Research Article

Foresight Application in Strategy Formulation: Case Study of Thai Insurance Business

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ABSTRACT

Foresight originates with public-oriented purposes, while in modern corporations, it is perceived as a strategic tool. It assists corporations in realizing potential futures and identifying strategic business directions. This research aims to explore the foresight process and propose a corporate-oriented foresight framework. The proposed framework is conceptualized and designed based on theories, research findings, and literature. It is validated through a comparative study between the strategy formulated by the proposed foresight and the implemented strategy, as well as through in-depth interviews with insurance industry professionals. In this research, the strategy of Thai insurers listed on the Stock Exchange of Thailand (SET) from 2017 to 2020 is selected as a case study. The findings show that the corporate-oriented foresight framework consists of five process phases: 1) preparation, 2) understanding the past, 3) foresight, 4) vision visualization, and 5) strategy formulation. The foresight-based strategy enables the organization to adopt a product-driven approach with an integration of value chain transformation, rather than focusing solely on product development and digitalization, as seen in the current strategies of Thai insurers.

Keywords: Foresight, Future, Strategy Formulation, Insurance, Thailand

บทความวิจัย

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บทคัดย่อ

การมองภาพอนาคตริเริ่มมาเพื่อวัตถุประสงค์เชิงประโยชน์สาธารณะ แต่ในขณะที่องค์กรภาคเอกชนสมัยใหม่การมองภาพอนาคตถูกมองว่า เป็นหนึ่งในเครื่องมือในการกำหนดกลยุทธ์ ซึ่งมีส่วนช่วยให้องค์กรตระหนักรู้ถึงอนาคตที่อาจจะเป็นไปได้ในกระบวนการกำหนดทิศทางกลยุทธ์ทางธุรกิจ งานวิจัยชิ้นนี้มีเป้าหมาย เพื่อศึกษากระบวนการมองภาพอนาคตและเสนอกรอบกระบวนการการมองภาพอนาคตสำหรับองค์กรภาคเอกชน กระบวนการมองภาพอนาคตที่นำเสนอได้รับการออกแบบบนพื้นฐานของทฤษฎี ผลการวิจัย และเอกสารต่าง ๆ และได้รับการตรวจสอบด้วยการศึกษาเชิงเปรียบเทียบระหว่างกลยุทธ์ที่กำหนดโดยการมองภาพอนาคตและกลยุทธ์ที่ประยุกต์ใช้อยู่ในขณะนั้นและมุมมองต่อกลยุทธ์ของผู้เชี่ยวชาญในธุรกิจประกัน ในงานวิจัยนี้ ได้เลือกกลยุทธ์ของบริษัทประกันภัยไทยที่จดทะเบียนในตลาดหลักทรัพย์แห่งประเทศไทยเป็นกรณีศึกษา โดยกรอบการศึกษาครอบคลุมตั้งแต่ปี พ.ศ. 2560–2563 ทั้งนี้ผลการวิจัยแสดงให้เห็นว่า กระบวนการการมองภาพอนาคตสำหรับองค์กรภาคเอกชน ประกอบด้วย 5 ระยะกระบวนการ ได้แก่ 1) ระยะเตรียมการ 2) ระยะเข้าใจอดีต 3) ระยะมองภาพอนาคต 4) ระยะสร้างภาพวิสัยทัศน์ และ 5) ระยะการกำหนดกลยุทธ์ และกลยุทธ์ที่กำหนดโดยการมองภาพอนาคตช่วยให้องค์กรดำเนินกลยุทธ์ที่มุ่งเน้นพัฒนาผลิตภัณฑ์ควบคู่ไปกับการบูรณาการการเปลี่ยนแปลงห่วงโซ่คุณค่า แทนที่จะเป็นการดำเนินกลยุทธ์ที่มุ่งพัฒนาผลิตภัณฑ์และพัฒนาเชิงดิจิทัล เฉกเช่นกลยุทธ์ของบริษัทประกันภัยไทยในขณะนั้น

คำสำคัญ : การมองภาพอนาคต อนาคต การกำหนดกลยุทธ์ ประกัน ประเทศไทย

1. INTRODUCTION

In Thailand, foresight is not widely recognized, particularly in strategic formulation. Nonetheless, in the public sector, foresight is also not commonly used as a tool for policy design. Despite this, there are increasing initiatives for foresight implementation at the governmental level. The Digital Economy Promotion Agency (DEPA), an organization under the regulation of the Ministry of Digital Economy and Society, has developed a foresight report for the Thai digital economy in collaboration with the market research service provider Frost and Sullivan (Digital Economy Promotion Agency and Frost and Sullivan, n.d.). Two independent organizations have been established to study signals impacting the Thai socio-economic domain, develop effective foresight tools, and enhance collaboration among future studies professionals in Thailand: The Innovation Foresight Institute (IFI) under the National Office of Innovation Agency, and the Institute of Public Policy and Development (IPPD) (Innovation Foresight Institute, n.d.; Institute of Public Policy and Development, n.d.). In the private sector, it is rare to find corporations implementing foresight into their organizations. In 2020, the Thai property developer Magnolia Quality Development Corporation Limited (MQDC) became the first company to establish a foresight research unit to support the organization, under the name FutureTales LAB (FutureTales LAB, n.d.).

In the Thai insurance business, the COVID-19 outbreak significantly influenced health insurance adoption, even as mobility and economic activities were restricted by government orders. The consequences of these restrictions inevitably impacted everyone and all business sectors. Contrarily, health insurance sales grew by 30% in terms of the number of policies, reaching 5 million more insured policies than the previous year, with digital finance being greatly promoted. This growth indicates that Thais have developed a heightened awareness of the necessity of being insured under uncertain situations (Office of Insurance Commission, 2020).

Historically, Thai citizens have held insurance policies at an extremely low level (Office of Insurance Commission, 2020). The uninsured population in Thailand accounted for 70% of the total population (Economic Intelligence Center, 2020). Demographically, there are 6.8 million households with a high dependency ratio—the ratio of non-workers to workers in the household. Almost 90% of this high dependency group is uninsured. The study reveals that citizens identified as underinsured are likely to be uninsured regarding medical provisions due to insufficient coverage. The major reason for the lack of affordability of insurance is low income and wages (Eltorai & Eltorai, 2017). Correspondingly, research by Siam Commercial Bank Economic Intelligence Center endorses that low household income, high household debt, low marriage rates, and smaller family sizes are key considerations influencing insurance demand and purchase, particularly for life insurance. There were 4.8 million households without life insurance (Economic Intelligence Center, 2020).

In this era, digital lifestyles inevitably impact businesses, particularly in terms of selling insurance products or services. Digitalization affects not only sales channels but also the entire value chain of the insurance business, including product development, sales and marketing, underwriting/risk sharing, distribution, and claims, investment and business models that offer insurance as financial tools or risk-minimizing instruments (Albrecher et al., 2019; Inderst, 2016; Bloemers, 2018). The insurtech sector is expanding globally, supporting most traditional value chains (A Four-Step Practical Guide to Build Insurtech Value Chain Ecosystems, n.d.). However, the number of insurtechs in Thailand remains limited. There were only 9 startups classified as insurtechs, and most of these ventures were brokers offering online marketplaces for traditional insurers to sell their products virtually (Oliver Wyman & Singapore FinTech Association, 2020).

Several points can be observed in the Thai insurance situation: (1) The uninsured segment has not significantly decreased over time, despite the presence of many insurers and continuous market growth. (2) Digital tools have facilitated the ease of purchasing insurance policies for customers, although digitalization alone has not significantly reduced the number of uninsured individuals. (3) Innovations driven by insurtech, which are expected to catalyze new business developments for insurers, have not been able to accelerate the numbers of insured individuals effectively.

These observations raise concerns about the strategic management of insurers in Thailand, encompassing both life and non-life sectors. Key questions arise regarding their strategies for addressing unmet needs in the market and adapting to its dynamic context. Additionally, it is worth considering whether the application of foresight is beneficial for the formalization of corporate strategies in this industry. Therefore, the research objectives for this study are twofold: (1) To investigate foresight methods and propose a practical foresight method as a corporate-suite approach, and (2) To validate the foresight-based strategy by examining existing strategies. The insurance business has been selected as the case study. Seven Thai insurers listed on the Stock Exchange of Thailand (SET), each earning more than 5,000 million THB in revenue in 2020, are chosen for this study.

2. LITERATURE REVIEWS

There is confusion regarding the terms “forecast,” “predict,” and “foresight.” Prediction signifies an estimation for any period with intervals and is attributed a descriptive numerical value (Coates, 2010; Cuhls, 2003). Forecast refers to the action of prediction on a selected clarified topic, resulting in a quantitative description of a future option. Foresight is characterized by having more extensive time horizons and anticipating more actions (Miles, 2010), and it is more subjective to future priorities rather than selected goals (Cuhls, 2003). Notable Nordic foresight experts, define foresight as “a systematic, future-oriented, analytical, and interactive process that partially contributes to shared visions concerning long-term developments within science, technology, business, and society and facilitates the alignment

of relevant stakeholder groupings around desirable developments through strategic decisions and actions." (Andersen and Rasmussen, 2014).

Foresight is an approach to future determination within a stakeholder's professional domain. Its role is not to predict or forecast but to explore alternative futures to adapt to changes, seeking transformative and sustainable outcomes (National Innovation Agency and Thammasat University, 2019). Foresight integrates both arts and sciences, requiring critical thinking, creativity, and imagination. It does not focus on a singular future but considers multiple possible futures (Andersen and Rasmussen, 2014; Berkhout and Hertin, 2002).

Given that the future is inherently uncertain, the precision of foresight depends on the foresight timeframe. The degree of certainty of foresight is related to the foresight timeframe. A longer timeframe implies more uncertainty in foresight. According to these concepts, the future can be categorized into 6 groups:

(1) A preposterous future: This is an impossible future with no chance of happening.

(2) A preferable future or preferred future: This is a wished future represented in the form of a vision. The vision is a normative idea of thoughts toward the future, visualized as an image of the future.

(3) A probable future: This is a highly plausible future. The probable future is the most frequently mentioned type of future in future research since the probable future requires a timeframe and conditions for the future to be visualized.

(4) A possible future: This is a future that might happen, but there is no significant supportive evidence ensuring the chance of an event,

(5) A plausible future: This is a future that might happen with significant supportive evidence ensuring the chance of an event.

(6) a projected future: This is an expected or baseline future that is generic and likely to occur without surprises. The trend generating the projected future is easy to imagine; therefore, it is expected and defined as the baseline of the future. Nonetheless, the projected future retains a small degree of uncertainty, which could lead to its nonexistence due to changes in events, new issues, or new beliefs that shape the future.

Foresight was firstly implemented in Japan in the late 1960s as a method for public policy design, focusing on exploring socio-technological changes over the next 30 years, conducted at regular intervals (Kawahara, 1999). Before 1970, the tool used to predict the development of impactful technology was known as technological forecasting. Initially applied in the U.S. for technological trend analysis and national policy design, forecasting became crucial for national development. In 1972, the U.S. established an organization to analyze technological changes (Miles, 2010). Modern institutions like the European Union (EU) have institutionalized foresight practices. The European Commission's "The

Strategy" session formulates the EU's strategic direction, primarily developed through an annual strategic foresight report. The EU-wide Foresight Network synergizes collaboration and information exchange among EU members regarding the future (European Commission, 2022).

