Strategic Planning - Management Relationship within Complexity and Turbulent Time

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Abstract

The last decade has witnessed two main incidents that played a significant role in shaping the whole world; COVID-19 pandemic and the Russian–Ukraine war. Both incidents have impacted the strategic and med-term plans of each single government, policies governing all developmental sectors, companies and their governing policies; mainly employment and HR policies, as well as individuals' employability and future plans.

The response of developed and underdeveloped countries to those two incidents showed that the world was not prepared or equipped to deal with sudden crises, despite the fact that many intellectual figures have raised their fears of the possibility of having a pandemic outbreak that would affect the whole world. Similarly, in the recent years, WHO keeps raising red flags on a new pandemic that is expected to be of a worse impact than that of Covid-19 (WHO, 2023)

This paper aims to discuss the role of future studies, scenario building, and strategic planning in preparing for such crises and managing them properly. Complexity, rapid pace, interlinked activities, and challenges are main features of both the present and the future world. Therefore, pre-disaster planning is a largely substantial matter that requires a strong and effective foresight relationship between experts, leaders, and decision makers.

Moreover, the paper aims to discuss the strategic planning – agile management paradox as a prerequisite for crisis effective management.

Introduction:

The last decade has witnessed two main incidents that played a significant role in shaping the whole world; COVID-19 pandemic and the Russian–Ukraine war. Both incidents have impacted the strategic and med-term plans of each single government, policies governing all developmental sectors, companies and their governing policies; mainly employment and HR policies, as well as individuals' employability and future plans.

The World must be ready to respond to next pandemic. Ghebreyesus ,WHO chief, May

The response of developed and underdeveloped countries to those two incidents showed that the world was not prepared or equipped to deal with sudden crises, despite the fact that many intellectual figures have raised their fears of the possibility of having a pandemic outbreak that would affect the whole world. Similarly, in the recent years, WHO keeps raising red flags on a new pandemic that is expected to be of a worse impact than that of Covid-19 (WHO, 2023)[1]. Analyzing the world preparedness during Ebola Virus, among others, although Bill Gates[2] and Barak Obama[3], have both warned the world of a high possibility of an international pandemic. Hence, these incidents raise a question on the reason why the world was not prepared and why nobody listened.

This paper aims to discuss the role of future studies, scenario building, and strategic planning in preparing for such crises and managing them properly. Complexity, rapid pace, interlinked activities, and challenges are main features of both the present and the future world. Therefore, pre-disaster planning is a largely substantial matter that requires a strong and effective foresight relationship between experts, leaders, and decision makers.

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[1]Ghebreyesus, Tedros, WHO, March 2023. Available at: https://news.un.org/en/story/2023/05/1136912

[2] Bill Gates, The next outbreak? We're not ready, TED Show, 2015. Available at: https://www.ted.com/talks/bill_gates_the_next_outbreak_we_re_not_ready?language=en

Thus, there are a number of questions inquiring: to what extent do leaders consider foresight experts point of views? To what extent do foresight experts affect the decision-making processes on both the national and the global level? Why were modern technologies provided by the forth industrial revolution such as pandemic sensors and other emergency surge operations and management systems unable to predict COVID-19? Where was the deficiency?

It is necessary for the governments to understand and learn how to move from a rather reactive approach toward a proactive and anticipatory adaptation approach that requires assessment of future conditions and hence frame forward-looking activities. Moreover, the paper aims to discuss the strategic planning – agile management paradox as a prerequisite for crisis effective management.

Design/methodology/approach:

The paper provides a literature review which discusses how the theory of contemporary complexity and uncertainty can be used to enhance state preparedness.

Originality/value: This paper uniquely links future studies and strategic thinking and planning with crises and agile management on the state or city level.

Keywords: Future Studies, Strategic Thinking, Strategic Planning, Crises Management, Management theory, Complexity theory.

Paper Type: General literature Review

Context: Complexity, Uncertainty and Predictability

The recent world is characterized by increasing complexity and decreasing predictability with new and emerging threats. The ever-increasing complexity is expected to result in more incidents such as new and unexpected threats that may affect governments' developmental plans. Although it provides more information to analyze, there is less time for that information to be well processed. In addition, this increasing complexity brings about a prevalence of more sophisticated technologies, emergence of new players and participants, and exceedingly high public expectations[4].

