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Serendipitous Strategy: How Chance Events Shape Organizational Direction and Decision-Making

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Abstract: Traditional strategy research has largely been focussed on rational, deliberate, and predictive planning processes as the main source of organizational success (Ansoff, 1965; Porter, 1980). However, the evidence both from the past and present, is that many of the strategic turnarounds and shifts originate in unplanned, lucky events rather than in the formalized decision, making (Mintzberg & Waters, 1985; Merton & Barber, 2004). This article deals with the idea of serendipitous strategy which is the organization's ability to recognize, understand, and make use of the unexpected events that lead to the important strategic redirection. By examining emergent strategy, complexity, and organizational learning, the study proposes that lucky hits are not just random but serve as an adaptive means by which companies deal with uncertainty and innovation (Cohen & Levinthal, 1990; Stacey, 1995).

The research, through an integrative literature review and case, based synthesis, documents how companies like 3M, Pfizer, and Google converted their inadvertent discoveries into intentional strategic moves. These cases demonstrate that the capacity to exploit serendipity is influenced by the presence of certain enablers in the context such as absorptive capacity, organizational slack, psychological safety, and interpretive flexibility. This paper offers a conceptual framework that explicates how the happenstance of learning from the inside can be a way of interaction with the external world to influence decision, making and long, term strategic direction. This work, by repositioning chance as a valuable asset rather than a disruptive anomaly, thus, it helps scholars and practitioners to rethink unpredictability's role in the evolution of and success of the organization.

Keywords: Serendipitous strategy; emergent strategy; organizational learning; absorptive capacity; complexity theory; strategic management.

1. Introduction

Strategic management has traditionally been based on the concept that efficient companies are able to make money through planned actions, logical analysis, and the strict control of resources (Ansoff, 1965; Porter, 1980). Models of classic strategy focus on linear functions of the organization, such as the definition of objectives, the environmental and competitive analysis, and implementation, while at the same time, they consider that managers are able to foresee and govern future results if they have enough data and insight (Grant, 2016). But, during the last several years, both factual and theoretical factors have led to the rejection of this deterministic perspective. Very often in reality, the developmental paths of organizations are far from

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the ones that were planned, and they are influenced, in fact, by such things as unexpected findings, unplanned decisions, and changes in the environment, which cannot be even localized by the formal strategic processes (Mintzberg & Waters, 1985; Burgelman, 1991).

The growing dynamism and uncertainty of business surroundings are of today's world only serve to highlight the shortcomings of entirely rational planning. Among the major factors shaping the current environment for business are globalization, technological changes, and social instability. They are such that no company can accurately foresee every crucial variable that would affect its strategic success (Eisenhardt & Martin, 2000; Brown & Eisenhardt, 1997). As a result, firms need not only to put their plans into deliberate action but they also have to keep their doors open for unforeseen opportunities and adaptive learning. It is in this very setting that serendipity, the occurrence of valuable and unexpected discoveries, becomes a key yet hardly noticed mechanism for strategic change (Merton & Barber, 2004).

Organizational serendipity is frequently mistaken for pure luck or random coincidence. Nevertheless, the progressive scholars argue that a fortuitous event is transformed into a strategically important one only when an organization has the interpretive and cultural abilities to perceive it and take the required action in that regard (Denrell, Fang, & Winter, 2003; Cunha, Clegg, & Mendonça, 2010). To put it differently, serendipity is the point at which unpredicted happenings and the readiness of an organization meet. The case of those transformations is very clear in a situation where 3M, Pfizer, and Google are the companies: each of them made a throwaway find, starting from weak adhesives to surprising drug side effects, and turned it into revolutionary products and strategic changes that ultimately redefined their sectors. The cases communicate that on the condition that a chance can be the factor that sets off an event, it is still organizational cognition and culture which decide whether that event leads to innovation or becomes one of those few instances that go unnoticed (Weick, 1995; Cohen & Levinthal, 1990).

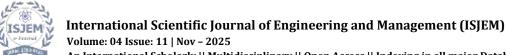
The impact of serendipitous events on strategic decisions requires you to reconsider control, drifts relationship. Mintzberg (1994) was of the opinion that strategy development encompasses as much discovery as design. In the same vein, complexity theorists argue that organizations are adaptive systems where even small, unplanned incidents can eventually lead to substantial structural changes (Stacey, 1995; Anderson, 1999). Hence, from that standpoint, serendipity doesn't contradict strategy but rather represents an essential aspect of complex adaptive behavior. It serves to emphasize the organization's less than linear and iterative nature of decision, making whereby the results stem from the continuous learning and interaction rather than strict following of the pre, set plans.

This article utilizes theory to probe deeper into the nature of serendipitous strategy, the means by which happenstance influences organizational direction and decision, making. By integrating concepts from strategic management, organizational learning, and innovation studies, the author sets three major goals of their research: first, to define serendipity as a strategic phenomenon; second, to determine the organizational factors which facilitate its effective implementation; and third, to depict its significance for managerial practice and theory. In the end, the argument presented in the paper is that to acknowledge serendipity as a strategic asset is to be able to better deal with the volatility of the future and to be capable of converting unpredictability into a source of sustainable competitive advantage.

2. Literature Review

2.1 Deliberate and Emergent Strategy

In the beginning, strategists mainly thought of success as resulting from solely one factor, i.e., rational, deliberate planning. Major theoretical contributions like Ansoff's (1965) Corporate Strategy and Porter's



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(1980) Competitive Strategy portrayed strategy as a hierarchical, logic, driven process which aimed at achieving harmony between company goals and the world outside by carefully checking and controlling them. Within this conventional framework, the creation and execution of strategy were expected to be follow, up phases in a chain of events led by the insight and intention of the management (Grant, 2016).

