

Entrepreneurial Strategies for Navigating the VUCA World

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Abstract

The business landscape is constantly changing. Today's leading companies face accelerating environmental turbulence and tectonic shifts in societal perceptions of private enterprise, of which the COVID-19 pandemic is neither the first nor the last major disruption in the history of unwanted events. The biggest challenge for businesses is to keep on evolving fast enough to remain relevant, while the greatest threat is to get stuck with what worked in the past. The article summarizes the body of rigorous academic literature on entrepreneurial strategies (effectuation, bricolage, pivoting, ambidexterity) effective in the turbulent environmental conditions of the VUCA (Volatility, Uncertainty, Complexity, and Ambiguity) world. The provided evidence-based advice is intended to help the managers to take the driver's seat, proactively leading and shaping the future of their companies amidst the environmental turbulence.

The rise of the VUCA world

As opaque and daunting as was the first encounter with the COVID-19 in the business environment, it was not the very first disruptive phenomenon in the history of unwanted events,^{1,2,3} nor could it be considered the last one. The business world has experienced numerous abrupt, negative environmental jolts, such as the saving and loan crisis in 1989, the boom and bust of dot-com business in 2000, the SARS pandemic in 2002-2003, the great recession in 2008, to name but a few. In addition to economy-wide disruptions, each industry has its own abrupt up and down cycles that the incumbents must navigate. Therefore, it is high time that businesses learn

how to cope with ongoing disruptions that are emerging at an accelerated pace. Ironically, companies by and large have been inept at dealing with different aspects of the turbulent business environment that we live in,² leading to accelerating corporate mortality trends.⁴ To address this incompetence, we summarize the findings of the rigorous management research related to entrepreneurial strategies and practical approaches for achieving corporate longevity and adaptation to changing world.

Today's global business environment is conventionally characterized using the VUCA acronym, standing for Volatility, Uncertainty, Complexity, and Ambiguity in an environment that affects the pre-planned strategies for executives and their businesses. As much as these four aspects of the VUCA world might seem similar to each other, they are actually distinct, requiring different adaptation strategies since the nature of competition changes in each circumstance.^{5,6} It is important for managers to not misinterpret the environment and to not get prepared for a wrong phenomenon, which consequently leads to the misallocation of resources towards adaptation, innovation, and growth. Among the whole spectrum of adaptation approaches, in this article, we concentrate on entrepreneurial strategies that are proven to be effective for addressing individual VUCA dimensions and their combinations. The subsequent analysis relies on the summary of rigorous academic literature, yielding practical managerial evidence-based advice.

Entrepreneurial strategies for navigating VUCA components

Strategies in volatility

Volatility is defined as a situation where there is enough information to make decisions; however, changes are quite unstable.⁵ Managers are required to be agile to recognize and work towards opportunities and threats in a volatile environment. One feature of agility is based on having sufficient resources that could be used when changes are imminent with erratic patterns. Possessing strategic resources paves the way for quickly responding to changes, and consequently could result in sustained competitive advantage.^{7,8} This approach is the cornerstone of the Resource-Based View (RBV) paradigm strategic management. The importance of RBV and possessing strategic resources gets particularly pronounced for small and medium enterprises (SMEs), being impacted by COVID-19, to reach survival and sustainability strategies.⁹

In addition, firms should be able to redeploy their available resources to address the changes/innovations needed in their products/services,^{10,11} which is called bricolage in the entrepreneurship sphere.¹² This advice is feasible for already existing firms in the market before the emergence of COVID-19.

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Existing firms have been able to reuse their available resources to keep their performance in the new reality of business after COVID-19.¹³ Firms producing ventilators and providing them to hospitals have acquired more resources and reused their available resources to meet the unprecedented need of the market.¹³

The other feature of agility is quick adaptability to the changes in the market, which could be implemented by boosting the dynamic capability.^{11,14,15} Through dynamic capability, firms have to renew their resources and increase their competencies by continuous adaptation.^{16,17} Dynamic capability helps firms to generate and modify operation routines by integrating, learning, and reconfiguring internal and external organizational skills and resources.^{14,15,18,19}

What if an alert entrepreneur aims to establish a new startup amidst COVID-19? Such exogenous shocks are shown to be decent catalysts for the long-term survival of new firms.^{13,20} This is because flexibility in changing business models, and quick implementation of innovation will be implanted into the DNA of such firms. This agility helps new startups to pivot efficiently and effectively.¹³ Having said all merits of agility, it should be noted that it is a very costly process,¹¹ which might inhibit some firms from going further. In other words, it is not a panacea for all firms with divergent features. Some might benefit from failing forward and fast by exiting the market at this stage.²¹ In summary, in volatile environments, the combination of acquiring more strategic resources (RBV), reusing available resources (bricolage), and quick adaptation (dynamic capability) are helpful for existing firms. For startups, pivoting could be a decent strategy to plant the seed of adaptation into their DNA.