[4] Tabish SA, (2015), Nabil Syed, Disaster Preparedness: Current Trends and Future Directions, International Journal of Science and Research (IJSR), Volume 4 Issue 6, June 2015. DOI:

Both COVID-19 and Russia-Ukraine war provide a clear example of complexity and uncertainly as it could be considered mission impossible to illustrate what is likely to happen and what the potential consequences are. Let alone development, it also assesses risk and draws roadmaps towards resilience and recovery.

Due to the ever increasing complexity and the rapid pace resulted from the forth industrial revolution featured in technology, biotechnology, and nanotechnology inventions, information and communication technology, smart phones, high-speed internet, 3D printing, robotics, big data and cloud computing, every single aspect of our life, including our mind-set, values, religion and behavior, is almost reshaped. On the one hand, the increase of public expectations along with the accessibility and use of data and information pose a huge burden on governments attempting to respond to the public calling for more transparency. On the other hand, this provides great opportunities to governments to ease community participation, strengthen public-government relationship, and facilitate communication and awareness activities which positively impact governance indicators; mainly the indicator of public trust in government[5].

It can be said that the undesirable circumstances today and the numerous problems impeding our path is a result of inadequate consideration for a future that has

COVID-19 and Russia-Ukraine as GREAT DIVIDE

COVID-19 and Russia-Ukraine war reflect time of turbulence and uncertainty that might not be purely new. However, their huge impact comes as a result of the ever-increasing globalization, interconnectivity, and complexity. Thus, the current generation's way of thinking and their attitude toward the future are reshaped creating what Drucker called "a great divide":

https://doi.org/10.21275/SUB115185. Available at: https://www.ijsr.net/issue1.php?page=43&i=-4&edition=Volume%204%20Issue%206,%20June%202015

[5] Ibid, 2015, p.5

. . . at some point between 1965 and 1973, we passed a "great divide" into the next century, leaving behind the creeds, commitments and alignments that had shaped politics for a century or two. At the most profound level, the Enlightenment faith in progress through collective action salvation by society which had been the dominant force of politics since the eighteenth century – was thoroughly dashed. This is not the first such divide...the last such divide was crossed a century earlier in 1873. That liberal century, in which the dominant political creed was laissez-faire, began in 1776 with Adam Smith's The Wealth of Nations and ended with the Vienna stock market crash and short lived panics in Paris, London, Frankfurt and New York in 1873" (Drucker, 1992, pp. 1-2)[6].

Reading the scene and forecasting the expected economic, political, and social impacts of COVID-19 and Russia-Ukraine war could be also described as "a great divide". For example, the amount and variety of literature discussing the different angels of "The World after COVID-19" is astonishing. David A. Lane and Martin Down (2010), claim that, recently, many of the tools used to understand the present and the future of the world is inadequate. They assume that there is an ordered and objective reality that can be uncovered by using more sophisticated techniques such as linear cause and effect scenarios. Understanding turbulences and uncertainty requires dealing with the non-linear relationships. Accordingly, one cannot assume that the future will continue to be a projection of the past, or that the structured step-by-step management procedures and processes of the past will address the needs of a current or future world that is characterized by being on constant change, risk taking, and ambiguity[7]. Stacey (2007) claimed that applying "complex responsive processes" approach is the only way for reaching conventional wisdom results[8]. The idea of "a great divide" reflects that

The idea of "a great divide" reflects that peoples' past assumptions dominate their thinking and vision of what is about to unfold, often with disastrous consequences. David A.

[6] David A. Lane and Martin Down (2010). The art of managing for the future: Leadership of turbulence, Emerald Group Publishing Limited, May 2010, Vol. 48 No. 4, pp. 512-527. Available at: www.emeraldinsight.com/0025-1747.htm

[7] Ibid, 2010, p. 7

[8] Ralph D Stacey (2007). Strategic Management and Organizational Dynamics: The Challenge of Complexity, Fifth Edition. Pearson Education. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.advisory21.com.mt/wp-content/uploads/2023/04/Strategic-Management-and-Organisational-Dynamics-Ralph-D.-Stacey-PDFDrive-.pdf

peoples' past assumptions dominate their thinking and vision of what is about to unfold, often with disastrous consequences. Considering that, in light of the twenty-four-seven culture where the needs of the moment are often so pressing that it leaves very limited time, if any, to think about how things are correlated and how events are unfolding, in addition to the prevalence of virtual world, where local people interact with the world in a way that no longer fits with established norms that bind together communities and cultures. Hence, identity, values, priorities, meanings and needs are increasingly defined by people's immediate space, place, and peers, driving out a sense of higher purpose and connecters with the wider "we" (David A. Lane and Martin Down, 2010)[9].