Nevertheless, the 1980s marked a turning point as researchers started to question the feasibility of a wholly deliberate strategy. Mintzberg and Waters (1985) argued for differentiating between deliberate and emergent strategies and contended that the latter mostly arise when the former fail to account for sudden changes in the environment or the learning of the organization. Here, the idea was introduced that a company's strategy may be derived from its modus operandi rather than from its explicit plans, a recognition that factors such as chance, trial, and adaptation are in fact indispensable for strategics to evolve (Mintzberg, 1994).

The emergent strategy view is also substantiated by the conduct of the real business world, where the consequences of these (often unexpected) events are able to turn not only market activities but also strategy operations on their heads (Burgelman, 1991; Eisenhardt & Brown, 1998). Actually, as the argument goes, organizations capable of foreseeing the future accurately are not necessarily the most effective ones; rather, these organizations would be those who have the ability to adjust and respond to sudden occurrences. Hence, in this context, serendipity is perceived as a facilitator of emergence, an outcome that, though unintended, gradually brings about the change of an organization's strategic path (Cunha, Clegg, & Mendonça, 2010).

2.2 Serendipity in Organizational Studies

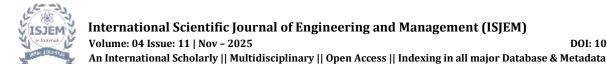
The word serendipity is derived from a letter of Horace Walpole (1754) wherein he described the tale "The Three Princes of Serendip", the protagonists of which made their discoveries "by accidents and sagacity." Present-day organizational serendipity is the act of stumbling upon valuable things unintentionally, but nevertheless, understanding and using their potential (Merton & Barber, 2004). So, serendipity is the conjunction of luck, perception, and mental alertness (Roberts, 1989).

Scholars of organizations have been paying attention to the works of firms where such accidental discoveries came up and how they profited from them. Denrell, Fang, and Winter (2003) maintain that random factors and exploratory behavior may facilitate strategic performance, provided that structures allowing firms to learn from anomalies instead of suppressing them are in place. Following the same line of reasoning, Cunha, Clegg, and Mendonça (2010) see organizational serendipity as "the ability to notice, interpret, and exploit the unexpected events," explaining that it is neither absolute luck nor careful planning, but rather a result of organizational openness and reflexivity.

There are plenty of examples to back this idea. The invention of the Post-it Note by 3M, the discovery of Viagra by Pfizer, and the creation of Gmail by Google all were the results of unintended experiments or side projects that later turned out to be strategic opportunities. These examples show that serendipity is not something externally accidental but an internal ability that allows companies to convert unpredicted occurrences into innovation (Busch, 2016). Hence, serendipity stands for a strategic position—a mode of perceiving and acting in the face of uncertainty which, thereby, separates the adaptable organizations from the inflexible ones (Weick, 1995; Garud, Gehman, & Giuliani, 2018).

2.3 Complexity and Nonlinear Dynamics

One of the main features of complexity theory is that it considers organizations as adaptive systems that change with and are influenced by their unpredictable and ever-changing surroundings. This theory differs from mechanistic models of strategy by not assuming stability and control in the environment. Instead, it highlights the recursive nature of feedback systems, self-regulation, and new patterns becoming visible not



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from a direct command but from the interaction between various agents. Complex systems are populated with small and seemingly insignificant events—in some cases called the "butterfly effects"—that over time can bring upbound effects and so indirectly can change the overall strategic direction (Levinthal, 1997).

This position implies that chance occurrences are not just anomalies but the core components of complex adaptive systems. While organizations are engaging with markets, technologies, and institutional forces that are continuously evolving, they will be confronted by the emergence of new patterns that are not fully predictable or plan-able (Marion & Uhl-Bien, 2001). As a result, serendipitous outcomes stand for instances of nonlinear emergence whereby unexpected local conditions interact with organizational structures resulting in new strategic possibilities (Dooley, 1997).

On top of that, executives who accept complexity would naturally come to the conclusion that they have to live with uncertainty alongside the continued development of adaptive processes instead of claiming full control. Most organizations that manage to succeed in such environments, as a rule, allow and encourage the activities such as experimentation, making decisions at the lower levels of the organizational hierarchy, and the involvement of members of different functional units in the organization of which all increase the probability of discovering and taking advantage of serendipitous opportunities (Chiles, Meyer, & Hench, 2004).

2.4 Organizational Learning and Absorptive Capacity

The ability to gain strategic advantage from random events hinges on the company's learning system as well as its cognitive capabilities. Cohen and Levinthal (1990) put forward the idea of absorptive capacity which means how well an organization can identify the worth of new external information, integrate it, and then use it for commercial purposes. A high level of absorptive capacity gives a business the ability not only to detect where future opportunities lie in the incidental events but also to convert these happenstances into feasible plans (Zahra & George, 2002).

Scholars of organizational learning maintain that acquiring knowledge from the unpredicted necessitates engaging both single-loop and double-loop learning (Argyris & Schön, 1978). Single-loop learning is about fixing the deviations from the already existing frameworks, whereas double-loop learning refers to the process of questioning and changing the assumptions that form the basis of the frameworks. Many times, serendipitous events help the company to start double-loop learning as a result they can figure out different strategic logics and reshape their possibilities (Crossan et al., 1999).