From the 1990s onwards, foresight has been applied to business objectives, serving as a tool for strategy formulation, prioritization, and innovation incubation across various industries. Corporate foresight (CF) is serving 3 perspectives.

(1) Future study: CF challenges the current situation to create better innovations by prompting adjustments in innovation activities, providing visibility into potential disruptive events, and necessitating adaptation of product development to environmental changes. Through these roles, foresight enhances the organization's capacity for innovation and strategic planning, contributing to improved overall business performance.

(2) Innovation management: CF signals initiatives by identifying customer trends, technological changes, competitive landscape shifts, and new business models, categorized into external changes necessitating new needs, science and technology developments enabling new products, and competitive landscape monitoring for future planning. And

(3) Strategic management: CF provides a directive path for innovative business strategies by adjusting portfolios, informing strategic direction, influencing business models, facilitating internal knowledge collection, and visualizing future scenarios (Adegbile, Sarpong, and Meissner, 2017; Mahdi and Seyes, 2017).

CF is identifying external changes by monitoring the external environment and gaining an in-depth understanding of these changes before a crisis occurs. It involves utilizing internal capabilities to synthesize external knowledge from various resources, generating actionable insights for decision-making. Thus, CF is an essential strategic management tool, helping corporations recognize and mitigate uncertainties (Dadkhah, Bayat, Fazli, Tor, and Ebrahimi, 2018; Pulsiri and Vatananan-Thesenvitz, 2021). It provides early warnings of changes that could impact the current strategy (Ruff, 2015).

In strategic management process, corporate strategy formulation involves sequential steps to think strategically about potential future scenarios, make tactical decisions, and form a strategic action plan (Conway, 2008). This process aims to develop the organization's competitive advantage (Nascimento et al., 2020). CF becomes the beginning of strategy formulation, allowing organizations to identify potential triggers for possible futures. These potential futures can be elucidated and leveraged to create competitive value or even initiate a new S-curve innovation for the organization. CF enhances the degree of certainty in strategic direction and action plans due to the strategy formulation process (Dadkhah et al., 2018). While foresight itself is not a directly actionable plan, it provides essential directions and insights needed to achieve targets with allocated resources (Cuhls, 2003). It supports the discovery of alternative futures and guides strategic planning.

Foresight framework, in general, is a methodical approach consisting of sub-techniques that sequence techniques to develop a vision of the future (Hines, 2020). The framework can be executed in various patterns depending on the objectives and context (Andersen and Rasmussen, 2014). In some cases, foresight requires data interpretation to understand the context, way of thinking, and even beliefs to realize the future (Coates, 2010). The complexity of the context is one of the factors affecting the diversity of the foresight framework's methods. The National Innovation Agency (NIA) revealed that future complexity should accommodate the realization of this complexity and the foresight purpose, leading to different foresight processes (National Innovation Agency and Thammasat University, 2019). In the foresight framework literatures, various frameworks have been proposed with different purposes and domains. Different purposes also lead to different foresight processes. The purposes can be holistically classified into horizontal foresight, vertical foresight, and a combination of horizontal and vertical foresight. Horizontal foresight is broader in terms of domains or boundaries, while vertical foresight is more focused on specific topics or domains. The combination of the two involves a comprehensive approach, considering foresight within a certain domain and its effects on external factors (Andersen and Rasmussen, 2014).

Foresight method can be categorized into 3 distinct groups: qualitative, quantitative, and semi-quantitative methods (Turturean, 2011).

(1) The qualitative method determines foresight outputs using non-numerical approaches, relying on subjective tools such as expert panels, relevance trees, SWOT analysis, literature reviews, backcasting, and futures wheels.

(2) The quantitative method, on the other hand, employs numerical approaches, utilizing calculable tools like trend analysis, modeling and simulation, trend extrapolation, multi-stage analysis, and future workshops.

(3) The semi-quantitative method combines numerical and non-numerical approaches, incorporating techniques such as monitoring technology, brainstorming, morphological analysis, questionnaires/surveys, scenario planning, Delphi, key technologies, technology road mapping, cross-impact analysis, stakeholder mapping, patent analysis, and text/data mining. Contrarily, the National Innovation Agency (NIA) defines foresight methodology based on the complexity of the future and the objectives of foresight. When plotting these two factors on an X-Y graph, with the vertical axis representing future complexity (structured vs. unstructured) and the horizontal axis representing foresight objectives (future design vs. future analysis), the NIA's foresight method is clustered into four types (Foresight Tools, 2019).

(1) The ideation-based approach conceptualizes the vision of the future using creativity and ideation, suitable for unstructured futures, utilizing methods such as visioning and the Delphi technique.

(2) The calibration-based approach analyzes unstructured futures by comparing them with manifested evidence or information, employing trend and megatrend analysis.

(3) The formulation-based approach designs structured futures through future scenario building and analysis or science fiction methods. Lastly, (4) the projection-based approach analyzes structured futures to cope with projected futures, utilizing tools like technology roadmaps, backcasting, and bibliometrics.

Some extents of literature reviews, various foresight frameworks have been identified, which are often used as foundations for developing alternative foresight frameworks. Researcher has summarized these frameworks demonstrated in Table 1.

In summary, there are various ways to apply the foresight framework for corporates, most commonly as a foundation for developing an alternative foresight framework. This holistic view of the framework consists of 5 main phases:

(1) Phase of preparatory: This phase involves identifying the foresight boundary or domain. Clear objectives and goals are essential to avoid misinterpretation and ensure information accuracy throughout the foresight process (Hines and Bishop, 2013; Coates, 2010). Miles (2013) highlights the importance of outlining foresight mandatory requirements and conditions. Pinto and Medina (2020) and Nugroho and Saritas (2009) emphasize starting with identifying needs and priorities, while Inayatullah (2008) stresses defining conditions to understand needs more deeply. Other approaches, such as Cuhls (2003), focus on planning foresight as a project by establishing a project charter and recruiting a project team.

(2) Phase of understanding the past: This phase accesses past events that affect the present and aims to link the past, present, and future. Understanding historical patterns provides a clear view of the present (Carleton et al., 2013). Inayatullah (2008) and Rattanawaraha (2020) argue that past events act as transformative triggers influencing present and future occurrences based on the principle of continuity, which states that past events and conditions will continue into future events and conditions. However, Hines and Bishop (2013) and Cuhls (2003) do not include an understanding of the past in their foresight frameworks. Carleton et al. (2013) suggest using tools like the technology adoption curve and progression curve to understand historical patterns.

(3) Phase of foresight: This phase defines the driving factors influencing the domain's alteration. A current situation scan captures the development of environmental surroundings (Andersen and Rasmussen, 2014; Carleton et al., 2013). The scan provides a wide range of information, including social, technological, economic, environmental, and political factors. Internal factors such as beliefs, emotions, perceptions, cultures, and paradigms also influence future developments including the perceived value of customers (Conway, 2006) and Berkhout and Hertin (2002). The identification has 2 scanning characteristics: (1) scanning for changes in surroundings or conducting an exploratory search for weak

signals of the future, and (2) scanning particular topics for future relevance. Identifying key drivers is essential after exploring surroundings and identifying tendencies Hines (2020) and Washida and Yahata (2020). These drivers, also known as signals or triggers, are crucial in developing future scenarios (Coates, 2010; FutureTales LAB, 2021). The trend-countertrend paradox, explained by the principle of continuity, indicates that when a trend is occurring, an opposite trend will also emerge (Inayatullah, 2008; Rattanawaraha, 2020). Washida and Yahata (2020) argue that capturing large amounts of information and identifying key drivers can be developed into future scenarios, termed "scenario planning."

(4) Phase of vision visualization: This phase provides stakeholders with an understanding of foresight results. Vision visualization can vary depending on the audience and detail level, whether at the corporate, business, departmental, or product levels, determining the corresponding impact (Carleton et al., 2013; FutureTales LAB, 2021). Other approaches, such as those by Coates (2010), Cuhls (2003), Dadkhah et al. (2018), Inayatullah (2008), and Miles (2013), do not include visualization in their foresight processes.

(5) Phase of strategy formulation of vision: Once the destination of foresight is defined, the execution of foresight must be integrated into strategy-making processes to shape corporate direction and strategic milestones (Carleton et al., 2013). Establishing a holistic view of the strategy and an action plan to drive foresight results forward is crucial (Coates, 2010; Cuhls, 2003; Dadkhah et al., 2018; FutureTales LAB, 2021; Miles, 2013).

Table 1: A Review of Foresight Framework

Framework	Sector	Summary of Foresight Step	Key Findings
Carleton, Cockayne, Antti-Jussi Tahvanainen, and Teknologian Kehittämiskeskus (2013)	Corporates	(1) Developing a long-period, clear view based on historical pattern (2) Developing ability to see growth existing today and extending it into the future. (3) Defining solution path to the future (4) Addressing team (5) Composing and communicating the innovation vision	The researchers present a set of tools for foresight practitioners working in innovation development, market development, or vision development for corporate clients. However, the presented framework does not recommend any specific purpose. The implication of the framework requires practitioner justification. The framework does not reveal an actionable plan or a strategy for implementation, but only a future vision. Holistically, the framework starts with an understanding of the past and the present. Then, it explores future signals and amplifies the signals for a possible future.
Coates (2010)	Government and Corporates	(1) Describing the system elements' definition and relationship (capital, infrastructure, people, energy, customs and laws, process etc.) (2) Identifying the key factors and the stakeholders and driving forces (3) Exploring the trend of future using the driving forces (4) Developing an alternative future identification of a desirable future for strategic direction and policy. (5) Developing a policy with actional plans	Joseph F. Coates is a consultant in strategic foresight, servicing governments and corporates in the US. The framework is applicable to future studies, public policy development and business direction settings. Holistically, the foresight is simple and easy to adopt. The framework starts by defining the structure of foresight, then identifying the trends and alternatives. However, in developing policy and an action plan, the desirable future is an in-take for policy and action plan for implementation.
Cuhls (2003)	Government	(1) Collecting trends from experts and non-exports on the topic (2) Classifying and prioritizing by recruited participants via group discussion (3) Selecting desirable futures as a key trend for scenario development by the group (4) Planning strategically to execute the desirable futures as a result of scenario planning	The framework is presented for governmental policy and national policy that are simplified from "Futur" a process-oriented version of German foresight. Holistically, the framework can be set up as a 1–1.5 years project which is a time-consuming foresight process for a corporate strategy formulation. The framework is a group session model to obtain the deliverables of each foresight step. This approach provides the result of foresight with a desirable future.

Table 1: A Review of Foresight Framework (Cont.)