Strategies in uncertainty

Uncertainty is described as a situation where there is a paucity of knowledge, which makes predicting the future difficult.⁵ There is a difference between uncertainty and volatility. Volatility is about a change that will happen doubtlessly, but its magnitude is not known. On the other hand, a change might not happen in an uncertain situation.

In an uncertain environment, information asymmetry gives the upper hand to mighty competitors. They have the bargaining power as well as more accurate information about the probable changes in the market. In a simple word, information asymmetry means “different people know different things.”²² In the management literature, it is clarified as the heterogeneity in the distribution of information between different parties in the market.²³ This lack of knowledge in uncertainty could be addressed by gaining information about consumer demands, competitors’ strategies, as well as changes in the

market.²⁴ The primary strategy in uncertain environment is expanding the information network; for this, firms should actively grow their information and data processing resources.⁵

A viable strategy for achieving this is open innovation. This approach implies being open and collaborative about sharing data with other cohorts as well competitors.^{25,26} Advantages of open innovation are early involvement in opportunities and new or emerging technologies,^{27,28} cost reduction,²⁹ and risk-sharing.³⁰ Firms in medical science have benefited greatly from open innovation during the COVID-19 pandemic to keep and even increase their market share.³¹

The other feasible way to progress in such an uncertain environment is not trying to control or predict the future by exploitation of contingencies instead of avoiding them.^{32,33,34} This method is named effectuation in the literature, which is instrumental in managing uncertainties.^{35,36} Effectuation is the adaptation of goals based on the resources currently available with affordable loss. As such, for the uncertain environments, the combination of open innovation and exploitation of contingencies with available resources (effectuation) could be useful for firms to keep their performance.

Strategies in complexity

Complexity is delineated as the intricacies of many interconnected parts both in internal organizations and external environments.^{5,37} Firms need to increase their organizational complexity to be able to adapt to the variety in the environment.²⁴ Ashby's law of requisite variety says "only variety can absorb variety."³⁸ It is worth noting that complexity is different from uncertainty and volatility. If firms merely accumulate more strategically valuable resources (the approach taken in volatility) without allocating them purposefully, it would not be helpful in complex environments. Similarly, expanding the information network (the approach taken in uncertainty) or overloading information freeze the decision-making process in firms.³⁹ Therefore, firms should be capable of restructuring their organizational systems,^{5,40} which improves their complexity by responding as quickly as possible to the external complexity.

A quick response to restructuring necessitates the capacity in the business model to adapt to the complex environments as well as having sufficient resources.⁴¹ Firms need to be able to pivot to efficiently and quickly mirror external complexity in their internal organizations.⁴² Pivoting includes changes in the relationships and promises (relational commitments), timing (temporal commitments), and other aspects of a business model,^{42,43,44,45,46,47} not planned and anticipated in advance. Although admittedly the academic literature is far from reaching a consensual definition of entrepreneurial

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pivoting, it is useful to conceptualize it as various changes in different components of the firm's business strategy with the aim of reaching a successful outcome.⁴⁸ Although changing the informal agreements, contracts, and promises might seem outrageous in the business world, it could give flexibility to firms to change quicker.⁴³ That is why changes in commitments could sometimes be a remedy to adapt to the external complexity. The timing and schedule of the business plan could change in favor of coping with the complexity.⁴³ Being hit by the environmental complexity, firms could adjust through changing the length of time for different activities, the sequence of activities, or postponing the scheduled plan. Changes in key activities, key resources, value propositions, revenue model, cost structure, as well as channels to be in touch with customers are other ways to restructure the business.^{46,49} While these adaptations sometimes need a huge amount of changes, there are other situations that just need a few changes. Following this line of reasoning, it is convenient to distinguish between handy vs. drastic pivoting. Handy pivoting refers to small changes in the aforementioned criteria. For example, restaurants, battered by COVID-19, have pivoted to offer a flat rate for a specific number of meals weekly or monthly.⁵⁰ Or, they have provided a video link and ingredients to their customers, which gives their customers a sense of learning. These changes have not altered the fundamental aspects of a business. In another example, airlines have switched from commercial passengers to cargo-only flights because of a 90% drop in the scheduled flights.⁵⁰ On the other hand, drastic pivoting targets transformational changes in the business model of a business, which might change its nature. Twitter is the very epitome of drastic pivoting.⁴⁶ It originally started as "Odeo," a platform to provide podcasts, which has turned into a microblogging platform. Twitter is more used as a platform to share the political and social landscape of our daily life. As it could be seen the nature of the business has changed which needed a great deal of change in the business model.