Besides cultural and structural aspects, an organization's ability to learn from chance is also dependent on those factors. A feeling of psychological safety, an error tolerance, and diversity openness invite the reinterpretation of anomalies as chances not as threats (Edmondson, 1999). On the other hand, rigid hierarchies or cultures with punishment may shut down the recognition of unexpected value, leading thus to the nonrecognition of those that have the potential to be revolutionary. Therefore, for serendipity to be successful, there should be a balance between elaborating and disciplining, which is typical of ambidextrous organizations (O'Reilly and Tushman, 2013).

2.5 Synthesis and Conceptual Gaps

Organization of all those different themes from literatures shows that strategic success is not completely the result of intentional design but also of the adaptive nature of the organization in dealing with the unexpected. Nevertheless, each research paper on emergent strategy, complexity, and organizational learning briefly acknowledging the role of unplanned events, hardly any of these studies combine these perspectives to formulate serendipity as a coherent strategic construct. In fact, much of the existing research treats the

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identification of serendipities as separate events that happen in the narrative of the organization rather than as the signs of the systematic capabilities of the organization (Busch, 2016; Garud et al., 2018).

This article is a step beyond those works. It synthesizes these theoretical strands as to how chance events influence organizational learning and adaptive structures leading to decision-making and eventual strategic direction. By doing this, it does not see serendipity as the opposite of strategy but as its seldom-seen companion, which is a dynamic process whereby organizations are able to turn disorder into opportunity.

3. Methodological Approach

The current research employs a qualitative, conceptual design to gain an in-depth understanding of the influence of serendipitous events on organizational changes and decision-making processes. Considering the exploratory nature of this phenomenon and its theoretical basis in various traditions, a qualitative review of scholarship and case studies is suitable for the investigation (Eisenhardt, 1989; Gioia, Corley, & Hamilton, 2013). The research strategy is not aimed at testing hypotheses through quantitative analysis but rather to draw from different fields such as strategy, innovation, and organizational learning to build an interpretive framework of serendipitous strategy.

3.1 Research Paradigm and Rationale

This study comes from the interpretivist epistemological paradigm perspective. This paradigm highlights that the reality of an organization is subjective and socially constructed (Burrell & Morgan, 1979). Opposite to positivist methods that are based on measurable cause-and-effect relationships, interpretivism strives to comprehend the perception, interpretation, and reaction of organizational actors to unexpected events within complex and uncertain contexts (Lincoln & Guba, 1985). Serendipity is inherently a phenomenon that cannot be predicted or quantified; its worth is in the interpretation and sensemaking (Weick, 1995). So, a qualitative conceptual approach is best equipped to uncover the intricacies of the dynamics that are dependent on the context and are at the core of serendipitous strategic outcomes.

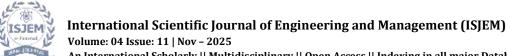
3.2 Data Sources and Selection

To understand this event, the research relies on secondary data from three different sources: (1) peer-reviewed academic literature on emergergent strategy, complexity, and organizational learning; (2) published case studies of well-documented accidental innovations, such as those involving 3M, Pfizer, and Google; and (3) theoretical works dealing with uncertainty, adaptability, and innovation management. Secondary data analysis is especially useful for conceptual research as it allows the researcher to integrate knowledge from different established domains and thus recognize patterns and theoretical relationships that are not evident in the individual studies (Tranfield, Denyer, & Smart, 2003).

The case examples of 3M's Post-it Notes, Pfizer's Viagra, and Google's Gmail were selected based on three criteria: (a) clear evidence of accidental discovery resulting in strategic impact, (b) availability of credible and detailed documentation, and (c) acknowledgement by academic and practitioner literature as instances of serendipitous innovation (Garud, Gehman, & Giuliani, 2018; Busch, 2016). These cases are not the empirical evidences but the illustrative exemplars (Siggelkow, 2007) which dramatize the conceptual phenomena that link chance events to organizational adaptation and strategic redirection.

3.3 Analytical Strategy

The study employed a thematic synthesis approach to integrate the insights from the literature and the evidence from the cases to figure out the patterns, the relationships, and the conditions that could lead to the



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phenomenon of serendipitous strategy (Thomas & Harden, 2008). Three iterative steps were involved in the process.

Firstly, through a systematic review of both the seminal and recent works, the authors identified key theoretical constructs (e.g. emergence, absorptive capacity, interpretive flexibility, and organizational learning) (Cohen & Levinthal, 1990; Mintzberg & Waters, 1985; Stacey, 1995).

Secondly, the researchers looked at the relevant case stories to understand how these theoretical concepts played out in actual organizational environments. As an example, in the case of 3M's Post-it Note, the story goes that the weak adhesive technology was turned into something valuable only after it was reinterpreted in a different application context - thus demonstrating interpretive flexibility and absorptive capacity (Garud et al., 2018).

Thirdly, the report synthesized the data into a conceptual model illustrating the interaction between luck, company skills and strategic results.

Such a highly-refined and abductive approach (Dubois & Gadde, 2002) is a movement between data and theory and therefore leaves room for conceptual insights to be born naturally. By associating theoretical notions with real-world examples, the paper intends to formulate a comprehensive framework that not only elucidates the role of serendipity in strategic evolution but also envisages it as a systematic, albeit unpredictable, factor.

3.4 Validity and Credibility

In qualitative conceptual research, the emphasis is mainly on theoretical validity and conceptual rigor rather than on statistical generalizability (Yin, 2018). To ensure its credibility, this research has the confidence to rely on the methodology of triangulation from various sources and different fields by not only using one discipline i.e. strategic management theory but also by combining organizational behavior research and innovation case studies. Cross-disciplinary integration like this reduces the chance of bias and increases the consistency of the theory (Patton, 2015).