Framework	Sector	Summary of Foresight Step	Key Findings
Dadkhah et al. (2018)	Corporates	Foresight phase (1) Identifying trends, (2) Determining a signal (3) Scanning environmentally with foresight maturity and stakeholder analysis (4) Creating a scenario (5) Defining and visioning the future. Strategy formulation phase (6) Analyzing financials, market capability and 5-Force (7) Creating strategic options (8) Formulating the strategy for implementation of future	The framework is proposed for corporates using an integrational concept between future analysis and strategy formulation, for which the steps are separated into 2 phases: determination of macro-level goal or determination of vision (foresighting phase) and company-level planning (strategy formulation phase) Holistically, the framework starts with understanding the surroundings and then following with identification of future scenario development. Lastly, the framework allows practitioners to potentialize the strength and weakness of organization. Hence, the approach provides the result of foresight with a possible future with robust strategy.
FutureTales LAB (2021)	Government/ Corporates	Policy-making approach (1) Scanning a horizon (2) Identifying the mega trends (3) Identifying the key drivers for industry (4) Analyzing morphologically the key drivers (5) Developing an evidence-based scenario (6) Conducting Causal Layered Analysis (7) Assessing its threats and opportunities (8) developing a policy Corporate-purposed approach (1) Scanning a horizon (2) Identifying the mega trends (3) Identifying the key drivers for industry (4) Analyzing morphologically the key drivers (5) Developing an evidence-based scenario (6) Envisioning alternative future (7) Defining an action plan	FutureTales Lab is a research center focusing on future planning, future cooperation and proactive advocacy under the Magnolia Quality Development Corporation Limited (MQDC), a property developer. The approach developed by FutureTales Lab has 2 different main objectives: a corporate purpose and a policy-making purpose. These 2 different methods start with identical steps which are a horizonal scan, identification of mega trends and identification of key drivers specific to the industry or to the focused domain. Hereafter, the approach will be different. Holistically, the framework starts by understanding the past and the present. Then, it follows by exploring the signal of the future and amplifying the signal to possible future. Lastly, the framework develops the implementation of foresight into action by the establishment of a plan or a policy.

Table 1: A Review of Foresight Framework (Cont.)

Framework	Sector	Summary of Foresight Step	Key Findings
Hines and Bishop (2013)	Corporates	(1) Identifying a geographic scope, time horizon and key questions (2) Assessing present condition of stakeholders and historical analysis (3) Identifying a baseline future (4) Analyzing alternative future with baseline analysis, uncertainty and prioritization of uncertainty. (5) Visualizing a preferred future (6) Choosing a future, categories, identification of potential implication and issue/opportunity (7) Planning for futures by prioritization of issue, selection of issue and outlining the prioritized issue (8) Indicating a monitoring and tracking future (9) Summarizing highlights of the issue resulting from the foresight	The framework is focused on foresight preparation from the scope, objective, timeline, boundaries and key points that may impact on the foresight result, including the person/team who will oversee the foresight. Holistically, the framework starts with understanding the present and the past before identifying baseline future. The foresight is developed by the baseline future which is projected from the present events or situations and is expanded into boarder futures, which are alternative futures out from the baseline, with one being the adopted approach from CLA's Inayatullah, (2008). Finally, the desirable future is selected and prioritized.
Inayatullah, (2008)	Future Study	(1) Mapping of historical event and constructing the present and plausible future with a concept of “the future triangle” (2) Anticipating a new social trigger by determination of issues and expansion of the consequences of such issues (3) Searching for an historical pattern of change toward the issues and its consequences, understanding the issues to a deeper level using CLA. (4) Exploring future alternatives via scenario development and finally transforming the scenarios into actional and understandable plans	Sohail Inayatullah is a professor in Futures Studies. The framework is designed for future exploration. The framework identifies the present and plausible futures with a belief that the past has its own consequence regarding the present and the present has its own consequence on the future. Furthermore, there is a belief that there is a paradigm in each signal which analyzes the psychological level of each signal, which is known as casual layered analysis (CLA). The approach provides the result of foresight with a desirable future.

Table 1: A Review of Foresight Framework (Cont.)

Framework	Sector	Summary of Foresight Step	Key Findings
Miles (2013)	Corporates	(1) Determining foresight objectives, requirements and conditions (financials and non-financials), the overall actions to be done and designing the foresight approach appropriate for the objectives and requirements (2) Identifying key stakeholders to participate in the foresight activity (3) Synthesizing information and creating future options (4) Mobilizing foresight future into actionable items and a plan (5) Evaluating the foresight program	The approach is generic and can be applied to any foresight; however, there is no suggestion that this approach is suitable for corporates. The framework is focused on foresight preparation; clear objectives and requirements, and the foresight participants.
Nugroho and Saritas (2009)	Corporates	(1) Drawing a boundary/topic of foresight and actors with a defined relationship for each boundary/ topic. (2) Linking participants to analyze position/role of participant in the network (3) Analyzing the network to obtain signal for future from the network (4) Analyzing the signal with other inputs of collaboration and actions (macro and micro level analysis) (5) Evaluating the foresight actors and their relationships	This improvement of Miles' foresight with the network concept can be applied in deriving inter-relations among the data and constructing the model to reveal constructive foresight outcomes.

Table 1: A Review of Foresight Framework (Cont.)

Framework	Sector	Summary of Foresight Step	Key Findings
Pinto and Medina (2020)	Corporates	(1) Identifying and analyzing the needs and latent needs together with expectations from all stakeholders (2) Conjecturing the fiction future as a guideline for future imagination (3) Developing the fictional scenario (4) Visualizing the scenario (5) Building a prototype (6) Developing strategic planning from implications of blue ocean strategy after vision statement has been defined	The framework is developed under aspects of science fiction, involving speculative and operational processes. Holistically, the framework starts by understanding the present needs and expectation and then following with fictional imagination being integrated into the future scenario. Hence, the approach provides the results of foresight with a desirable future.
Mohsen Taheri Demneh, Zackery, and Amir Nouraei (2023)	Corporates	Phase of perceiving (1) Identifying objectives and establish organization (2) Analyzing literatures and secondary resources (3) Using PESTEL for environmental scan Phase of prospecting (4) Identifying key drivers and ranking importance matrix (5) Analyzing independency of key drivers (6) Developing scenarios in ScenarioWizard Phase of probing (7) Developing response according to scenario planning	The foresight framework was applied to small and medium-size enterprise in packing industry. The framework aimed to enhance results of foresight by integrating into strategic planning with understanding of the external, designing strategic response based on scenario planning and validating pre-existing strategic planning

Table 1: A Review of Foresight Framework (Cont.)

Framework	Sector	Summary of Foresight Step	Key Findings
Sokolova and Vishnevskiy (2022)	Corporates	3 Stages of foresight 1st Stage (1) Estimating a future demand (2) Identify segment of market and white spot 2nd Stage (1) Prioritizing of product group (2) Identify possible priorities (financials) (3) Assessing the future market 3rd Stage (1) Creating routes (2) Determining groundwork (3) Identifying the missing in the market	This foresight framework was applied for a research and development project in state-owned enterprise in Russia. The framework was essentially to determine a gap in future market comparing with existing market and capacity. The result of foresight produced a promising product and potential market.
Atilla Öner and Göl Beşer (2011)	Corporates	(1) Identifying a weakness of signal (2) Creating a roadmap (3) Developing a scenario (4) Creating “Pictures of the Future” which is a combination of roadmap and scenario development	This foresight framework was applied for project development in multinational corporate in Germany
Hammoud and Nash (2014)	Corporates	(1) Guiding questions (2) Scaning environment (3) Identfying trends (4) Developing scenario and stories of future (5) Constructing the action plan	This foresight framework was designed for corporates. The framework started with identification of its objectives and concern, environment realization, identification of trend, development of future story and definition of actionable plan.

Table 1: A Review of Foresight Framework (Cont.)

Framework	Sector	Summary of Foresight Step	Key Findings
Rohrbeck and And Heuer (2007)	Corperates	(1) Ideating on consumer and technology perspective (2) Communicating the ideas (3) Developing the concepts (4) Developing the product incorporating consumer and technology contributions	This foresight framework was designed for innovation development in corporates. The framework was conducted as a workshop format where product development team, project management team and Technology team were participated.
Vishnevskiy, Meissner, and Karasev (2015)	Corporates	(1) Scanning environment (2) Identifying and prioritizing mega trends (3) Developing future scenarios (4) Developing a strategic roadmap	This foresight framework was designed under Russian practice which the framework revealed 2 distinguished parts: foresighting part and implementation part. It offered a strategic roadmap as a deliverable which enabled organization the implementation direction.

3. METHODOLOGY

After intensive literatures review on corporate-suited foresight framework, for this research, the framework is consisting of 5 main phases as presented in the Table 2.

Table 2: Process Steps of a Proposed Foresight Framework

Phase	Foresight step	Method
1. Preparatory	1. Domain description	Geographic scope, time horizon, domain map
2. Understanding the past	2. Identification of historical pattern	S-curve of technology change and Janus Cones
3. Foresight	3. Identification of mega and micro trends	Social, Technology, Economy, Environment, Politics, and Values (STEEPV) analysis
	4. Identification of key drivers	Strengths, Weaknesses, Opportunities, and Threats (SWOT) analysis/value proposition of the trend
	5. Scenario development	Web of impact
4. Vision Visualization	6. User persona creation	Future user persona
	7. Vision statement	Short description of idea to inspire, energize and help others visualize the targeted future opportunity
5. Strategy Formalization	8. Strategic action plan	Roadmap development

In the preparation phase, the domain is identified based on the following topics: foresight definition, scope, time horizon, and constraints (Hines & Bishop, 2013). The preparatory steps are outlined as follows:

(1) Domain definition: The domain represents the boundary of what is foreseen in the future. It should be clearly defined at the beginning of the foresight process to avoid scope creep. While the domain may be initially broad and somewhat undefined, it should be refined with clear intentions as the process progresses.

(2) Geographic scope: This step involves defining the specific region or territory for the foresight activity, such as Thailand or Bangkok. The geographic scope is essential for subsequent analyses, such as the Social, Technological, Economic, Environmental, Political, and Values (STEEPV) analysis.

(3) Time horizon: The time horizon specifies the length of the future being considered. The length of the time horizon inversely affects the degree of uncertainty. According to the National Innovation Agency (NIA), the time horizon can be divided into 3 lengths (AGRiP, n.d.).

- Short term (3–5 years): At this timeframe, quantitative foresight methods are suitable due to the availability and accuracy of existing information. The short-term future aligns with projected or probable futures.
- Middle term (6–10 years): In this timeframe, quantitative methods may be less appropriate. Instead, qualitative approaches are more suitable, resulting in futures that are more plausible in nature.
- Long term (more than 10 years): For long-term foresight, qualitative methods are predominantly used. The character of the long-term future might include preposterous or preferable futures, which can sometimes fall outside the cone of the future, representing unexpected or seemingly impossible outcomes. According to the Association of Governmental Risk Pools (AGRIP), a 20-year foresight horizon allows for strategic organizational planning, as it spans sufficient time to capture generational shifts. The longer the timeframe, the more complex and difficult the foresight becomes, reflecting the inherent uncertainty (AGRiP, n.d.).

(4) Domain map: This identifies what is included and excluded in the foresight process. It delineates the boundaries and key areas of focus, guiding the overall foresight activity.

In this research, the foresight was applied to insurance business in Thailand focusing on business strategy of listed insurers which “insurance business” was defined as a domain definition of foresight, “business strategy of listed insurers” was defined as a sub-domain and “Thailand” was a geographic scope which defined what is inside of influence and what to be left outside of influence throughout the foresight. The time horizon is how far the future will be expected to look forward to. Thus, the time horizon for this reseach is 10 years.