Futures Studies and Planning Methodologies within times of Turbulence and Uncertainty

It is important to understand that the future is born in the heart of today's changes and that only through effective planning certain targeted future can be reached. Additionally, there are "several prospective futures" rather than simply "one possible future". There are mainly three important terminologies in this regard; Futures study/research, strategic thinking, and strategic planning.

1) Futures study/research: It reflects all efforts allocated to depict potential futures and factors of stability or instability in order to be prepared for them through preparing plans based on analyzing availability of resources and patterns. It includes states of "probability", "possibility", and "desirability". Hence, people decide and plan ahead to pass the present towards the targeted future. It may be said that future studies consist of forecasting and featuring processes. The forecasting processes draw an image of the future through precise evaluation of the current conditions in terms of facilities, strength, weakness, opportunities, and threats of both desirable and/or disastrous expected situations. On the other side, featuring processes constitute the required facilities, necessary acts, programs, and procedures needed in order to reach an accurate identification. In featuring process and strategic programming of flexibility of governments/cities, both anticipation attitudes on the basis of current situation and featuring in accordance with the ideal are considered. Nowadays, several questions are raised, namely; how to effectively perform the forecasting and featuring

[9] David A. Lane and Martin Down (2010). P 15

processes within the high levels of uncertainty, turbulences and complexity? What are the needed proper tools and methodologies? Are traditional tools, methodologies, and approaches still working? Despite their confidentiality, these questions are not answered yet.

Building scenarios is one of the main tools of future studies. It was first used as a military planning tool in World War II. Herman Kahn introduced it in the civil domain shortly after the war. Schwartz defined scenarios planning as "a tool for ordering one's perceptions about alternative future environments in which one's decisions might play out". Scenario planning intends to pinpoint large-scale forces that aim to improve the future in all its multiple directions (Wilkinson. 1995)[10]. A well-prepared strategic planning process does not only bring about a tangible output (a documented plan) but it also promotes a constant strategic thinking, discussion, and behavior processes. Schoemaker (1998) highlighted the importance of applying two types of scenarios that are: learning scenarios and decision scenarios.

A) Learning scenarios: these scenarios act as tentative hypotheses which are investigated and verified by means of research and discussion

B) Decision scenarios: these scenarios are verified to conclude the strategies that better serve in the different futures.

Furthermore, both learning scenarios and decision scenarios form a perfect pair with the concepts of strategic thinking and strategic planning[11].

2) Strategic/Anticipatory Thinking: It acts as a fundamental process that emphasizes detecting and developing opportunities while generating dialogue revolving around directions. It plays a significant role as an ingenious, synthetic, and divergent process. Although strategic planning helps in promoting effective strategic work, it is convergent, analytical, and conventional.[12] Conway (2004) assumed that the aim of strategic thinking is to provide options. Strategic planning focuses on the

[10] Wilkinson, Lawrence. "How to Build Scenarios." Wired (Scenarios: 1.01 Special Edition) September 1995: 74–81. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.musicandmedia.org/standard/pdf/build_scenarios.pdf

[11] Schoemaker, Paul J. H., Ch. 26, "Twenty Common Pitfalls in Scenario Planning." Learning from the Future, John Wiley and Sons, 1998. Available at: https://www.researchgate.net/publication/285797815_Twenty_common_pitfalls_in_scenario_planning

[12] Gates, Linda Parker (2010), Strategic Planning with Critical Success Factors and Future Scenarios: An Integrated Strategic Planning Framework, Software Engineering Institute, Carnegie Mellon University. Available at: http://www.sei.cmu.ed

process of generating actions[13], building future scenarios to explain the surrounding environment, ascertaining the critical uncertainties and the driving forces (i.e. the most uncertain and the key factors and forces), generating few scenarios that inspires decision makers through the investigation of the recognized critical uncertainties, creating the scenarios to describe each one in such a way that enables exploring and understanding its limits, defining repercussions and strong strategies, and finally detecting indicators that enable understanding the impacts of each scenario on its strategies and decisions[14]. Yet, the question is: Do these tools need to be developed within today's high levels of uncertainty, turbulence and complexity? Were they efficient in predicting COVID-19 pandemic or the Russia–Ukraine war?