Moreover, the choice of the most prominent cases helps to achieve external validity by linking theoretical debates with real examples supported by empirical data (Eisenhardt & Graebner, 2007). The conceptual framework of the study is based on old but still developing paradigms as it incorporates ideas from classical strategy literature and modern research on complexity and learning.

3.5 Ethical and Philosophical Considerations

This investigation refrains from involving primary data collection or human subjects and thus ethical approval is not necessary. However, it is worth mentioning that the investigation is in line with ethical standards of academic integrity as well. The study ensures that the works of other researchers are properly cited and acknowledged, the sources used are presented transparently, and the intellectual contributions of others are recognized. From a philosophical point of view, the adopted approach accepts that strategic knowledge is uncertain and probabilistic and it views organizations as entities that can adapt, and are part of ever-changing ecosystems (Stacey, 2012). The aim is not to provide a set of deterministic rules for handling fortuitous events but rather to identify the organizational factors that make it possible for such events to be recognized and utilized effectively.

In essence, the methodologies employed in this study are qualitative and interpretive, involving the synthesis of various sources to understand how chance events are strategically utilized in organizations. The integration of theoretical insights and the presentation of the illustrative cases from the field enable the research to come

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up with a conceptual framework of serendipitous strategy that highlights the interplay between randomness, recognition, and organizational adaptability. This framework is the basis for the next part of the chapter where empirical examples and theoretical propositions will be discussed.

4. **Discussion and Case Analysis**

The discussion and case analysis section explains how various organizations use serendipity as a strategic tool, considering different layers of organizational culture, history, and the future. Besides, this part demonstrates, through Bringing 3M, Pfizer, and Google, how serendipity affects organizational learning, development of absorptive capacity, and the formation of emergent strategy in terms of creative breakthrough and strategic transformation.

4.1 3M and the Accidental Adhesive: Institutionalizing Serendipity

The invention of Post-it Notes at 3M is commonly referred to as the most brilliant and serendipitous innovation in the history of corporate strategy. As a matter of fact, in the year 1968, 3M scientist Spencer Silver was involved in the process of developing the strongest adhesive for a piece of technology utilized in the aerospace field. Instead, he created a weak, pressure-sensitive adhesive that could easily attach and detach from surfaces without leaving residue (Fry & Silver, 2001). At first, this "failed" invention had no obvious commercial use. Nevertheless, after a few years, another 3M worker, Art Fry, realized its potential application when he was looking for a method to mark pages in his church hymnal without damaging them (Garud, Gehman, & Giuliani, 2018).

The thing that made this accident a strategic breakthrough was not luck alone but the 3M culture of continuous experimentation that was an integral part of it. This culture was characterized, among other things, by an open attitude towards failure, the readiness to live with uncertainty, and the trust in the power of bottom-up innovation (Lindberg, 2007). It was 3M's "15 percent rule," which permitted employees to allocate a fraction of their working hours to their personal projects, that brought the organizational slack required for experimentation (Peters & Waterman, 1982). The cultural infrastructure of 3M thus became a rich soil for serendipity, allowing people to see failed outcomes in a new light and as potential opportunities.

On the one hand, it is like an example of absorptive capacity on the face of it (Cohen & Levinthal, 1990), where the collective knowledge and flexible structure of the organization enabled recognition of a hidden value in an abandoned result. Moreover, it represents the concept of double-loop learning (Argyris & Schön, 1978), as 3M changed its perspective on the usefulness of the product and customer value based on the new understanding derived from unintended results. Therefore, serendipity was at that time institutionalized as a cause of organizational routines, incentives, and values, which supported the continuous reinterpretation of anomalies, rather than a rare event.

4.2 Pfizer's Viagra: Reframing Failure into Strategic Opportunity

One example is the discovery of the drug Viagra (sildenafil citrate) by Pfizer, which highlights the element of luck in the growth of strategy very clearly. At the beginning of the 1990s, researchers working under Pfizer were trying out the new drug to treat angina and hypertension. The drug didn't work for the heart during the tests, but the people involved in the experiment wrote down that the drug had made their sexual functioning better (Nicholson, 2008). Once the news of this side effect spread, everyone in Pfizer wanted to leave the initial project and focus on finding a cure for erectile dysfunction. Finally, it became one of the most profitable and revolutionary products of the company.



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The point that makes this case so obvious is the firm's ability to reframe the situation (Weick, 1995). Many companies would probably throw away this finding as something irrelevant or, even worse, as a ridiculous incident. On the other hand, Pfizer's scientists and executives showed interpretive flexibility, i.e., the capability to look beyond first assumptions and see strategic opportunities in the unexpected. This ability to "make sense" of the incident, which is unforeseen, corresponds to Weick's (1998) point of view that sensemaking is the process through which organizational members derive meaning from ambiguity by means of joint discussion and reflection.

The fortunate success of Pfizer also points to the significance of strategic agility (Doz & Kosonen, 2010). After spotting the opportunity, the company didn't waste any time in gathering the necessary resources, changing its R&D approach, and creating a marketing plan that aimed at making the discussion about male sexual health less stigmatized. Such an adaptive move illustrates that serendipity is not only about recognition but also about the rapidness of the subsequent action. By chance, the opportunity may be there; however, strategic capability will decide whether the opportunity will be seized successfully or not (Denrell, Fang, & Winter, 2003).