Secondly, in the phase of understanding the past, the process involves identifying historical patterns using the S-curve of technology adoption in the Thai insurance sector. This S-curve (Figure 1) was constructed using the methodology by Carleton et al. (2013) with secondary data collection from 28 annual reports from 7 insurers published during the period 2017–2020, as well as other secondary resources to capture technological developments in insurance. The curve was drawn with event timelines, industry lifecycles, and other historical technological developments.

Janus cone presents both backward and forward views with defined timelines against historical events, allowing an understanding of multiple, overlapping, and intersecting events in a single view. The Janus Cone consists of two cones with the center marking “today.” The left cone represents the past, and the right cone represents the future, with the vertical market denoting specific times (Carleton et al., 2013). In this research, the Janus Cone demonstrates events occurring in 5-year intervals until

2021 and was constructed using secondary data collection and fabrication by Miro Online Software (Figure 2).

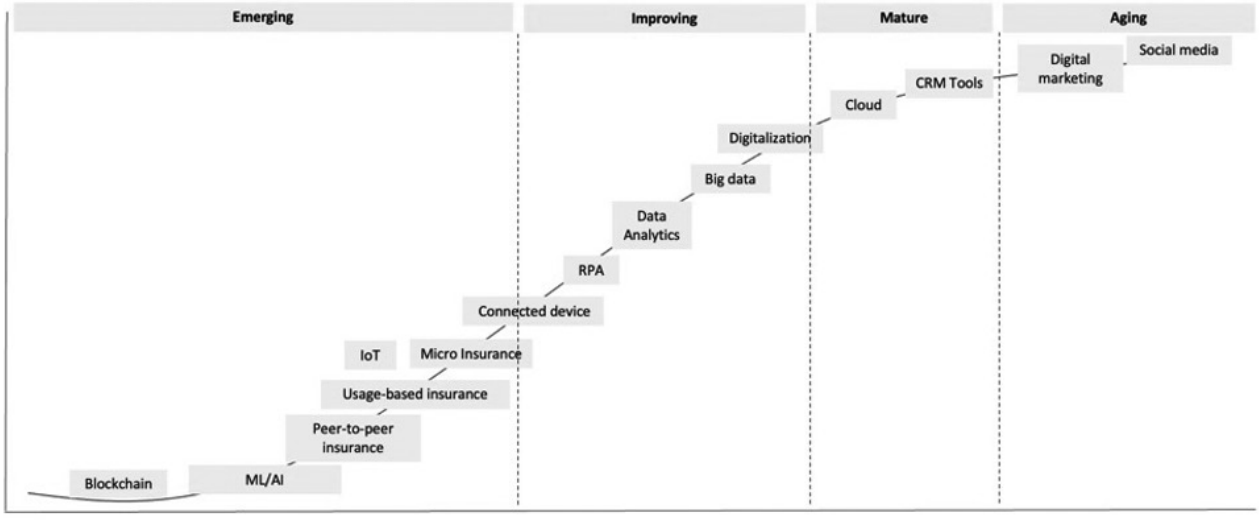

Figure 1: S-Curve of Technology Adoption in Thai Insurance

Adapted from "Playbook for Strategic Foresight and Innovation: a Hands-On Guide for Modeling, Designing, and Leading Your Company's Next Radical Innovation", by T. Carleton, W.R. Cockayne, Antti-Jussi Tahvanainen, and Teknologian Kehittämiskeskus, 2013, Tekes, https://app.box.com/s/i1q85p829xm1ez0xl0r9mjp2ana2ov9r

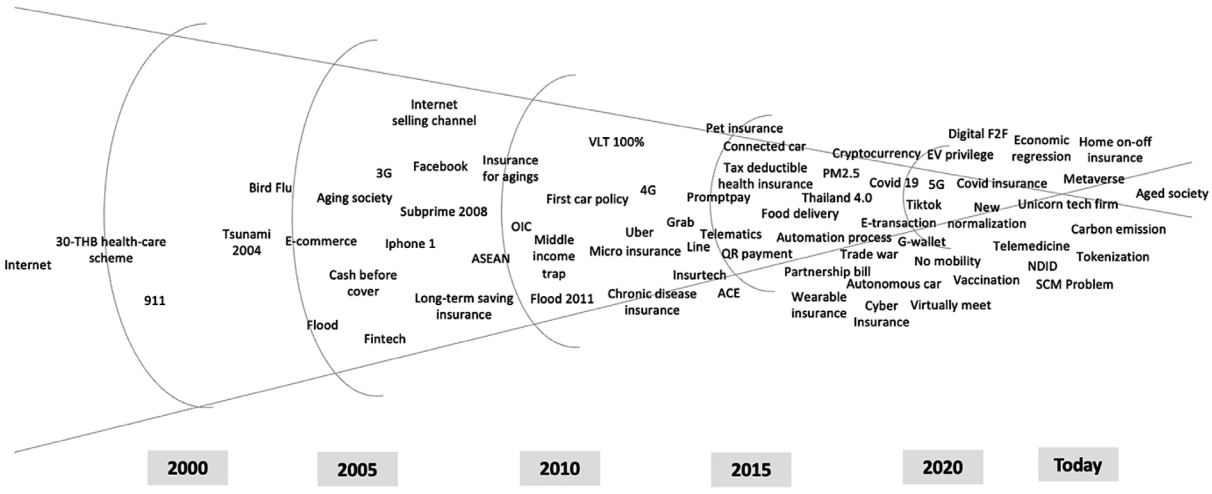

Figure 2: Janus Cone

Adapted from "Playbook for Strategic Foresight and Innovation: a Hands-On Guide for Modeling, Designing, and Leading Your Company's Next Radical Innovation", by T. Carleton, W.R. Cockayne, Antti-Jussi Tahvanainen, and Teknologian Kehittämiskeskus, 2013, Tekes, Retrieved from https://app.box.com/s/i1q85p829xm1ez0xl0r9mjp2ana2ov9r

Thirdly, the foresight phase comprises 3 steps:

(1) Identification of mega and micro trends: This step involves capturing and monitoring essential changes from various perspectives of current situation, including Social, Technology, Economy, Environment, and Politics, collectively known as the STEEP framework. However, FutureTales Lab by MQDC has highlighted the importance of including values in this analysis, reflecting social and cultural beliefs that differentiate the trends (FutureTales Lab, 2021; Loveridge, 2002b). Therefore, the STEEPV is used. The STEEPV analysis (Table 3) is constructed using secondary data sources.

(2) Identification of key drivers: This step aims to determine the key driving factors, trends, and signals for future development. However, before the selection of driving keys (Table 4), those trends' Strenght-Weakness-Opportunity-Thread analysis (SWOT) must be performed (Table 5). Since those trends are externally influenced, the integration of SWOT analysis allows the foresight's result to be more specific to the domain and the domain's capability by leveraging a competitive advantage's strength and mitigating a weakness. Nonetheless, the other key trends are fallen into other quadrants shall be titled with different statuses and different measures: (Leopairote, 2021)

The identified key drivers are evaluated for their degree of possibility and impact by plotting them into a matrix with two parameters: possibility and impact, referred to as the "value of proposition matrix," as demonstrated in Figure 3. Trends that fall into the category of high impact and high possibility are defined as "Important Forces" and require prompt response, termed "Act Now." Trends with high impact but low possibility are defined as "Latent Forces," requiring planned responses, termed "Informed Strategy." Trends with low impact but high possibility are defined as "Monitor," requiring close monitoring, termed "Keep Watching." Trends with low impact and low possibility are defined as "Unimportant Forces" and can be revisited later (Leopairote, 2021).

(3) Scenario development: The selected key drivers form the basis for building scenarios by applying a web of impact that explores both plausible and possible futures based on specific key drivers. Scenario development using the web network starts by placing key drivers from "Important Forces" as the network's starting points. It then identifies connections and impacts between key drivers by adding related keywords and drawing lines representing relationships (Leopairote, 2021; FutureTales Lab, 2021). The resulting web of impact is demonstrated in Figure 4, linking each key driver and developing future scenarios for the foresight period, as elaborated in Table 6 and as visualized in Figure 5.

Table 3: STEEPV Analysis

Social	Technology	Economics
• Aged society • New normalization • Remote work/work anywhere • Lower birth rate • COVID 19 policy revocation • Work and life integration • Uninsured citizens • E-shopping behavior and E-banking • E-finance adoption • Virtual world/metaverse	• Insurtech • Digitalization and application • application and social media • Artificial intelligence, machine learning and internet of things • EV and autonomous car • 4G/5G telecommunication • Optical character recognition (OCR) • National digital identification (NDID) • Blockchain/cryptocurrency • Metaverse • Behavioral-based analytics	• Foreign direct investment to ASEAN in insurance business • Regressive economy • Household debt and income • Economic recession and recovery • Vehicle sale volume • Public project expenditure • Import/export recovery • Travel and tourism • Interest rate • ASEAN insurtech • Transportation and road improvement upcountry
Environment	**Politics**	**Values**
• Pet bill • Global warming • Zero carbon emission • COVID 19 Pandemics • Flooding • Sinking city: Bangkok	• Social security • Citizen welfare • Expense and tax distribution • Constitution reformation • COVID 19 controls • Digital face-to-face policy • Insurance regulation by regulator • Lower loan approval • E-finance/e-money • ASEAN new venture	• Health awareness • Holds insurance for risk minimization. • Insurance for tax reduction • COVID 19 policy revocation

Note. Adapted from *FutureTales Lab. (2021). Future of Urbanisation Scenarios GREATER BANGKOK. Bangkok*. Retrieved from https://www.futuretaleslab.com/upload/1OVdxCjUqTLrzSNH.pdf

Table 4: List of Possible Key Drivers

Talent development	Analytics/AL/ML	Fraud detection	Partnership
Cloud	Simplified product	Customer persona	Incubation
Human customer service	Infrastructure development	Customer segmentation	OCR/Image process
Process innovation	Autonomous car	FDI to ASEAN	New way of work
Digitalization and RPA	Cryptocurrency	Metaverse	Tokenization
EV	Micro insurance	Old-before-rich	Global warming
Wellness	Blockchains	Big data	New underwriting

Note. Adapted from *FutureTales Lab. (2021). Future of Urbanisation Scenarios GREATER BANGKOK. Bangkok*. Retrieved from https://www.futuretaleslab.com/upload/1OVdxCjUqTLrzSNH.pdf

Table 5: SWOT Analysis of Key Drivers

Strengths	**Weaknesses**
(1) Variety of insurer choices and products in the markets (2) Insured person is under protection of regulator. (3) Insurer has strong networks and relationship with financial institutes. (4) Most of top insurers have good financial status.	(1) Sales revenue still relies on agent/bancassurance costing at least 18–35% of total premium sold. (2) Less innovative business model as revenue relies on risk-based premium. (3) Too many insurers (4) Product has not yet captured majority of population. (5) Slow technological development (6) Lack of young talent with tech-competency Business model still relies on traditional approach.
Opportunities	**Threats**
(1) Sales revenue still relies on agent/bancassurance costing at least 18–35% of total premium sold. (2) Less innovative business model as revenue relies on risk-based premium. (3) Too many insurers (4) Product has not yet captured majority of population. (5) Slow technological development (6) Lack of young talent with tech-competency (7) Business model still relies on traditional approach.	(1) Regulation in product development is still complicated. (2) Aged society causes lower population and higher premium due to the age. (3) Old before rich (4) Understanding of insurance necessary (5) Increased household debt and decreased income (6) Financial status of small insurers after Covid policy revocation.