3) Strategic Planning: It aims at directing all efforts and resources toward achieving preset future objectives. Recently, within the complexity theory, people suffer from the so called "Strategy Paradox". Raynor (2007) defines the concept of Strategy Paradox as "it arises from the need to commit in the face of unavoidable uncertainty. He argues that this paradox can be solved by separating the management of commitments from that of uncertainty. As uncertainty rises with the time horizon under consideration, the basis for the allocation of decision-making is the time horizon for which different levels of the hierarchy are responsible" [15]. In light of this definition, it is important to separate the managing operational activities from managing uncertainty (i.e. mitigating the risks associated with future uncertainty while providing exposure to promising opportunities). Raynor (2007) suggested that each organizational level is defined by its relationship to managing strategic uncertainty. That separation can ease applying the concept of agile management. Friend and Jessop (1968) identified three classes of uncertainty and explained how they affect the decision-making processes and its relevant needed actions.

[13] Conway, M. "Scenario Planning: An Innovative Approach to Strategy Development." Swinburne University of Technology, 2004. Available at: https://www.researchgate.net/publication/242707360_Scenario_Planning_An_Innovative_Approach_to_Strategy_Development

[14] Gates, Linda Parker (2010), P 8-12.

[15] Raynor, Michael E. (2007), The Strategy Paradox: Why Committing to Success Leads to Failure and What to Do About It. New York: Doubleday. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www2.deloitte.com/content/dam/insights/us/articles/the-strategy-paradox/US_deloittereview_The_Strategy_Paradox_aug07.pdf

As presented in table (1) below, they are called UE, UV, and UR[16]. John Abbott (2000) divided the UV into UVP and UVC, giving more reflection on the planning model that fits each type of uncertainty and explains what it should focus on[17]. As presented in the table, each type of uncertainty fits better with a different planning model. Additionally, that has its implications on the planning processes, required data, and level of community participation…etc.

Agile Management Models within Uncertainty, Turbulences and Complexity

Early in the twentieth century, Henri Fayol clarified that managers are those who are in charge of planning, organizing, commanding, coordinating, and controlling. Thus, planning is seen as one of the main tasks of managers. Therefore, planning science and practices have emerged in a foreseeable world where future could be planned. Consequently, managers are entitled to define their goals and handle them in such a way makes them possibly achieved. That was developed to Management by Objectives (MBO) which evolved into strategic planning. As specialized units for strategic planning started to be detached from the day-to-day realities of the business and emphasized formal procedures around numbers. Henry Mintzberg introduced a definition of strategic planning as "a formalized system for the codification, elaboration and operationalization of the strategies possessed by the companies."[18] Nowadays, with the emerging paradigm characterized by complexity, uncertainty, turbulences, rapid technological change, the fourth Industrial revolution, increasing global competition, and globalization, strategic planning seems like pointless wishful thinking. Modern executives see planning as rigid, slow, and bureaucratic. An analytics survey conducted by HBR in 2016 showed that most executives were frustrated with planning

[16] Jessop, (1969) "Local Government and Strategic Choice: An Operational Research Approach to the Process of Public Planning," Tavistock Publications, London. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://api.pageplace.de/preview/DT0400.9781483136431_A27461571/preview-9781483136431_A27461571.pdf

[17] Abbott, John. (2000). Planning as managing uncertainty. In book-New ideas of planning: Linking theory and practice. Available at: https://www.researchgate.net/publication/321314515_Planning_as_Managing_Uncertainty

[18] Di Fiore, Alessandro (2018), Planning Doesn't Have to Be the Enemy of Agile, Harvard Business Review, September 13, 2018. Available at: https://hbr.org/2018/09/planning-doesnt-have-to-be-the-enemy-of-agile

as they believed that speed and agility are more significant. As plans frequently change, there is no reason to waste time and effort in a slow, painful planning exercise which most likely will not be implemented[19]. Nonetheless, planning is still essential for any entity of any size. Besides, the types of plans and the processes of planning need to be revisited. The term "agility", since introduced, has been incorporated into leadership style and strategizing but using different understandings of agility. However, since the emergence of complexity theory, a revised understanding of agility has emerged (Lewis, Andriopoulos & Smith, 2014; Prange & Heracleous, 2018; Sull, 2005). Furthermore, it is essential for each entity to think of adapting to agility in an evolutionary sense rather than a revolutionary one while realizing that it should be of balanced stability, identity and resilience with speed[20].The concept of "agile management" is based on a segmented structure while each segment presents a planning cycle. It allows for planning but without the rigidity of traditional linear planning, as each cycle allows for (and actually requires) adjustment based on the results of the previous cycle[21].