4.3 Google's "20 Percent Time": Designing for Serendipity

While 3M and Pfizer are companies where serendipity comes from accidental discoveries, Google can be seen as a company that has intentionally created structures to foster serendipity. The "20 Percent Time" policy of Google, which was the main idea of the early 2000s, allowed employees to allocate one-fifth of the working hours for projects of their own which were outside the formal job descriptions (Schmidt & Rosenberg, 2014). This policy gave birth to breakthrough innovations such as Gmail, Google News, and AdSense, which were all the result of individual experimentation and not a top-down directive.

Google not only opens the door to serendipity but also institutionalizes it by laying the groundwork in both the structural and cultural spheres for such unexpected connections to take place. The company thus increases the likelihood of unplanned idea convergence by giving employees autonomy and encouraging cross-functional collaboration (the phenomenon is termed recombinant innovation by organizational theorists) (Hargadon & Sutton, 1997). It is therefore not surprising that the organization views the element of randomness not as a challenge that has to be overcome, but a vital component of the mode of discovery.

This is a good example of how the theory of complexity sees organizations as adaptive systems in which order is the result of interaction rather than control (Stacey, 1995; Anderson, 1999). Google does not direct but rather curate the process of innovation, thus providing an environment where creativity can emerge. The "20 Percent Time" program is an instance of a design that enabled serendipity - an intentional attempt to strike a balance between control and freedom so that fortunate discoveries may come forth spontaneously (Cunha, Clegg, & Mendonça, 2010). By making flexibility, trust, and openness part of its fundamental operations, Google turns the unpredictable into a strategic resource that is manageable.

4.4 Comparative Analysis: Patterns and Mechanisms

From these three instances, it is possible to derive a number of patterns that regularly reappear and which shed light on the ways in which organizations are capable of turning chance into strategy effectively.

Cultural Openness to Experimentation:

Before the examples of 3M or Google, it is clear that in each case the respective culture was one where experimentation was highly valued and the mistakes were tolerated. Both 3M and Google embedded in their organizations the routines—like the discretionary time practices—that broadly allowed employees to carry out



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curiosity-driven projects. These practices create a psychologically safe environment (Edmondson, 1999), where employees feel free to bring up unconventional ideas and not be afraid of failure or reprisal.

Interpretive and Cognitive Flexibility:

These episodes emphasize the importance of sensemaking (Weick, 1995) and reframing as mental processes that can convert anomalies into opportunities. Pfizer's discovery of the unintended effects of the drug called for the redefinition of the failure as the success—a change that is deeply dependent on openness to interpretation and more frequent discussions between researchers and executives.

Organizational Learning and Absorptive Capacity:

Based on the theory by Cohen and Levinthal (1990), the three companies showed the ability to take in new data, connect it to already known things, and use it in contexts that were different from before. Serendipity, thus, is not something that happens completely separate from these organizations; it is dependent on the organizations' rich knowledge networks and solid learning processes.

Strategic Agility and Execution:

The mere recognition of the situation is not enough—organizations need to make a move swiftly and decisively if they want to benefit from the unplanned opportunities (Doz & Kosonen, 2010). For instance, the example of Pfizer's quick change of tactics can be seen as a demonstration of the necessity for both the improvisational recognition and the structured follow-through as the conditions for the occurrence of serendipity.

Systemic Design for Emergence:

Particularly the example of Google is telling in a way that serendipity is not something that can be expected, but it can be facilitated by the deliberate designing of the flexible systems. This lends support to the argument that the organizations having the capability to "anticipate the unforeseen" do so by fostering the structures that make the spontaneous connections possible (Garud et al., 2018).

4.5 Integrative Discussion: Turning an Accident into Advantage

The interplay of these instances implies that serendipity can most accurately be described as a prepared interaction. Theoretically, these examples articulate that serendipity serves as a mediator between emergent and deliberate strategies (Mintzberg & Waters, 1985). It embodies a channel through which emergent opportunities get noticed and subsequently converted into deliberate actions. Hence, serendipity is a strategic integrator—the instrument that connects improvisation with intentionality, and exploration with exploitation.

In effect, this deliberation reaffirms the paper's central thesis about the nature of serendipity: it is not just a fortuitous event but a strategic ability—a result of organizational structure, learning, and leadership mindset. Organizations that foster curiosity, allow for exploration, and are willing to live with uncertainty will be able to turn the unpredictable into a lasting strategic advantage.

5. Theoretical Implications

These case analyses before have shown how lucky events can be used as strategic catalysts in organizations. This part, therefore, reflects on the theoretical implications of such lucky events for the fields of strategic management, organizational theory, and innovation studies. It first of all asserts that serendipity is a strategic resource, goes on to point out the organizational conditions that make it possible, and finally offers a conceptual framework which sees chance, cognition, and structure as interrelated in determining strategic



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evolution. These points put forward a challenge to the traditional view of the deliberate and emergent strategy as two separate things and also ascribe serendipity a vital, rather than secondary, role in the adaptive behavior of organizations.

5.1 Serendipity as a Strategic Resource

Traditional strategy theory, for instance, that of Michael Porter (1980) and Igor Ansoff (1965), has emphasized rational planning and control as the primary ways to achieve competitive advantage. Nevertheless, the findings of this research indicate that serendipity may be considered a strategic resource in itself - the resource that enables companies to identify and exploit the opportunities that result from unpredictable incidents. This repositioning is consistent with the resource-based view (RBV) of the company, which holds that competitive advantage is due to resources that are not only valuable but also rare, difficult to imitate, and non-substitutable (Barney, 1991). Here, the organizational openness to the chance-experiences sensitivity to the unplanned and upon-perceiving the action-taking - represents the intangible yet potent strategic capability of an organization.

