4 shows the horizontal axis of the context frame. The insurance industry manages people in the change mode which is very similar to the reference portfolio with a management style that is only slightly more traditional than the reference portfolio $t= 1.37$, $p=0.264$. The change mode appears to align well with the prevailing agile maturity level of the industry. The insurance industry employs targets to focus people’s efforts on goal achievement much more than the reference portfolio. The large variance in target setting offsets more positive results in self-responsibility and teamwork.

Table 4: Management Model and Levers – People

		Management Levers		Insurance Industry II)		Reference Portfolio (RP)		Variance Analysis		Test	
		10 - 49	50 - 100	Mean	Std Dev	Mean	Std Dev	Var II-RP	Var %	t-Test	Sig.
Management Style	How do we manage?	Traditional	People-centric	49.55	9.32	50.71	10.82	-1.16	-2.3%	1.37	0.264
People	How do we engage people?	Command	Self-responsibility	57.09	15.04	54.31	19.80	2.78	4.9%		
Organization	How do we coordinate work?	Procedures	Teamwork	55.32	15.12	51.28	18.16	4.04	7.3%		
Work	How do we mobilize the energy?	Targets	Attention	36.50	14.32	46.74	17.88	-10.24	-28.0%		
Operations	How do we enable change?	Change	Capabilities	48.91	17.29	49.80	18.73	-0.89	-1.8%		

To successfully operate in a people-centric and dynamic mode, the industry needs capabilities and management styles that are in line with the capability-based management model. The results indicate that the insurance industry does not operate in the capabilities mode significantly better than the reference portfolio. Therefore, H3 is rejected. Current capabilities that determine the dominant management model clearly are not ready for people-centric management in a dynamic environment that favours innovation.

Figure 6: Insurance Industry Management Model - People



A closer review of management levers in the insurance industry shown in Figure 6 offers insights into the barriers that prevent the insurance industry from being more innovative and indicates what it takes to be more innovative. Ideally, the levers should be aligned however the emphasis on setting targets will shape behaviors that inhibit self-responsibility and teamwork. This inconsistency creates interference that is preventing the industry from being more innovative and adaptive.

Operating Mode, Environment - Table 5 summarizes the diagnostic responses for four levers on the vertical axis of the context frame which offers insight into how the industry deals with a volatile, complex, uncertain, and ambiguous (VUCA) environment. Context levers offer a choice between organizational capabilities designed for a stable or a dynamic, VUCA, environment.

The responses show mixed results somewhere in the middle of traditional and dynamic. While the insurance industry appears to be slightly better positioned than the reference portfolio to adapt to the environment, the variance is not significant; $t=1.55$, $p=$

0.219. Therefore, H3b must be rejected. Similar to the operating mode for people, setting targets to improve efficiency gives managers more power which offsets more people-centric practices that encourage self-organization and allow people options when dealing with clients.

Table 5: Context Levers in a VUCA Environment

		Management Levers Scale		Insurance Industry II)		Reference Portfolio (RP)		Variance Analysis		Test	
Levers		10 - 49	50 - 100	Mean	Std Dev	Mean	Std Dev	Var II-RP	Var %	t-Test	Sig.
Management Levers		Traditional	Dynamic	50.75	5.66	47.37	1.35	3.37	6.6%	1.55	0.219
Volatility	How do we deal with volatility?	Efficiency	Emergence	43.25	25.45	45.74	20.07	-2.49	-5.8%		
Complexity	How do we act in complexity?	Bureaucracy	Self-organization	55.34	20.70	48.25	19.50	7.09	12.8%		
Uncertainty	How do we decide under uncertainty?	Power	Delegation	49.49	18.53	46.82	18.31	2.67	5.4%		
Ambiguity	How do we behave in ambiguity?	Standards	Options	54.90	20.64	48.68	19.77	6.23	11.3%		

Figure 7: Insurance Industry Management Model – VUCA Environment

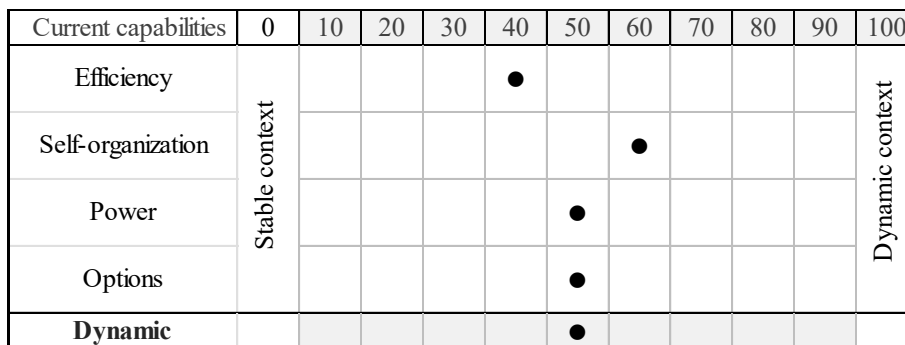


Figure 7 presents diagnostic responses for the management model on the vertical dimension of the context frame for the insurance industry. Overall, context levers show “stuck in the middle” or “we want the benefits of both”.