Table No (1): Types of Uncertainty and its Implications on Planning Models and Processes

Type of Uncertainty		**Leads to Calls for Actions**	**Best Planning Model**	**Focuses on**
UE	**Uncertainty** in knowledge of the surrounding **Environment** (physical, economic, political, environmental, cultural and social, technological..etc) and its interrelationships.	More research, data, analysis and modeling	Comprehensive Rational Planning	Preparing and using good data and analysis of the environment in order to develop comprehensive long-term options and technically feasible solutions.
UV	**Uncertainty** about appropriate **Value** judgments			

[19] Ibid, 2020, Pp 4-6.
[20] Lewis, M. W., Andriopoulos, C., & Smith, W. K. (2014). Paradoxical leadership to enable strategic agility, California Management Review, 56(3), 58–77. Available at: https://openaccess.city.ac.uk/id/eprint/15305/
[21] Prange, Christiane, Alicia Hennig (2019), From Strategic Planning to Strategic Agility Patterns, SAGE Publications, Journal of Creating Value, 5(2) 111–123. DOI: 10.1177/2394964319867778

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Type of Uncertainty		**Leads to Calls for Actions**	**Best Planning Model**	**Focuses on**
a)UVP	**Uncertainty** about the **Value** judgments of **Politicians** (interest groups, political parties…etc)	More political policy guidance	Incrementalism Planning	Ensuring that taken decisions are desirable and feasible in the short-term for politicians.
b) UVC	**Uncertainty** about the **Value** judgments of the local **Community** (individuals, community leaders and CBOs)	More community participation	Trans-active Planning	Understanding, considering and managing community's knowledge and values.
UR	**Uncertainty** about the intentions of the different organizations in the **Related** areas (government, private sector, interest groups, civil society, international community…etc).	More coordination	Incrementalism Planning	Ensuring solutions are desirable and feasible for involved organizations in short-term implementation.
UE, UR, UVP	**Uncertainty** in knowledge of the surrounding **Environment, Related** areas**,** and **Values of Politicians**	All of the above	Mixed Scanning Planning	Ensuring solutions work in the short- term and the longer term

Source: John Abbott (2000). Planning as managing uncertainty.

As researches indicated that both planning and agile management are key elements within uncertainty and complexity, planners had to make them both align effectively. Alessandro Di Fiore (2020) suggested creating a Venn

diagram with planning on one side, agility on the other, and a practical and workable sweet-spot in the middle. He introduced what is called "*agile planning"* which acted as an approach suitable for the style of the twenty-first century. According to Alessandro Di Fiore, *Agile planning* is characterized by the following[22]:

- Frameworks and tools commensurate with different future;
- Adaptability with frequent and dynamic changes;
- Specify quality time for real and appropriate strategic conversations rather than being merely a game of numbers;
- Availability of resources and funds for any opportunity to come.

The application of such a planning approach calls for radical changes in both institutional set-up and leadership style. Agile organizations need to work on managing the local autonomy of bottom-up inputs with the top-down view as the center for the strategic priorities of the organization. Thus, new routines, structures, and processes for planning and coordination are required to control this tension[23]. Agility is not about speed and high transformation, nor diminishing strategic planning moving to none-linear planning chaotic planning. Evidences show that, in some cases, competitive advantages are not about those who changes faster. However, it might have different sources such as reflection, slowness and active waiting. What really matters is what pattern of agility to be applied. Christiane Prange and Alicia Hennig (2019) introduced three types of agility patterns; resilient pattern, versatile and transformational pattern depending on the combination of systematic planning and more chaotic elements[24]. Agile transformation is not an easy task that could be reached at once. Nonetheless, it should be seen as a process that contributes to culture and value creation both on individuals and organizations. It contains creating a new mindset and structures that

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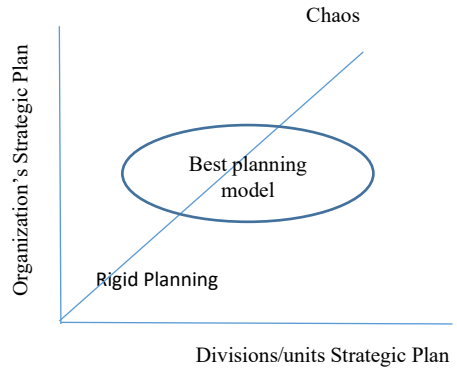
[22] Alessandro Di Fiore (2020), Pp 4-7.
[23] ibid (2020), P. 10
[24] Prange, Christiane, Alicia Hennig (2019), Pp 5-8.

allow different ways of acquiring and deploying knowledge (Kabadayi & Stokes, 2017)[25].