For having enough resources, the firms should accumulate resources both tangible and intangible ones whenever possible, which could give them superiority compared to other competitors.⁵¹ As mentioned earlier, the RBV literature has proven that possessing strategic resources can help firms to reach sustainable competitive advantages.^{7,8,52,53} Intangible assets are more likely to increase the complexity of the organizational systems because of their inimitability, immobility, and non-substitutability.⁵⁴ Sufficient resources are instrumental in restructuring a foundation of a business; however, creating, administering, and employing those resources are costly and difficult.⁵¹ Finally, the combination of restructuring (through changes of

different aspects of the business model) and acquiring more resources are useful to firms in complex environments.

Strategies in ambiguity

Ambiguity is pertinent to a situation where causal relationships in the business environment are not clear without any precedents to refer to.^{5,24} It is the world of “unknown unknowns”. Ambiguity is different from the rest of the features of the VUCA world. There is no volatility in terms of expecting unstable change. That is why stockpiling strategic resources could lead to the failure of firms.⁵ In the uncertain environment, while there is a paucity of knowledge, the causal relationship is understood.⁵⁵ Acquiring more information is not helpful in an ambiguous situation, because not only there are not any previous experiences to look at, but also you are not sure which information might be useful. Decision-making could not be based on facts in such environments.⁵⁶ And, ambiguity does not reflect the complexity, as it is not expected to encounter a great number of convoluted interconnected parts here.²

What could be done in an ambiguous environment is experimentation with different options to learn about the causal structure of the environment.^{5,24} To reduce the cost and time of experimentation procedures, it is rational to start with the available resources at hand. Entrepreneurs, managers, as well as investors could use experimentation to evaluate and commercialize different ideas and projects without fully investing in them.⁵⁷ Innovations that are implemented through experimentation mostly fail.⁵⁸ Firms require to have an organizational tolerance for failures of experimentation, especially in the short term. This results from the fact that from a number of experimentations, just a handful number of them would be instrumental in firms’ survival.⁵⁹ This tolerance and looking at an affordable loss are helpful in doing early experimentation to come up with the best experiment to implement thoroughly. Firms could employ three approaches as effectuation, bricolage, and ambidexterity to keep and increase their performance in ambiguous environments.

First, effectuation is explained by its four features, namely experimentation, affordable loss, flexibility, and precommitments.^{33,34} Experimentation in effectuation includes developing various variations of a product or service, different ways of selling or delivering prototypes and services, trying different distribution channels and different revenue models.^{33,60,61} Affordable loss in effectuation asks how much investors and/or entrepreneurs are willing to lose based on available means to the firm. Flexibility is pertinent to adaptability to the changing and unpredictable circumstances, as well as to the new knowledge. And, precommitments in