While serendipity is different from common resources like technology or capital in that it cannot be intentionally manufactured or controlled, it comes about through the relationship of chance and being prepared (Busch, 2016). Serendipity embracing organizations do not view uncertainty as a peril facing them from outside, but rather as a rich field where something new can be discovered. This perspective is consistent with March's (1991) exploration-exploitation differentiation and implies that serendipity exists in companies that have mastered equilibrium between the planned exploitation of their current skills and the exploratory openness to unknown. Therefore, serendipity is a meta-capability that extends a company's capacity for the dynamic adaptation of the environment characterized by volatility.

5.2 Conditions Enabling Serendipitous Strategy

The case analyses and literature synthesis suggest that the organizational conditions leading to serendipitous events are actually the same conditions that allow their productive use. These conditions are the underlying factors that turn random events into strategic opportunities.

a) Organizational Slack and Freedom for Exploration

Organizational slack, i.e. the time and resources that are discretionary and can be allocated for experimentation, is what makes the very space for serendipitous discovery (Bourgeois, 1981). The "15 percent rule" of 3M along with "20 Percent Time" at Google are two examples that show how intentional provisions for non-directed exploratory activity can make the occurrences of accidental innovations more probable (Lindberg, 2007; Schmidt & Rosenberg, 2014). Employees through such slack are given a chance to break from their regular work and take up creative problem-solving, thus producing the unstructured interactions in which serendipitous discoveries are most likely to be found.

b) Psychological Safety and Error Tolerance

The recognition and subsequent reaction to serendipitous events require, among other things, a culture which promotes risk-taking and accepts mistakes. Edmondson (1999) defines psychological safety as a shared belief in a team that individuals will be able to present ideas, raise questions or report mistakes without being penalized. In 3M and Pfizer's instances, the respective organizational cultures that did not accredit "failure" thus permitted members to reframe their errors as possible innovations. Hence, psychological safety is a system that acts as a prerequisite for serendipity by allowing staff to bring up rather than hide the irregularities they have found.



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c) Interpretive Flexibility and Sensemaking Capacity

One of the conditions without which serendipity would not be possible is interpretive flexibility i.e. the ability to re-interpret anomalies to recognize value in the unexpected. Weick's (1995) sensemaking theory can be used to explain this: organizations understand their environments through shared interpretation, thus, ambiguity is turned into knowledge that can be acted upon. Pfizer's turning Viagra's unexpected side effects into a new product is a perfect example of interpretive flexibility. In the same way, 3M's ability to see "weak adhesive" as "repositionable note" shows that success in serendipity is heavily reliant on constructing the right meaning. As a result, sensemaking is not only a cognitive process but also a strategic one, which converts randomness into opportunity.

d) Absorptive Capacity and Knowledge Integration

The notion of absorptive capacity as introduced by Cohen and Levinthal (1990) is a way of emphasizing how organizational learning mechanisms impact recognition and acceptance of novel information. Organizations that possess a vast pool of knowledge and have established cross-departmental communication channels are in a better position to see the links between the newly found discoveries that look unrelated to them and their strategic goals (Zahra & George, 2002). Hence, absorptive capacity is the intermediary that carries the victim who has stumbled into their advantage by providing the cognitive infrastructure necessary for integration and application.

e) Leadership and Strategic Agility

Leadership mainly helps in making serendipitous events be seen as potential strategic ones. Doz and Kosonen (2010) define strategic agility with the characteristics of being able to continuously adjust and transform a business's core ideas by promptly changing allocation of resources and strategies. Ambiguous and uncertain situations thus, the leaders who accept these factors are the ones dominated to give the go-ahead for exploration, coach learning from surprises, and provide the emergent opportunities with legitimacy. Hence, visionary leadership can be considered as the interpretive link that connects serendipitous insights with intentional strategic realignment.

5.3 Integrative Framework: The Serendipitous Strategy Model

Based on these factors, the article presents a Serendipitous Strategy Framework as a way of understanding the influence of stochastic events on strategic outcomes through the interaction of organizational capabilities with these events. The framework is composed of three interconnected stages:

Triggering Event (Randomness):

The initiation of the process is an unexpected event, a failed experiment, a discovery made by accident, or an environmental anomaly, for example. By this event, the system of the organization is injected with new players, which challenge the old ones.

Recognition and Interpretation (Cognition):

Organizational actors perform sensemaking to find the potential importance of the event (Weick, 1995). The high interpretive flexibility and absorptive capacity significantly increase the chances that the event will be reinterpreted as opportunity rather than dismissed as irrelevancy.

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Realization and Exploitation (Action):

After the opportunity has been recognized, it is introduced to the organization's strategic agenda by means of learning, resource allocation, and leadership commitment. This phase demonstrates the shift from the level of emergence to that of intentionality—where randomness is becoming a part of deliberate strategic processes (Mintzberg & Waters, 1985).

Serendipitous opportunity exploitation is linked by feedback loops to organizational learning and thus preparing the firm for identification of future chance events. Therefore, serendipity is self-reinforcing and creates an adaptive cycle that continuously refines strategic capability (Crossan, Lane, & White, 1999).