Agility Patterns: The idea of patterns provides feasible guidelines to act upon. these patterns are still tentative and free to evolve under the impact of new experiences, observations, specifications of each situations…etc. However, it must be noted that, patterns only provide a reusable solution to a commonly occurring problem or process, but not a finished and completed design that can be transformed into directly. Christiane Prange and Alicia Hennig (2019) stated that, in a world of complexity and uncertainty, strategy formulation must include a mix of planning and chaos where deliberateness and emergentness exist. Accordingly, they provided "agility patterns" to reach this mix. They believe that if agility is viewed as a strategy and a 'pattern' in the course of decision- making, "agility patterns", as presented below, might help overcome the slowness resulting from a rigid planning mindset. Additionally, they can prevent chaos resulting from undirected action and accelerated speed as it works as an alternative to linear strategic planning, which apparently has limitations such as rigidity, inflexibility and lack of speed[26].

Figure No. (1) Best Planning models within Uncertainty and Complexity



Source: Illustrated by the author

There are three main types of Agility Pattern as follow:

[25] Kabadayi, S., & Stokes, P. (2017). Comments by guest editors. Journal of Creating Value, 3(2), Pp9–12. Available at: https://www.deepdyve.com/lp/sage/comments-by-guest-editors-1yuehj0Y4Q
[26] Prange, Christiane, Alicia Hennig (2019), Pp 5-9.

1) Agility Patterns for Resilience: They deal with the ability to cope with a crisis or to return to a pre-crisis status quickly while minimizing the potential negative results and maintaining a stable state. For example, agility patterns for resilience are relevant in scenarios for the industrial sector which has high reliability requirements, such as presenting crucial elements of a functioning socio-politically relevant infrastructure like nuclear power plants, transportation, and hospitals.

2) Agility Patterns for Versatility: They provide many options to vary the degree of change within a specified framework. This type of pattern best fits in entities that have to adhere to rule and regulations while asked to be innovative. Accordingly, it needs to apply high transformation in some scenarios and maintain more stability in others.

3) Agility Patterns for Transformation: They aim at a transformation that generates high degrees of constant change and experimentation. They provide an open window to explore and learn until feasible action scenarios emerge.

It is important to consider that some patterns may be relevant for one organizational level whereas others may require a different pattern. Therefore, each organization might apply a different type of agility patterns either across the different organizational levels or to be related to different issues, processes or contents over the whole organization.

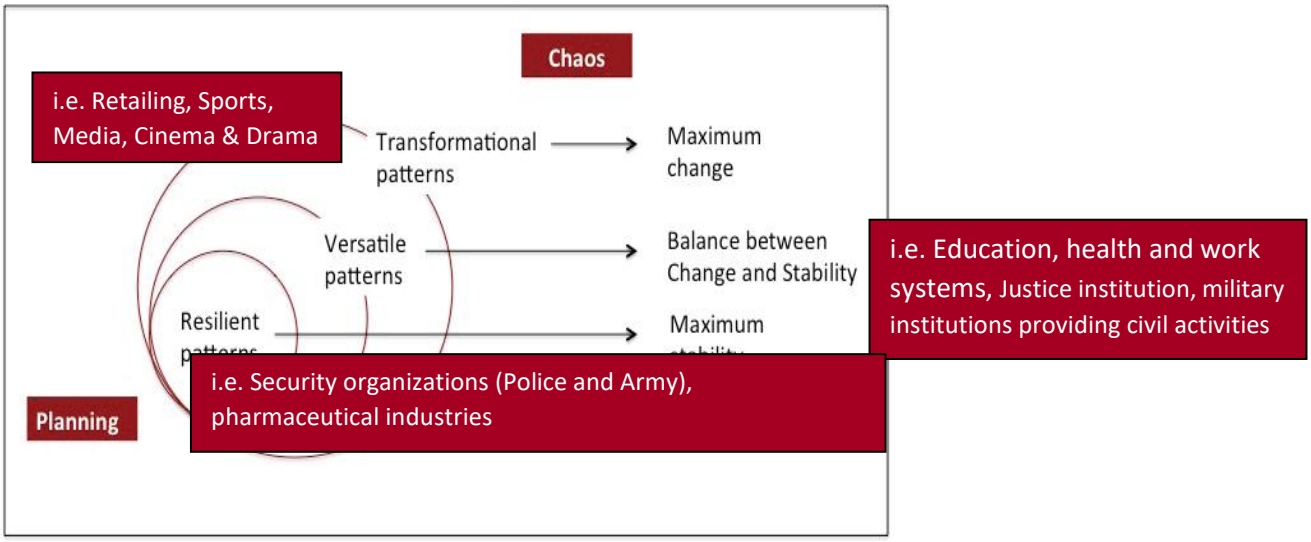
Figure (2) illustrates the authors' understanding of the current status of agile transformation in various entities that are categorized along the dimensions of system relevance (low vs. high) and strategic planning vs. full agility.