Note. Adapted from "Business Management in The World of Disruptions Building Future-Ready Organization", by K. Leopairote, 2021, Lecture for Executives MBA Program, Thammasat Business School.

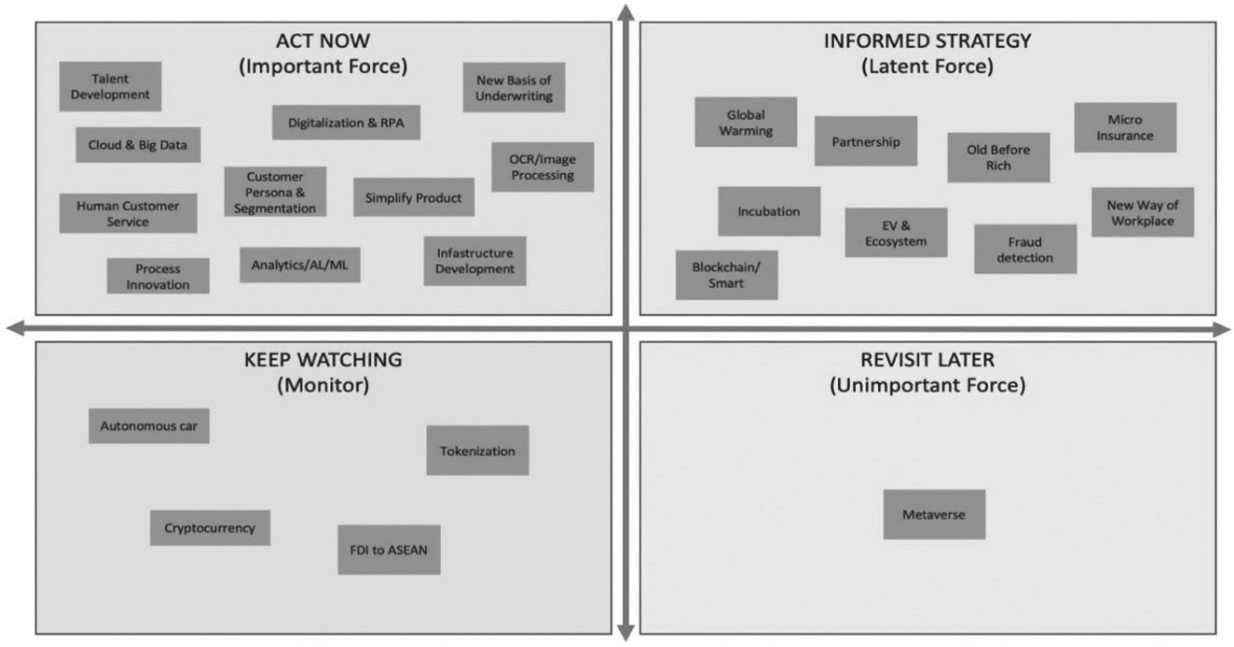

Figure 3: Value Proposition of Key Drivers

Adapted from "Business Management in The World of Disruptions Building Future-Ready Organization", by K. Leopairote, 2021, Lecture for Executives MBA Program, Thammasat Business School.

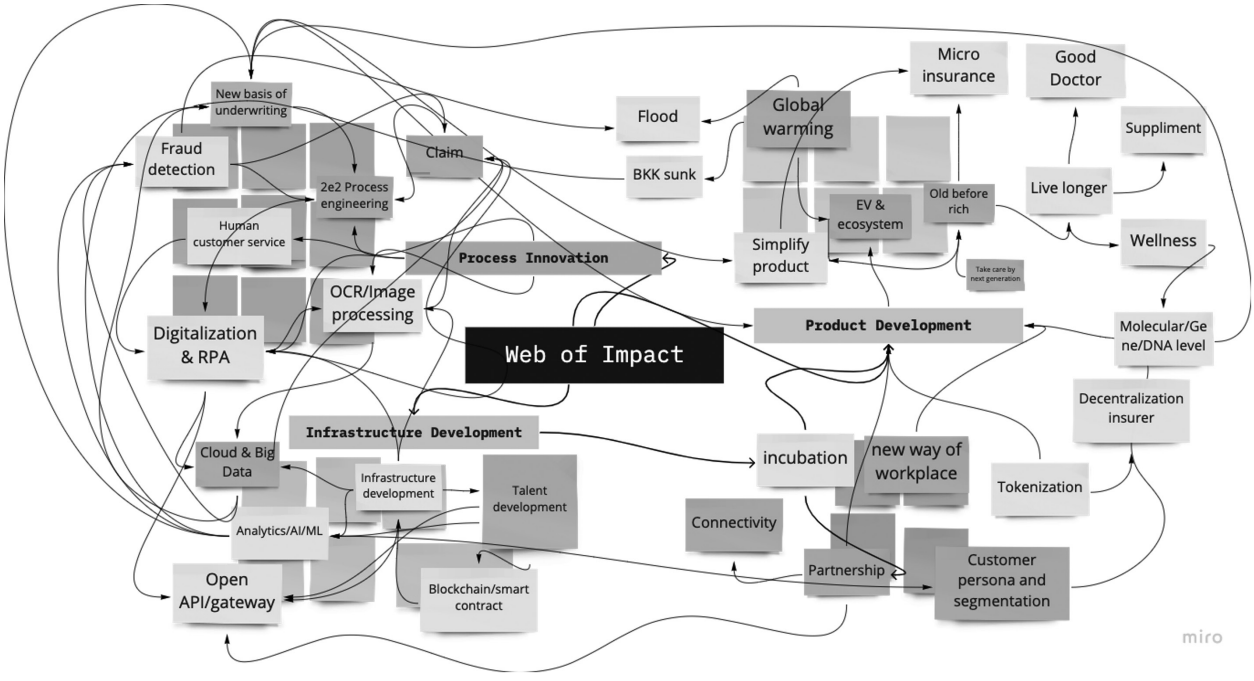

Figure 4: Web of Impact

Adapted from "Business Management in The World of Disruptions Building Future-Ready Organization", by K. Leopairote, 2021, Lecture for Executives MBA Program, Thammasat Business School. And "Futuretales Lab. (2021). And, "Future of Urbanisation Scenarios GREATER BANGKOK". Bangkok. Retrieved from https://www.futuretaleslab.com/upload/1OVdxCjUqTLrzSNH.pdf

Table 6: Scenario Development

Scenario Development
Scenario 1: Fearlessly obtain a truly digital experience while being cautious Thai citizens have increasingly become accustomed to digital transactions since the COVID-19 pandemic, which enforced social distancing practices and touch avoidance nationwide. This shift has led to a significant rise in e-commerce transactions and the adoption of cashless payments, fostering a digital lifestyle that has become a norm in Thailand. Similarly, customers have become more confident in purchasing complex insurance products digitally, a trend projected to continue into 2030. However, the insurance industry faced challenges, such as the failure of risk assessment and bearability. This situation prompted regulatory intervention to ensure customer protection and fair resolution for insured individuals underwritten by COVID policies. Consequently, by 2030, while the online insurance experience is expected to grow, customers will likely select insurers with greater caution. Consumers are becoming more sophisticated and knowledgeable about insurance products. The digital experience will need to extend beyond the point of sale to encompass the entire value chain. This includes a fully digital end-to-end claims process and enhanced interactions between partnered brokerages and bancassurance through open data gateways. This comprehensive digitization will be crucial for delivering a truly digital insurance experience, ensuring efficiency and customer satisfaction in a highly competitive market.
Scenario 2 - Climate change, global warming and zero carbon emission In 2021, the European Union (EU) committed to achieving climate neutrality by 2050, aiming to eliminate carbon dioxide emissions, which contribute to ozone layer depletion, global temperature rise, and climate change. This ambitious pledge has encouraged non-EU countries to develop and implement their long-term strategies for addressing climate change. Thailand has increasingly experienced the effects of climate change, evidenced by prolonged droughts, frequent floods, rising sea levels, coastal erosion, and land subsidence. Bangkok, with a population exceeding 15 million, faces escalating flood risks due to sea level rise, which also exacerbates the salinization of estuaries and groundwater. By 2030, it is expected that Thai citizens will have a deeper understanding of the impacts of climate change and will have adapted their lifestyles to reduce their carbon footprints. The adoption of electric vehicles (EVs) is one example of the shift towards zero-carbon emissions in the mobility sector. Residential energy consumption is expected to decrease through measures such as upgrading light bulbs, washing clothes with cold water, air-drying laundry, and reducing family size. In the food domain, there is a growing trend toward low-carbon and health-conscious diets. These lifestyle changes are crucial for Thailand as it aims to mitigate the effects of climate change and align with global efforts to achieve carbon neutrality. As public awareness and understanding of these issues increase, it is likely that more sustainable practices will become ingrained in daily life, helping to ensure a healthier environment for future generations.
Scenario 3 - EV and its ecosystem The government has introduced tax incentives for automotive manufacturers to sell electric vehicles (EVs), including reductions in both excise tax and import tax. Specifically, the import tax from China to Thailand has been reduced to 0%, and from ASEAN countries to 10%. This policy has encouraged Chinese automotive companies, such as MG and GWM, to enter the Thai market, resulting in a supply that currently exceeds demand, given the limited adoption of EVs as of 2021. This discrepancy is partly due to the insufficient number of electric charging stations,

Table 6: Scenario Development (Cont.)

Scenario Development
which are primarily concentrated in major cities. Looking ahead to 2030, EVs are expected to become a more viable choice for consumers. The transition from internal combustion engines to pure electric engines will not only impact the driving experience but also transform the value chain. Manufacturers will need to assemble and offer vehicles with larger batteries, fewer parts, and high-voltage chargers. Companies like GWM may adopt direct-to-consumer sales models, utilizing delivery centers instead of traditional dealerships and providing comprehensive financial solutions for customers. The availability and infrastructure of EV charging stations and solution platforms will be crucial factors for consumers when purchasing EVs. Effective battery management will shape consumer behavior regarding EV range and battery lifespan. Additionally, special management will be required for degraded batteries to prevent environmental contamination from toxic substances. These changes underscore the necessity for robust infrastructure development and innovative business models to support the growing EV market in Thailand.
Scenario 4 - Molecular Wellness management It is well-established that people today live longer than in previous generations, a trend not only attributable to advances in medical treatment but also to improved personal wellness practices. The COVID-19 pandemic has further popularized preventive medical practices, as evidenced by the significant number of reservations for mRNA vaccinations in 2021. Despite the availability of traditional vaccines at no cost, the demand for cutting-edge mRNA vaccines highlights the increasing importance Thai people place on their well-being. Moreover, substantial medical research has affirmed that the sources of many chronic diseases are linked to molecular abnormalities. Consequently, personalized health products based on genetic test results are likely to become more prevalent, offering tailored strategies for maintaining optimal health.
Scenario 5 - Work anywhere (future of workplace) The concept of working from anywhere is not new to the corporate world. Many companies have been striving to establish themselves as flexible working environments by implementing work-anywhere policies. However, the practical application of these policies often falls short of expectations. The COVID-19 pandemic has significantly accelerated the adoption of work-anywhere policies, transforming them from theoretical guidelines into practical, cultural norms within corporate settings. After more than a year of employees working from home, the necessity of a physical office location has diminished. Offices are no longer viewed solely as places where employees perform their duties. Furthermore, policies that mandate employees to work from the office have become less attractive, particularly to digital talent. As a result, the digital workplace is becoming a standardized practice for companies operating in virtual or hybrid models. This shift necessitates that employees become proficient with digital office tools. Additionally, the metaverse is emerging as a potential new frontier for business operations, offering another format for conducting business activities. This evolution underscores the importance of adapting to new technologies and flexible work arrangements to attract and retain top talent in the digital age.