5.4 Reconciling Emergent and Deliberate Strategy

The theoretical consequences of this research debate about whether strategy formation should be deliberate or emergent have been influenced by it. Mintzberg and Waters (1985) posited that deliberate strategies are the outcomes of planned actions, whereas emergent strategies are the results of organizations' adaptations to the unexpected. Serendipity, in this case, can be seen as the dialectical synthesis of the two extremes: it is an initially emergent discovery which, later, through deliberate decision-making and organizational learning, becomes a purposeful utilization.

Such a reconciliation moves beyond seeing strategy as a set of firm goals to understanding it as a continuous interaction between control and emergence (Stacey, 2012). Those organizations which succeed in unstable environments develop hybrid strategic processes - ones that commit to planning but also recognize the possibility of being surprised. Hence, from this perspective, serendipity is the element that allows the firm to integrate emergent learning into its deliberate strategic framework.

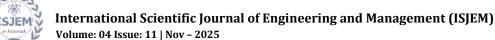
5.5 Implications for Theory Development

In the first place, this article brings several implications for speculative advancement in strategic management and organizational behavior the next time. To begin with, it makes an invitation to the scholars deciding to reconsider the limits of the rationality of the strategy thus involving the figure of non-linear and unpredictible processes in the formation of the results (Anderson, 1999). As a matter of fact, it prompts to pay even more attention to cultural and cognitive microfoundations, stressing the importance of individual sensemaking, emotional involvement, and organizational norms for the process whereby randomness is converted into strategy (Felin & Foss, 2005). Another point to support this argument would be the use of less disciplines combined in one research paper. Hence, we can integrate into this topic not only psychology but also complexity science and innovation studies the theme of serendipity as a multi-level phenomenon will get more profound.

By placing the discovery of lucky chances not as a mere anecdote but rather as a construct based on theory, this research is a step towards the conception of strategic management that is more comprehensive and acknowledges the inherent uncertainty as a source of new opportunities and the revolutionary capacity of pure chance.

6. **Managerial Implications**

Theoretical ideas and case examples used in this research offer immediate practical application to the management layer. Perceiving serendipity as one of the strategic capabilities puts in question the whole idea of control and predictability, and thus managers have to rethink organizational setups, cultures, and practices, which should not only allow but actively encourage the detection and use of lucky events. Though one cannot



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plan for serendipity, managers can surely make it so that fortunate discoveries and unforeseen revelations have a better chance to become a source of competitive advantage. This part of the paper is dedicated to the discussion of main management implications derived from the study that are related to culture, leadership, resource allocation, and innovation management.

6.1 Cultivating a Culture that Embraces Uncertainty

One of the most consistent findings across the 3M, Pfizer, and Google cases is the role of organizational culture in facilitating serendipity. Managers should actively foster an environment in which uncertainty is not stigmatized, but embraced as a source of potential opportunity (Edmondson, 1999). This involves:

- Mangers should lead the organization to take risks and try out new things, even when they do not know what the results will be or when the results will be unusual (Lindberg, 2007).
- Making failure "normal" as a way of learning rather than as a reflection of lack of skills (Sitkin, 1992).
- Encouraging communication and collaboration between different departments in order to maximize the flow of ideas (Nonaka & Takeuchi, 1995).

If managers through the organizational DNA embed curiosity, psychological safety, and tolerance for ambiguity, then they can increase both the cognitive and emotional receptivity of employees towards the unexpected. Such a stance enables the organization not only to find ways of using fortuitous discoveries but also to refrain from dismissing them.

6.2 Designing Structures to Enable Discovery

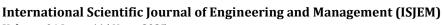
After culture, structural design is a major factor that determines whether serendipitous events lead to strategic outcomes. Managers can take steps to create environments that are ripe for exploration by instituting certain policies and frameworks:

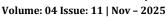
- Provide the necessary officials with the liberty, time, and other means for the realization of their projects, as is the case with the "15 Percent Rule" at 3M or "20 Percent Time" at Google (Schmidt & Rosenberg, 2014; Lindberg, 2007).
- Introduce cross-functional teams or rotation programs to broaden one's horizons in diverse knowledge areas, thus increasing the chances of obtaining unexpected insights through the recombination of knowledge (Hargadon & Sutton, 1997).
- Encourage informal networks, social spaces, or digital collaboration platforms as a means to facilitate unplanned interactions which may lead to the right place at the right time phenomenon (Cross, Borgatti, & Parker, 2002).

All these structural measures do not mean that there will be no surprising events but rather that there will be more chances that such events will take place in settings where they can be spotted and used.

6.3 Enhancing Sensemaking and Interpretive Capacity

It is the responsibility of the managers to actively influence the way the whole company perceives the results of the unexpected events. The Pfizer case depicts that the artistic nature of leaders to combine different ideas and the creativity of teams is what usually leads one to identify the opportunity (Weick, 1995). Strategies of sensemaking through management involve:





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- One way of enhancing sensemaking is to encourage reflective functions and to have a prepared talk about what you have learned through the experiments or projects in order to be able to write down the unfinished results of these events (Crossan, Lane, & White, 1999).
- The company should sponsor a different approach to the same issue where the employees can not only give their alternative viewpoints but also argue them. By doing so, the staff will get used to the presence of anomalies in their working environment, which will ultimately make it impossible for them to ignore those anomalies (Weick, Sutcliffe, & Obstfeld, 2005).
- The enterprise can train staffs through practice and examples to help them discover the sequence of the problem once it is vague and at the same time link the unexpected findings to the strategic goals of the company (Cohen & Levinthal, 1990).

Once managers have built a strong interpretive network within the company, they can shift from the rare events of leaving them unrecognized or underutilized to having the chance to turn them into valuable insights.