Typical characteristics for companies in the change mode of operations are the combination of efficiency and self-organization. Efficiency typically aligns with the dominant exploitation mode of operation. Executives in the exploitation mode attempt to leverage competitive advantages by improving efficiency to squeeze more and more profits from human and physical assets. Whereas self-organization helps companies operate more effectively in a dynamic environment. Self-organization and self-responsibility promote knowledge sharing which helps companies move towards the innovation mode of operation with an exploration-type business model.

The current pattern of management in the insurance industry is a dangerous mix when innovation is at stake. Self-responsibility and self-organization mean that people have the freedom to decide and act on their own within broad boundaries. As such, managers rely on the capabilities of people in their sphere of operation to get things done. People become free to be creative with innovation as the result. On the other hand, targets are a traditional control and command tool. Detailed targets narrow the span of responsibility of people. Managers control people with performance reviews. Traditional command and control techniques, at their core, are

counterproductive for a work environment that needs to stimulate innovation and growth. Moreover, systems (Table 1: Low score of 64) are the home of traditional targets, plans, budgets, control, and alike which limit innovation rather than stimulate creativity. It further becomes clear, that the lack of focus (Table 1: low score of 62), often perceived as missing priorities, interfering leaders and confusing goals, has its roots in systems that may have been adequate for a stable environment but are unsuited for today's people-centric and dynamic context.

CONCLUSIONS and MANAGERIAL IMPLICATIONS

This study was designed to gain insight into the readiness of the insurance industry to capture the benefits of digitalization in a dynamic VUCA environment. For more innovation, the insurance industry needs to adapt managerial systems (Goal setting, planning, performance management, budgeting) to operate in a capability-based mode. While a body of research exists with a focus on changing market dynamics and capabilities, the literature is thin when related to the insurance industry which is an industry with an intangible product that is loaded with knowledge where market differentiation comes from people applying their creativity, skills, and knowledge more effectively than competitors. Moreover, the prevailing industrial change approach to management in a dynamic environment makes the contribution of this paper even more important. The study discussed in this article makes the case for specific changes in the industry's management model and the operating systems to achieve higher levels of innovation and growth.

The overall result of this insurance industry study is clear: the insurance industry is only partially ready to fully benefit from the digital transformation and to successfully compete in a dynamic environment. While the industry's dynamic capabilities are slightly better than those of the reference portfolio industry average, these capabilities are not sufficient to enable superior innovation. Managerial systems are stuck in the industrial mode of operations with exploitation-type business models at the core. Exploitation-type business models limit the ability of people to fully unlock their potential and contribute with their creativity to more innovation and growth. The fix requires exploration-type business models with systems and capability-based management models that are designed to enable people to perform and the organizations to operate in a dynamic environment. To remain competitive, the industry should operate in the capability-based mode. With the current change-based mode of capabilities, the move toward the capability-based mode poses a real transformational challenge requiring agile capabilities to support the organization to cope with higher challenges and a management approach that enables people to apply their creativity.

The objective was accomplished by measuring dynamic capabilities and comparing them with a reference portfolio of companies, by assessing the agile maturity level of the organization, by positioning the industry in the context framework, and by identifying the industry's dominant management model. We suggest that this approach provides a more comprehensive interpretation of managerial capabilities and the readiness of a company (or industry) for 21st century management.

The approach has its benefits. First, clarity on the prevailing management model and options for the future enable executives to determine what management approach best works for their future challenges. Second, the breaking down of dynamic capabilities into its Performance Triangle elements offers opportunities to spot interferences and strengths of current capabilities. For every transformation, agile maturity establishes the starting point. Third, the relationship between capabilities and outcomes focuses transformation efforts on the things that matter most.

The study confirms previous empirical findings (Nold & Michel, 2018) and extends the analysis to a specific industry on how to successfully upgrade, reconfigure and renew managerial capabilities to sustain competitive advantage. We contribute to the performance

management literature with a practical approach on how to match context, management style, and capabilities. The methodology allows contrasting comparisons of managerial systems of practices that integrate organizational behaviors, capabilities, and performance outcomes.

While the study makes a noteworthy contribution, it is important to identify limitations and discuss future research. One of the biggest limitations of the study is the data was collected from a small number of participants. Moreover, participants were exclusively part of the young generation of upcoming leaders with the potential that one sends to further education to develop their managerial skills. Therefore, the feasibility of the approach should be tested in a large-scale study spanning more executives to be included in the survey. Moreover, the study was limited to the insurance industry. Clearly, more in-depth studies are needed to transfer the insights to other industries.

This insurance industry study makes the case for removing or modifying traditional management barriers as the means to achieve higher levels of innovation to better cope with a dynamic market environment. Moreover, shifting management modes includes risks. Understanding the risks of changing management modes is important. In the same direction, a better understanding of the effects of building dynamic capabilities would be desirable. More research is needed in both areas.

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