Table 6: Scenario Development (Cont.)

Scenario Development
Scenario 6 - Virtual world The virtual world, widely known as the metaverse, represents an advanced iteration of augmented and virtual reality technology, offering real-time immersive experiences by creating new identities that connect to the physical world. This technology has far-reaching implications across various sectors. In the medical field, for example, individuals with disabilities can engage in social activities that would otherwise be inaccessible due to physical constraints. Commercially, the metaverse enables marketing and communication through virtual stores, where transactions for virtual goods can be executed using tokenization technology and digital currencies. In Thailand, the adoption of blockchain-based technology is gaining traction. This is evidenced by an increasing number of individual investors transitioning to digital currencies and farming investments. Furthermore, several corporations have shown a keen interest in embracing the digital currency domain. This includes accepting digital payments and even developing proprietary digital currencies. Such advancements signify a growing acceptance and integration of digital financial technologies within the Thai market, positioning the country at the forefront of digital transformation in Southeast Asia.
Scenario 7- Co-creation of innovation with partners It becomes evident that the scope of Thai insurers' business partnerships remains relatively narrow. Most partnerships are focused on downstream value chain activities, primarily aimed at selling insurance products. Despite the presence of numerous aggregators, insurers have conservatively developed their capabilities in acquiring uninsured segments. This conservative approach may not be suitable for all market segments, particularly the uninsured. To address this issue, a more effective strategy involves building and co-creating initiatives with businesses that are experts in their respective domains. This approach would not only foster the development of innovative products and services but also accelerate technological advancements, making the process more dynamic. Currently, the insurtech landscape in Thailand is evolving slowly in terms of market players, while the market itself is advancing rapidly. This has led to an influx of ASEAN insurtech companies attempting to enter the Thai market, evidenced by the establishment of new businesses. Moreover, several prominent Thai insurers have undergone organizational transformations, evolving into holding-subsidiary structures or engaging in mergers and acquisitions. Such transformations provide these companies with greater flexibility in organizational competency, purpose, financial management, and liability. The co-creation of innovation in insurance is likely to span the entire value chain, from product development and underwriting to end-to-end claims processing and customer service. This holistic approach ensures that innovation is integrated at every level, driving the industry forward and addressing the needs of various market segments more effectively.

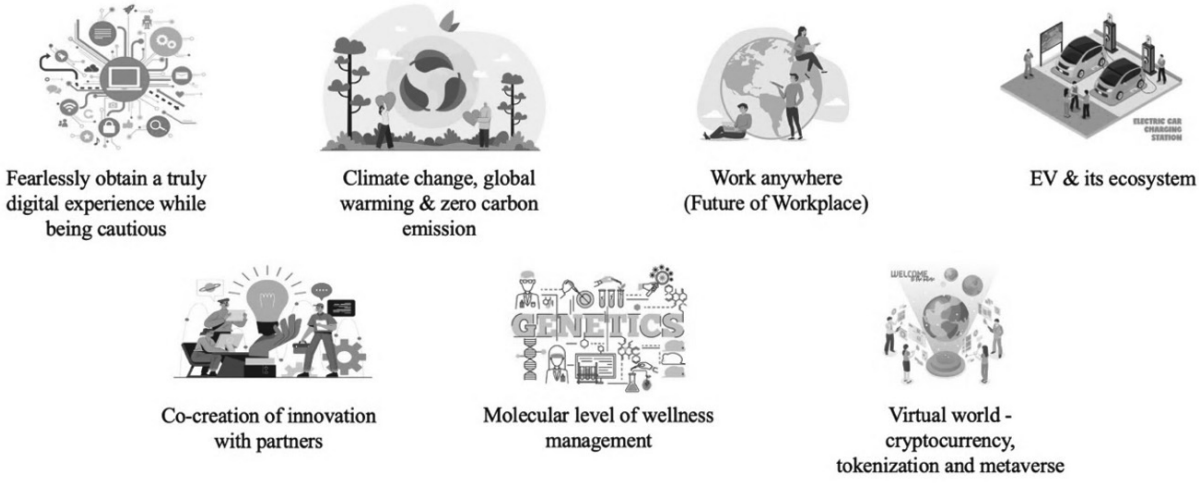

Figure 5: Summary of Scenarios

Adapted from "Business Management in The World of Disruptions Building Future-Ready Organization", by K. Leopairote, 2021, Lecture for Executives MBA Program, Thammasat Business School.

Fourthly, the vision visualization phase provides stakeholders with an understanding of the foresight results through visualization. This process consists of 2 visualization steps:

(1) Future user persona: This step involves creating a future profile of users with specific characteristics, comparing present and future traits. The researcher begins by collecting secondary resources to describe demographic details of specific age groups to cover all generations, including newborns, 10-year-olds, 20-year-olds, 30-year-olds, 40-year-olds, and 60-year-olds. From the collected secondary data, fictional characters are created, detailing their profiles to form a present user persona. Subsequently, the seven scenarios are utilized to detail the next-10-years user persona, resulting in the future user persona (Tables 7) as visualized in Figure 6.

Table 7: User Persona

Group of Persona	Present user Persona (Year 2021)	Future user Persona (Year 2031)
Newborn	Rachakorn, born in 2021 during the pandemic, has experienced hospitalization with strict infection control measures. Rachakorn's parents must exercise caution to protect themselves and their child from infection, minimizing the risk of exposure outside the home. Growing up in a "new normal" environment, Rachakorn is accustomed to seeing people wearing masks, which is not frightening for him. Regular medical check-ups are essential, and close attention is required for his developmental milestones. Rachakorn learns from facial expressions, voice, and mood of interactions, and the use of facial masks and social distancing may impact his developmental progress.	Rachakorn will grow up immersed in a digital environment and lifestyle. Socialization and interactions with friends will primarily occur in virtual worlds. Rachakorn understands the difference between petrol stations and EV charging stations. His parents prioritize insurance, making him a beneficiary under health insurance, child education insurance, and their life insurance policies.
10th-year-old	Pitchaya, who receives her education in a governmental school, experienced a setback in her learning development due to the pandemic, as she had to attend online classes instead of face-to-face sessions. Nevertheless, she fearlessly enjoys digital experiences and is highly active on social media platforms such as Facebook and TikTok.	Pitchaya holds a bachelor's degree, has started her career, and still lives with her family. Her workplace can be anywhere, as she connects with her team via the network. She actively accesses the virtual world. Pitchaya is familiar with using digital currency for financial transactions in the virtual world and has started self-learning about investments in digital assets, such as virtual land or tokenized assets. She is tech-savvy and environmentally responsible, prioritizing investments in her health and wellness over owning a car.
20th-year-old	Khanin (non-binary), graduated with a bachelor's degree from a university in Bangkok. Currently, Khanin is facing difficulties entering the labor market due to the economic slowdown caused by the pandemic. Khanin is highly active on social media, especially Twitter, where they engage in discussions, offer opinions on current issues, and propose solutions, often leading to resolved situations. A strong believer in human rights and equality, Khanin loves fashion, traveling, video streaming, and acquiring new knowledge from educational platforms. They fully support environmentally friendly and locally crafted brands. Khanin's first car is an eco-car, reflecting their commitment to sustainability.	Khanin will have multiple professions for generating income, in addition to a full-time occupation, by setting up a business and making investments. He is dedicated to maintaining his health by regularly checking his medical status through physical exams and has started planning for retirement. His investments span both traditional and alternative markets. Khanin does not rely on the government to solve problems or provide support; instead, he strongly believes in individualism and self-reliance. Consequently, he ensures comprehensive coverage through health insurance, life insurance, and other insurance policies to mitigate potential troubles that may arise.

Table 7: User Persona (Cont.)

Group of Persona	Present user Persona (Year 2021)	Future user Persona (Year 2031)
30th-year-old	Nonthanon is a physician working in a hospital located in a rural area. He dedicates most of his time to the hospital and is currently married with one child. When shopping, Nonthanon always considers the needs of his family and looks for value for money. Despite his busy schedule, he maintains interests in travel, cars, and IT gadgets. He lives in government-supported accommodation and does not see the need for health insurance because his family's medical expenses are covered by government welfare. However, he purchases tax-deductible insurance annually to save on taxes. He owns a sedan, which he uses for daily transportation.	Nonthanon places the highest priority on his family while maintaining a stable career with a focus on managerial tasks rather than procedural duties. He owns a house where three generations live together: himself and his wife, their children, and his mother. Nonthanon enjoys taking his family out to eat whenever he has time off during the weekends. He is active on social media to stay updated on his interests. He tends to remain loyal to the brands he uses, but he is open to upgrading to more premium options, including his car, which is now an electric vehicle (EV).
40th-year-old	Somruethai, a single woman living with her mother, is currently leading her family and approaches shopping with great care. She loves online shopping but ensures she considers quality, value for money, and brand loyalty. She frequently researches product reviews before making purchases. Somruethai places significant importance on retirement and financial stability, investing in traditional markets such as mutual funds, provident funds, and retirement insurance. Health and wellness are also high priorities for her at this stage of life. She regularly undergoes health check-ups, exercises, and invests in healthy products, wellness, and aesthetic treatments. Additionally, she is increasingly conscious of her diet, incorporating more plant-based foods	Somruethai enjoys maintaining her health and improving her eating habits by incorporating healthy foods and engaging in low-intensity exercise. At this stage of her life, she is preparing for retirement and exploring new interests. She prefers spending quality time at home rather than going out. Somruethai remains loyal to the brands she loves, but her shopping experiences are influenced by price sensitivity as she saves for her post-retirement period. She is focused on a balance between quality and cost, ensuring that her expenditures align with her long-term financial goals while still enjoying the brands and products she trusts.

Table 7: User Persona (Cont.)

Group of Persona	Present user Persona (Year 2021)	Future user Persona (Year 2031)
60th-year-old	Somchai is now in a period of retirement but continues to work. He seeks activities to occupy his time and may decide to postpone his full retirement. Somchai enjoys shopping for household items and spends time on social media, including online shopping while at home. He also loves traveling with his family. He maintains connections with his friends through social media, where their opinions are highly influential when it comes to recommendations. Somchai is concerned about his healthcare and wellness, including the risk of infectious diseases. Considering these factors, he is contemplating buying an electric vehicle (EV) due to its lower maintenance costs and energy consumption.	Somchai believes he is mentally younger than his chronological age, even as he approaches or enters retirement. He spends most of his time at home and within his local community, valuing the comfort and familiarity of his surroundings. He enjoys traveling upcountry several times a year with his extended family, which includes multiple generations. Somchai is increasingly conscious of reducing unnecessary expenses and material possessions that add to his financial burden. His focus on cost-efficiency and sustainability is reflected in his consideration of purchasing an electric vehicle (EV) due to its lower maintenance and energy consumption.