1- *Low system relevance* refers to those sectors that are not systemically relevant for the maintenance of socio-political stability and are not intensively regulated. These sectors also bear a lower risk when it comes to failed transformation as their impact on society and socio-political stability is limited. Examples are creative industries (arts- and culture-related businesses and institutions) or advertising and consulting industries amongst others.

2- *High system relevance* refers to those sectors that are systemically relevant for the maintenance of socio-political stability and are also often highly regulated, for example, government-led (infrastructure) projects with strong regional, national, and supranational relevance (e.g. EU projects implemented nationally) in addition to pharmaceutical and

food industries sectors. The degree of system relevance is considered by looking at social and economic indicators, for example, average number of employees, equity ratio, and economic viability. A causal link is suggested between an industry or business being systematically relevant and the perceived need for strategic planning. Higher system relevance limits the degree of agile transformation as the contribution to society is critical and cannot be subject to experimental play or even higher risks of failure. However, even these industries can be agile to the extent that they adopt agile pattern aligned with their positioning and challenge.

Figure No. (2) Examples Illustrating of Low and High System Relevance in Egypt's Governments



Source: Illustrated by the author

Figure (2) illustrates the relationship between planning patterns and their relevant organizational level, either by sector or administrative level. If this is applied on the two of Covid-19 pandemic and Russia-Ukraine war, it can be concluded that in each incident has a totally different classification.

Firstly: in the case of Covide-19 Pandemic, sectors that might follow the Agility Patterns for Resilience that require maximum change might include Sports, Cinema, and Drama. Although these sectors are important and highly affected by the pandemic, they are not the main ones affecting

the management of such crisis. Sectors that might follow Agility Patterns for Versatility that require balance between change and stability might include education, health and work systems, agricultural sector, justice institution, and the military institutions involved in civil activities as these sectors were highly affected as well. However, these sectors have a crucial impact on the future generation as well as the communities of social and political stability. Hence, it was crucial to perform in more innovative ways without breaking certain rules and regulations that create lawful issues.

On the other hand, sectors that might follow Agility Patterns for Transformation that requires maximum stability included Media, pharmaceutical industries, retailing, and more importantly security organizations; namely, the Police and the Army. These sectors played a pivotal role in the pandemic management as some of them, e.g. the different media channels were the main communication channel between the government and the public giving all directions and updates. The performance of retailers was crucial for goods and commodities to remain available at stores at fare prices. The pharmaceutical sector was asked to move rapidly and produce vaccines and increase amounts of products without breaking the international rules and regulations.

Secondly: Analyzing that with the Russia-Ukraine war, it can be found that the classifications of the governmental organizations among these three patterns are totally different. Additionally, the Low system relevance and the High system relevance are found to be totally different due to the different nature of crises where the affected sectors are totally different as well.

As the crises affected mainly oil prices, the prices of trade and industry, shipping, all exports and imports in addition to wheat, as a strategic product, are affected in most countries in return. Accordingly, sectors that might follow the Agility Patterns for Resilience which require maximum change might include media and drama. Sectors that might follow Agility Patterns for Versatility which require balance between change and stability might include industry and trade, transportation, electricity, and agriculture as to innovate production techniques that depend on sources of energy other than oil and gas. On the other hand, sectors that might follow Agility Patterns for Transformation which require maximum stability included retailing and market control as to keep prices at an affordable level to the public.