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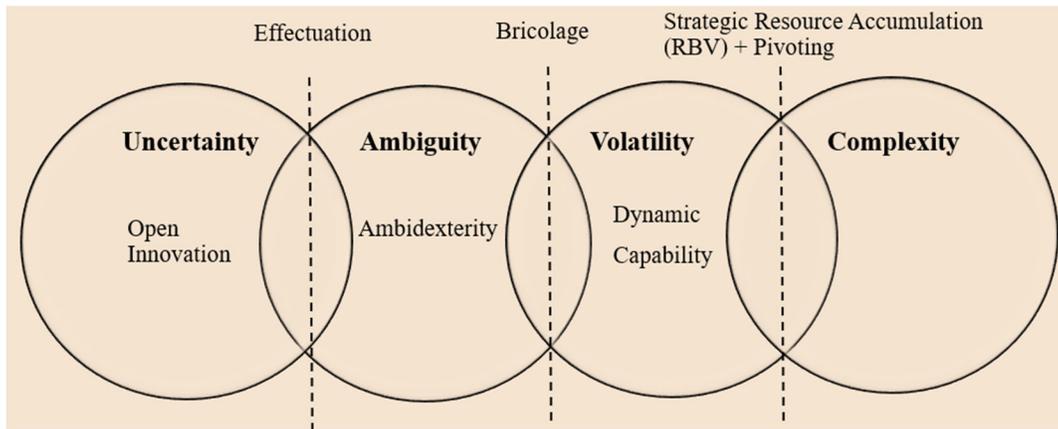
effectuation are related to establishing relationships with customers, cohorts, and strategic partners well before entering the market with the newest products or services. This early relationship not only reduces the uncertainty but also promotes a sense of responsibility among stakeholders. Therefore, effectual entrepreneurs create new markets for their new products or services,^{34,62} or they transform their markets.⁶³ All these four aspects help firms overcome the ambiguity in the environment and keep their performance.^{32,64}

Second, bricolage through recombination of resources at hand to tackle new problems is another part of experimentation.^{12,65} Bricolage does not take conceptual approaches towards problems. Instead, it focuses on experimentation to solve problems.^{12,66} It is shown that bricolage is especially useful in ambiguous environments.^{67,68} In addition, bricolage is conducive to decreasing the magnitude of loss by reusing whatever resources are already in existence in the firm.

Third, ambidexterity is another effective approach to work prosperously in ambiguous environments. Ambidextrous managers and entrepreneurs are acute enough to explore and exploit simultaneously.⁶⁹ Experimentation, search, discovery, risk-taking, flexibility, and innovation constitute the foundation of exploration.^{64,70} Exploration could cause negative effects due to its essence of radical and risky changes. On the other hand, efficiency, incremental changes, implementation, and selection comprise exploitation.^{64,70} Purely exploiting every opportunity could decelerate the profitability path for firms due to its conservative or cautious approach.^{64,71} Ambidexterity helps firms benefit from the merits of experimentation between exploration and exploitation by making a balance between them.⁷² The usefulness of ambidexterity could be bolstered in ambiguous environments,^{73,74} especially because of the necessity to experiment with the least possible loss.⁷² To conclude, in ambiguous environments the combination of different methods which have experimentation with the least probability of loss are great solutions. Therefore, in this situation the firms should pursue implementation of recombination of available resources (bricolage) in conjunction with affordable loss (effectuation) and exploration and exploitation of opportunities (ambidexterity). A summary of what should be done in each facet of the VUCA world is shown in Figure 1.

Figure 1. The strategic decisions in each part of the VUCA world.

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Conclusion: interconnected or separated?

As theoretically distinct as the four aspects of the VUCA world could be,⁵ there are still similarities and overlaps between them in practice.²⁴ Each aspect has its own characteristics, necessitating different strategies. However, the overlaps between the four aspects are representative of their similar managerial/entrepreneurial approaches. Hence, effectuation, bricolage, strategic resource accumulation (RBV) and pivoting are put at the intersection of VUCA dimensions in Figure 1.

What if two or more aspects of the VUCA world happen at the same time? Unlike the traditional practice of management, the complexity of today's business environment requires the combination of different approaches to deal with the volatility, uncertainty, ambiguity, complexity.²⁴ To be able to cope with the abrupt changes of the VUCA world, organizations must practice continuous adaptation and permanent learning.^{24,75,76} The continuous adaptation facilitates the agility in the organizational structure which could pave the way for the implementation of different strategies at the same time. But, the next question would be how many of the strategies could be carried out when the VUCA happens? There is no definite answer to this question as it depends on various aspects, such as firms' organizational structures, firms' market status, firms' size and age, the industry, the market, the managerial team experience, and to name a but few. Yet, should the managers inject the agility in the blood vessels of their organizations, they would be able to pick the combination of strategies that would fit their situations.

As it is the case with any managerial framework, the approach of dealing with VUCA summarized in Figure 1 does not guarantee prosperous organizational future in any context. Instead, it summarizes the evidence-based advice intended to help the managers to take the driver's seat, proactively leading and shaping the future of their companies amidst the

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environmental turbulence. Using the proposed entrepreneurial strategies in practice increases the likelihood of developing an agile organization, able to quickly take advantage of changing environment and prepared to thrive on the next black swans coming your way.

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