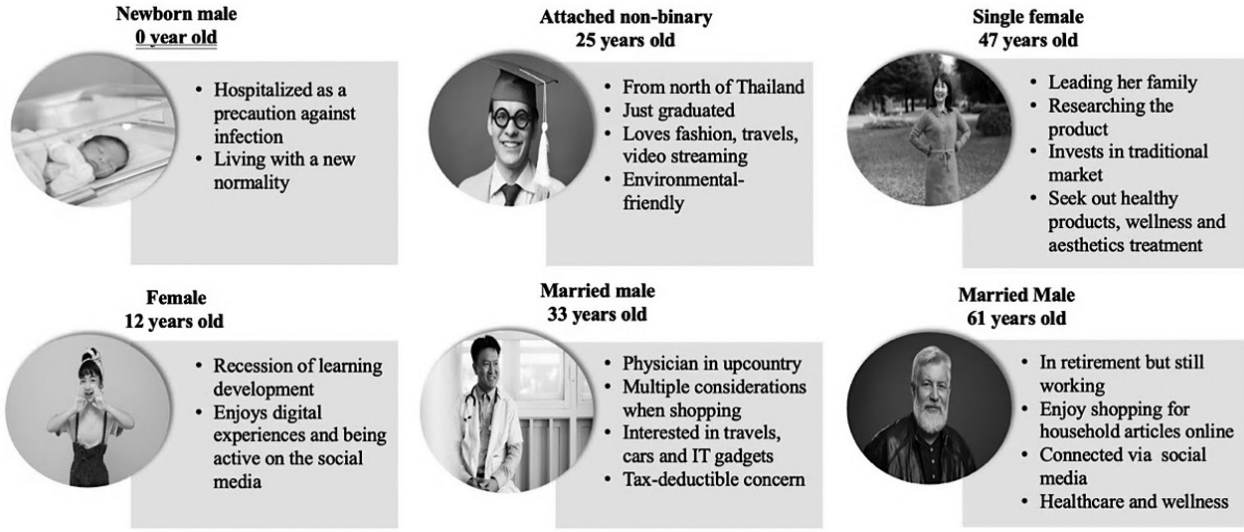

Figure 6: Future User Persona

Adapted from "Playbook for Strategic Foresight and Innovation: a Hands-On Guide for Modeling, Designing, and Leading Your Company's Next Radical Innovation", by T. Carleton, W.R. Cockayne, Antti-Jussi Tahvanainen, and Teknologian Kehittämiskeskus, 2013, Tekes, https://app.box.com/s/i1q85p829xm1ez0xl0r9mjp2ana2ov9r

2) Vision statement: This step involves envisioning the corporate direction by applying each scenario developed in the foresight phase. It explains opportunities by capturing current patterns of historical and identified trends, ultimately revealing a comprehensive vision journey with a defined timeline (Carleton et al., 2013). To disseminate the future baseline to all stakeholders, a vision statement was developed using Carleton et al.'s (2013) method and can be summarized as follows:

"Our vision is to be an insurer that successfully navigates the changing business context and landscape, embracing a digital society, a zero-carbon emission lifestyle, the growth in demand and supply for EVs and their ecosystem, awareness of molecular wellness management, new ways of working, a virtual world, and an innovative business model.

Achieving this vision necessitates disruptive transformation in several areas, including digital transformation, process transformation, market transformation, and organizational transformation. The timing is opportune, as businesses have encountered significant changes in recent years, such as COVID-19, city lockdowns, the growth of e-commerce, the demand for EVs, the advent of 5G technology, and an aging society, all of which contribute to increased business complexity. By collaborating with selected strategic alliances and partners, we will realize this vision over the next decade by creating truly digital insurance experiences, developing products aligned with market trends, generating value within existing value chains through innovative business models among alliances and partners, and adopting advanced technologies such as blockchain-based products, tokenization, and the metaverse for insurance business development."

Lastly, in the phase of strategy formulation of vision, the goal is to establish a holistic view of the strategy and an action plan to drive the foresight results. The articulated vision statement can be translated into a more actionable strategic roadmap to guide the insurer in achieving this vision, as demonstrated in Figure 7. The strategic roadmap aligns with the 10-year vision timeline and is divided into three milestones: short-term (years 1–3), medium-term (years 4–7), and long-term (years 8–10) Table 8.

Table 8: 10-year Vision Milestone

Short-term (1st–3th year)	Medium-term (4th –7th year)	Long-term (8th –10th year)
The short-term milestone involves the foundational phase for preparing for the future in alignment with defined scenarios. The key actions to be accomplished include: **(1) Development of IT Infrastructure**: This encompasses accommodating data digitization, process digitalization, the implementation of robotic processing automation (RPA) in core and supportive processes, data analytics, the development of an open gateway and connectivity, and IT security enhancements. **(2) Execution of Digital Transformation**: This involves the digitization of data and processes and the embedding of RPA to offer customers an immersive digital experience. **(3) Development of Digital Nomad Capabilities**: This aims to support the strategic direction by fostering a digital nomad culture within the organization. **(4) Market Assessment and Capability Analysis**: This includes assessing the market and analyzing capabilities in strategic scenario spaces such as digital customer experience, zero carbon emission, electric vehicles (EV), molecular wellness, the future of the workplace, the virtual world, and co-creation with partners. **(5) In-depth Exploration of Strategic Scenario Spaces**: This involves thoroughly understanding scenarios in digital customer experience, zero carbon emission, EV, molecular wellness, the future of the workplace, the virtual world, and co-creation with partners. The goal is to define new parameters and design data models for use in risk	The medium-term milestone focuses on enhancing IT infrastructure and establishing a foundation for the future based on defined scenarios. The key actions to be accomplished are: **(1) Development of IT Infrastructure**: This includes supporting blockchain technology, machine learning and artificial intelligence, digital currency, a higher level of connectivity, and the creation of a decentralized insurance platform or peer-to-peer platform. **(2) Implementation of New Risk Variables**: Introduce new risk variables in the mathematical calculations of risk management, price premiums, and underwriting processes to accommodate new approaches to the insurance business, focusing on strategic scenarios such as zero carbon emission, EV, molecular wellness, the future of the workplace, and the virtual world. **(3) Introduction of New Products**: Launch new products using the updated approach to risk management, price premiums, and underwriting processes within targeted segments based on strategic scenarios, including zero carbon emission, EV, molecular wellness, the future of the workplace, and the virtual world. **(4) Expansion of the Ecosystem**: Broaden the ecosystem by forming partnerships related to strategic scenarios, such as zero carbon emission, EV, molecular wellness, the future of the workplace, and the virtual world.	The long-term milestone focuses on enhancing the implementation of advanced technologies, such as data analytics, machine learning, and artificial intelligence, to prepare for future scenarios. The key actions to be accomplished are: **(1) Application of Machine Learning and Artificial Intelligence**: Optimize the use of data within strategic scenarios, including zero carbon emission, EV, molecular wellness, the future of the workplace, and the virtual world. This involves using advanced algorithms to enhance decision-making processes, risk assessment, and customer experience. **(2) Establishment of Brand Visibility in the Metaverse**: Build and enhance a virtual brand space within the metaverse to engage with customers. This involves creating immersive virtual environments where customers can interact with the brand, explore products, and receive services in a fully digital experience. **(3) First Launch of Insurance Emerging with Metaverse and Reality**: Introduce innovative insurance products that seamlessly integrate the metaverse with the real world. These products will cater to new risks and opportunities presented by the digital and physical integration, providing comprehensive coverage for digital assets and activities. **(4) Establishment of Collaboration with Partnerships in the Merging of Reality and Metaverse**: Develop strategic partnerships to bridge the gap between reality and the

Table 8: 10-year Vision Milestone (Cont.)

Short-term (1st–3th year)	Medium-term (4th –7th year)	Long-term (8th –10th year)
management, price premiums, and underwriting processes in alignment with new business contexts. **(6) Experimental Period for New Models**: While new models for risk management, price premiums, and underwriting processes are being tested, new products using traditional approaches can be launched to establish brand visibility in the strategic scenarios. **(7) Partnership Development for Co-creation**: This requires analyzing the current value chain for transitioning from an in-house operative model to a cooperative operative model with business partners and incubators. Furthermore, existing business partnerships will be developed in line with the new strategic roadmap	**(5) Implementation of Peer-to-Peer Insurance Platform**: Develop and implement a peer-to-peer insurance platform through co-creation with partners. **(6) Implementation of Virtual Office for Employees**: Establish a virtual office to enhance employee collaboration and flexibility. **(7) Application of Blockchain Technology**: Implement blockchain technology applications, including smart policies and digital currency as mediums. **(8) Introduction of Co-Created Development Outcomes to the Market**: Launch co-created products and solutions developed through strategic partnerships into the market	metaverse. This collaboration will focus on co-creating solutions that leverage the strengths of both worlds, enhancing customer experience and expanding market reach

To validate the foresight-based strategy, a comparative study between the existing strategy of insurers and the foresight-based strategy was conducted. Additionally, two insurance industry experts were selected and be in inductive in-dept interview session to provide reflections based on their professional expertise on the proposed foresight method and the foresight-based strategy. The sessions were conducted 1-1 between research and expert via digital face-to-face meetings using Google Meet. The interviewees were questioned with guide list of questions on different topics (Table 9). The experts were recruited based on the following qualifications:

(a) More than 15 years of experience in insurance or finance sector.

(b) More than 10 years of experience in managerial position in insurance business.

(c) Experience in leading a corporate strategy department for an insurer and/or financial institute.

Table 9: In-Depth Interview Questions

Information Given Before Questioning	Guiding Question
Researcher presents existing corporate strategy of each insurer.	*1. As a professional, do you agree with the information presented? Why?*
Researcher presents mainstream strategic direction of Thai insurers	*2. As a professional, do you agree with information presented? Why?*
Researcher presents 7 key driving forces from the foresight	*3. As a professional, do you agree with information presented? Why?*
Researcher presents strategic roadmap constructed based on foresight result.	*4. As a professional, do you agree with the roadmap to be implemented by the insurer? Why?*
Researcher presents the proposed foresight method.	*5. As a professional, what do you think about the foresight step presented as a means of formalizing a corporate strategy?*

Figure 7: Insurance Strategic Roadmap

Table 10: Strategies of Insurers Captured in Year of 2017–2020

Insurer	Vision	Corporate Strategy	Business Strategy	Key advantages
Insurer 1	To be one of the admirable brands in Thai non-life insurance market and to be one of leading non-life insurers in the SEA region	Market development strategy with partnerships and alliances supporting upstream and downstream activities	Growth strategy with digital, broker and agent development	Business ecosystem (bank, asset management and insurer)
Insurer 2	Insurer 2 Insurance aims to be the preferred non-life insurer in Thailand.	New market development with partnership development and existing market development with growth strategy	Growth strategy with digital and broker and agent development	Business ecosystem (Bank, Asset Management and Insurer)
Insurer 3	To be Thailand's top non-life insurance company	Diversification to cover insurance business ecosystem	Growth strategy with digital and innovative development.	Good relationships with government-owned banks and governmental agencies
Insurer 4	To be the leader of non-life insurance regrading service innovation and Insurtech	Growth strategy with digital and innovative development.	Growth strategy with product and service differentiation using technology	Innovation development
Insurer 5	To be the most preferred insurance partner providing outstanding solutions	New market development and existing market development with CEO public-figure strategy	Growth Strategy with product development strategy	Value proposition to customer
Insurer 6	To become one of Thailand's leading investment holding companies with primary focus in the insurance sector, leveraging on Insurer 6's experience, expertise and network to achieve sustainable growth.	Cooperation based on resource-knowledge capability	Growth strategy focuses on building "Insurer 6" brand awareness, driving health insurance to the Future of Health Insurance and developing digital and brokers channels along with truly customer-centric service.	Relationship with global insurer as a shared holder supporting knowledge transfer and good relationships with local banks
Insurer 7	To be an admired and trusted financial institute and to be a leader of Thai financial institute and to expand in SEA market by 2025	Horizonal integration strategy	Growth strategy with digitalization and utilization of data to generate new business innovation.	Value-created synergy among subsidiary companies in the automotive industry

4. DISCUSSIONS

4.1 Difference Between Foresight-Based Strategy and Tradition Thai Insurers Strategy

The strategies of Thai insurers listed on the Stock Exchange of Thailand (SET) captured from secondary resources in between year of 2017 to year of 2020 are summarized in Table 10. The study reveals that the strategic directions of all the examined insurers diverge in several ways, as outlined below:

(1) Market Development: The insurers focus on expanding the existing market through various sales channels, including traditional methods such as selling agents and bancassurance, as well as digital approaches like digital brokers and proprietary platforms. Moreover, several insurers demonstrate a strong intention to explore opportunities beyond the current market and plan to expand their operations into other ASEAN countries. Concurrently, many insurers are prioritizing internal organizational development.