This type of analysis is pivotal for each state to do effectively as a framework of planning and managing any crises. It is necessary to clearly specify the sectors highly affected by this crisis, the anticipated effect, the Agility Patterns that better fit in managing this particular crisis and more importantly the Low and High system relevance with the requested role of each.

References:

1. Abbott, John. 2000. Planning as managing uncertainty. In book-New ideas of planning: Linking theory and practice. Available at: https://www.researchgate.net/publication/321314515_Planning_as_Managing_Uncertainty

2. Bill Gates, The next outbreak? We're not ready, TED Show, 2015. Available at:

https://www.ted.com/talks/bill_gates_the_next_outbreak_we_re_not_ready?language=en

3. Conway, M. "Scenario Planning: An Innovative Approach to Strategy Development." Swinburne University of Technology, 2004. Available at: https://www.researchgate.net/publication/242707360_Scenario_Planning_An_Innovative_Approach_to_Strategy_Development

4. David A. Lane and Martin Down (2010). The art of managing for the future: Leadership of turbulence, Emerald Group Publishing Limited, May 2010, Vol. 48 No. 4, pp. 512-527. Available at: www.emeraldinsight.com/0025-1747.htm

5. Di Fiore, Alessandro (2028), Planning Doesn't Have to Be the Enemy of Agile, Harvard Business Review, September 13, 2018. Available at: https://hbr.org/2018/09/planning-doesnt-have-to-be-the-enemy-of-agile

6. Gates, Linda Parker (2010), Strategic Planning with Critical Success Factors and Future Scenarios: An Integrated Strategic Planning Framework, Software Engineering Institute, Carnegie Mellon University. Available at: http://www.sei.cmu.ed

7. Jessop, (1969)"Local Government and Strategic Choice: An Operational Research Approach to the Process of Public Planning," Tavistock Publications, London. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://api.pageplace.de/preview/DT0400.9781483136431_A27461571/preview-9781483136431_A27461571.pdf

8. Kabadayi, S., & Stokes, P. (2017). Comments by guest editors. Journal of Creating Value, 3(2), 9–12. Available at: Available at: https://www.deepdyve.com/lp/sage/comments-by-guest-editors-1yuehj0Y4Q

9. Lewis, M. W., Andriopoulos, C., & Smith, W. K. (2014). Paradoxical leadership to enable strategic agility, California Management Review, 56(3), 58–77. Available at: https://openaccess.city.ac.uk/id/eprint/15305/

10. Prange, Christiane, Alicia Hennig (2019), From Strategic Planning to Strategic Agility Patterns, SAGE Publications, Journal of Creating Value, 5(2) 111–123. DOI: 10.1177/2394964319867778

11. Ralph D Stacey (2007). Strategic Management and Organizational Dynamics: The Challenge of Complexity, Fifth Edition.

Pearson Education. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.advisory21.com.mt/wp-content/uploads/2023/04/Strategic-Management-and-Organisational-Dynamics-Ralph-D.-Stacey-PDFDrive-.pdf

12. Raynor, Michael E. (2007), The Strategy Paradox: Why Committing to Success Leads to Failure and What to Do About It. New York: Doubleday. Available at chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www2.deloitte.com/content/dam/insights/us/articles/the-strategy-paradox/US_deloittereview_The_Strategy_Paradox_aug07.pdf

13. Schoemaker, Paul J. H., Ch. 26, "Twenty Common Pitfalls in Scenario Planning." Learning from the Future, John Wiley and Sons, 1998. Available at: https://www.researchgate.net/publication/285797815_Twenty_common_pitfalls_in_scenario_planning

14. Tabish SA, (2015), Nabil Syed, Disaster Preparedness: Current Trends and Future Directions, International Journal of Science and Research (IJSR), Volume 4 Issue 6, June 2015. DOI: https://doi.org/10.21275/SUB115185. Available at: https://www.ijsr.net/issue1.php?page=43&i=-4&edition=Volume%204%20Issue%206,%20June%202015

15. Tedros Ghebreyesus (2023). World Health Organization. March 2023. Available at: https://news.un.org/en/story/2023/05/1136912

16. Wilkinson, Lawrence. "How to Build Scenarios." Wired (Scenarios: 1.01 Special Edition) September 1995: 74–81. Available at: chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.musicandmedia.org/standard/pdf/build_scenarios.pdf