(2) Digital Strategies: The insurers have implemented comprehensive digital strategies across all channels, including communication management. They emphasize digital marketing activities on social media platforms and digital sales points through digital brokers.

(3) Innovation and Insurtech: There is a notable decline in the number of Insurtech initiatives in Thailand, indicating a lack of innovation within the business sector. None of the insurers have established strategic directions for incubating Insurtech ventures or conducting research and development for their own innovations. Their perspective on innovation is largely confined to developing sales channels, offering products with unique service complements, and enhancing brand perception. The innovation activities among the studied insurers do not create a demand for changes in the value chain, which explains the limited development of Insurtech within Thai insurance organizations.

In essence, the strategic directions implemented by Thai insurers differed greatly (Table 11). First, the foresight strategy aimed to navigate the organization toward a product-driven approach by developing new products aligned with future demand and incorporating transformative, value-creating processes. In contrast, the current mainstream direction of Thai insurers was to seek out new opportunities outside the existing market and to enhance customer experiences with digital touchpoints within the existing market, while still offering traditional coverage. Second, the defined strategy of most insurers barely touched on mid-term or long-term plans. Most insurers revealed only strategic actions applicable to the next year or even the current year. Third, in terms of digitalization and digital transformation, the foresight strategy enables the organization to build a foundation for digitalization and digital transformation, encompassing IT infrastructure, data digitization, process digitalization, and the development of digital capabilities until the plausible future of digitalization and digital transformation is realized. Conversely, the insurers' strategy was to engage customers online using social media, while

neglecting IT infrastructure improvement. Insurers were developing online channels with e-commerce platforms to sell coverage and enhance customer experience using digital technologies.

Table 11: Difference of Thai Insurer Strategy and Foresight-Based Strategy

Index	Thai Insurer Strategy	Foresight-Based Strategy
Strategy	Market development/market expansion	Product development
Length of Strategy	Short term	Long term
Product Strategy	Traditional	Offering new product
Digital Transformation	Digital customer journey transformation	Value-chain transformation
IT Foundations	Less integration to strategy	One of core strategy

4.2 Professionals' Opinion on Insurers' Strategy, Foresighting Framework, and Strategic Roadmap

Regarding the existing strategy of each insurer, the professionals concurred that the current strategies being implemented were not fully aligned with the organizations' vision and mission. From their perspective, corporate strategy should transition from a transformative vision to actionable steps, while business strategy should be a well-defined set of strategic actions aimed at achieving the overall vision.

Concerning the corporate strategy of Thai insurance businesses, the professionals shared a unified view on the strategic trends being applied by Thai insurers, particularly in relation to digitalization. They believed that these strategies should encompass the implementation of technology and the incubation of innovation within the organization, including product innovation, channel innovation, service enhancement, and operational excellence. Additionally, organizational flexibility was deemed essential for Thai insurance businesses; without it, organizations would struggle to cope with uncertainty. One professional emphasized that organizational flexibility should center around digital transformation, necessitating greater agility within the organization. Regarding market expansion, regulatory factors and market similarities would likely drive Thai insurers to focus on the Cambodia, Laos, Myanmar, and Vietnam (CLMV) region rather than Singapore, Malaysia, and Indonesia.

With respect to the key drivers and scenarios resulting from foresight, the professionals agreed that the seven key drivers identified through foresight would significantly influence the insurance industry. However, they provided two additional comments. First, the key drivers of electric vehicles (EV) and molecular wellness will impact policy underwriting and risk management, which traditionally rely on mathematical and statistical calculations using risk-based parameters. These parameters are expected

to evolve in the future. Second, concerning the foresight-based strategy related to IT systems, the professionals noted that the core IT system managing insurance end-to-end involves extensive legacy technology, posing significant challenges for effective customer service. Therefore, improving the foundational architecture should be a top priority in the strategic roadmap. Once the foundational improvements are completed in the short-term plan, further enhancements to IT systems and supportive architecture can be developed. In parallel, the professionals also agreed on the necessity of product development as part of the short-term plan. However, given the rapid pace of change, a 10-year foresight-based strategy might not be effective. A more proactive approach would involve the organization revisiting the roadmap annually to ensure it remains current with market needs.

Lastly, regarding the designed foresight framework, one professional considered the process suitable only for Thai-national insurance businesses and not applicable to multinational insurance companies, which have different strategy formulation processes. In multinational insurance companies, strategy is defined at the headquarters level and then cascaded to the local market level for execution. Concerning the foresight steps, the professionals made two observations. First, capturing the mega trend using STEEPV analysis might overlook the compliance and regulation perspective, which is crucial for Thai insurance businesses. Second, as strategists, the professionals perceived the vision statement more as a mission statement. In their opinion, the vision for the organization must be short, simple, and self-explanatory, clearly stating what the organization aims to become. Furthermore, the strategy should be more measurable, actionable, and adaptable than the vision and mission statements, while ensuring alignment with them.

4.3 Theoretical Contributions and Practical Application

This research contributes to the theoretical domain of strategic management, emphasizing the importance of strategizing through tactical decision-making and forming strategic action plans aimed at developing a corporation's competitive advantage (Conway, 2006; Dadkhah et al., 2018; Nascimento, Reichert, Janissek-Muniz, and Zawislak, 2020). Given the inherent uncertainty of the future, the proposed corporate-oriented foresight framework serves as an effective strategic tool for identifying possible or alternative futures, thereby facilitating logical and structured corporate strategy formulation.

From a practical perspective, the proposed corporate-oriented foresight framework can be integrated into insurers' strategy formulation processes. This integration enables insurers to anticipate potential future scenarios that could impact their business and to formalize their corporate strategies accordingly. The foresight outcomes, encompassing 7 distinct scenarios, can serve as valuable inputs for insurers' strategic planning. Furthermore, the applicability of this framework extends beyond the insurance sector, making it a versatile tool for strategic management across various industries.

This structured approach not only enhances the strategic agility of organizations but also ensures they are better equipped to navigate and respond to evolving market conditions and emerging challenges. By leveraging this foresight framework, corporations can better align their strategic initiatives with anticipated future developments, thereby securing a competitive edge in their respective markets.

To ensure effective foresight, it is crucial to engage internal parties who are well-versed in the organization's capacities throughout the foresight process. Maintaining a consistent mindset about the organization's future is key. Practitioners should remember that the foresight results are intended for the organizational level, rather than the industry level, making the results more specific and relevant to the organization. Foresight typically requires the integration of diverse knowledge areas to achieve a broad perspective. Therefore, it is beneficial to conduct foresight activities in a workshop format, involving a mix of experts from various departments within the organization, including both managerial and operational levels. This approach ensures that the foresight process is comprehensive and considers multiple viewpoints, enhancing the accuracy and applicability of the foresight results.

When developing scenarios, practitioners should deeply understand the topics within the scenarios, including how these topics can evolve and the timeline for their realization. For example, the development of the EV ecosystem in Thailand might be influenced by the Board of Investment's (BOI) promotions and tax incentives for multinational companies to encourage EV manufacturing in the country. Such incentives can accelerate the market development for EVs.

In creating future user personas, it is advisable to start with the current customer personas of the organization. Subsequently, future personas can be developed, providing the organization with a more precise view of their potential future customers.

5. CONCLUSIONS

This research presents a corporate-oriented foresight process for strategic formulation, encompassing five distinct phases: (1) Preparation Phase: This phase involves identifying the foresight domain, setting the boundary and scope for the foresight activity. (2) Understanding the Past Phase: Historical patterns are identified to provide context and insights into the evolution of relevant factors over time. (3) Foresight Phase: This phase focuses on identifying emerging trends and key drivers, which are then used to develop plausible future scenarios. (4) Vision Visualization Phase: A user persona and a vision statement are developed to articulate the desired future state and its implications for stakeholders. (5) Strategy Formulation Phase: The final phase translates the vision into actionable strategies, ensuring that foresight insights are integrated into the strategic planning process.

The results reveal significant differences between the strategy derived from foresight and the traditional strategies of Thai insurers as highlighted by the study. These include: (1) strategic context awareness: the foresight-based strategy provides organization with a proactive approach, enabling

business to adapt and stand ahead of the trends. (2) strategic alignment of direction: the foresight-based strategy offers a clear strategic vision, mission and plans ensuring that action implementations are aligned with long-term milestones. (3) Temporal scope: due to the nature of foresight, it requires a longer of timeframe, allowing the foresight-based strategy has opportunities to explore boarder trend potentially impact to the business. And (4) market development approach; traditional strategies often involve entering new markets with existing products, in contrast, the foresight-based strategy focuses on innovative product development to enhance the existing market allowed the foresight-based strategy to develop untapped segment with innovation e.g.

In addition to its methodological contributions, this case study allows the researcher to explore the future of the insurance industry in Thailand over the next decade. The foresight-based strategy developed through this process is designed to help corporations navigate future uncertainties effectively. This approach enhances strategic agility and ensures that the organization is better prepared to respond to evolving market conditions and emerging challenges.

However, this research has several limitations. Firstly, data collection relied primarily on secondary methods, such as annual reports, which might not fully capture all corporate strategies, even within the defined data collection period. Secondly, the research was conducted during the pandemic year of 2021, when many insurers faced cash flow shortages due to a high number of COVID-19 insurance claims. This situation led to interventions by local insurance regulators to protect consumers, which were excluded from the research conditions and foresight scenarios. Thirdly, the research scope included both life and non-life insurers, which could complicate the interpretation of the foresight strategy roadmap. Lastly, to increase the robustness of the proposed corporate-oriented foresight framework, a higher number of insurance strategists and professionals knowledgeable in corporate strategy formulation should be consulted.

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