6.4 Balancing Exploitation and Exploration

Serendipity can be found in those companies which keep their operations in a state of dynamic balance between the exploitation of their existing strengths and the exploration of new opportunities (March, 1991). Managers should:

- On one hand, they can foster gradual changes by making use of the firm's current strengths, and, on the other hand, they can put a stake in the ground for experimental projects that have the potential of delivering unanticipated innovations.
- By means of an ongoing scrutiny and flexible distribution of resources, the executives can on the one hand ensure the security of the core business and, on the other hand, allow the new initiatives to prosper (Doz & Kosonen, 2010).
- It is imperative that the company adopts a flexible evaluation system for performance, which features traditional assessment of efficiency complimented by the aspects of learning, creativity, and the ability to gladly receive unexpected insights (Levinthal & March, 1993).

The equilibrium accomplishes the function of securer is also that the discovery of the serendipity will not only be acknowledged but also turned into the company's next strategic move, thus resulting in the creation of advantageous positions for the company over the long term.

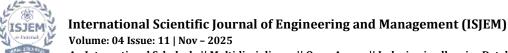
6.5 Leveraging Leadership to Recognize and Exploit Chance

Leadership plays an important role in the process of turning lucky events into planned outcomes. Leaders essentially demonstrate the way the company staff perceives the irregularities and whether the firm is ready to allocate resources for the emergence of new opportunities (Doz & Kosonen, 2010). Some of the significant managerial actions are:

- By conferring the advantage of accidental discoveries and lessons from failure in public, leaders can inspire uncertainty to be not only faced, but also welcomed and understood (Edmondson, 1999).
- Interpreters and legitimizers by ensuring that discoveries which are promising yet unconventional, get the attention and support of the organization (Garud, Gehman, & Giuliani, 2018).
- Using a long-term outlook which, besides efficiency of the short term, puts emphasis on knowledge accumulation and learning (Nonaka, 1994).

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Leadership, therefore, is a strategic amplifier that extends the organization's potential to turn luck into concrete business results.

6.6 Integrating Serendipity into Innovation Management

Managers can make use of serendipity to enrich innovation and R&D practices by:

- Embedding the methods to systematically capture and evaluate the occurrence of anomalies or unexpected results of experiments and pilot programs (Dougherty & Hardy, 1996).
- Encouraging iterative prototyping, rapid experimentation, and agile decision-making to test hypotheses generated from unplanned discoveries (Tushman & O'Reilly, 1996).
- Encourage external research and open innovation to broaden the network connection and thereby increase the exposure to possible chance events occurring in the environment (Zahra & George, 2002).

This way managers can move from treating serendipity as a source of random events on the periphery of the business to a central driver of innovation that enables adaptive responses to internal and external surprises.

6.7 Summary

The implications of managerial serendipity basically point out that an occurrence of a chance event is not enough; it should be followed by the organization's readiness, its ability to interpret and respond with agility.

Such managers who foster the attitude of experimentation, create flexible structures, improve sense-making, regulate the balance between exploration and exploitation, and demonstrate leadership skills that are adaptive make possible an environment where unpredicted opportunities can be recognized, legitimized, and strategically used.

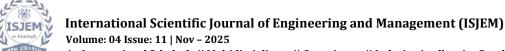
Contrary to being a purely passive phenomenon, serendipity can be purposely encouraged as a practical and operational part of strategic management which, in turn, makes organizations capable of prospering in an uncertain and complex world.

7. Conclusion

This examination of the organizational strategy field has been significantly informed by the study of the less recognized area of serendipity that mainly focused on how lucky events affect profoundly the evolution, the choice, and the innovative capacity of companies. Through the combination of the management, organizational psychology, and innovation theory perspectives, the report argues that serendipity should not be seen as a mere happenstance or a negligible case, but a strategically vital factor, which, when accurately identified and employed, leads to a continuous competitive edge (Barney, 1991; Busch, 2016). This paper confronts the existing traditional models that revolve around the concept of planning by control and suggests that there is a complex interaction between the intentional and the unpredictable factors that determine to a great extent the final result of the organization (Mintzberg & Waters, 1985).

7.1 Synthesis of Key Findings

The research uncovers that the influence of serendipity on corporate entities rests on the interplay of four areas: culture, structure, cognition, and leadership. As a matter of fact, first of all, cultural characteristics such as psychological safety and ambiguity tolerance are instrumental in making sure that the employees' unconventional ideas come to light and that employees view anomalies not as threats but as possible opportunities (Edmondson, 1999; Sitkin, 1992). Secondly, organizational types that have a slack time



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provision, functional collaboration, and decentralized decision-making open the way for the surprise discoveries that emerge and are recognized (Lindberg, 2007; Hargadon & Sutton, 1997). Third, on the one hand, interpretive flexibility and absorptive capacity on the other hand are two very important cognitive processes through which organizations can take the initiative to convert unpredicted occurrences into feasible knowledge (Cohen & Levinthal, 1990; Weick, 1995). Lastly, leadership is at the heart of the phenomena of endorsement and leverage of chance opportunities by stimulating the explorative aspect of the work, at the same time keeping the strategic goals of the organization intact (Doz & Kosonen, 2010).

Such revelations combine to imply that serendipity is definitely not just a luck-dependent factor, but rather is influenced by the preparedness and intent of the organization. Thus, it is true that the lucky occurrences cannot be scheduled; however, their potential effect can be greatly enhanced by means of foresighted managerial actions and facilitative organizational arrangements.

7.2 Contributions to Theory

The research enhances the strategic management theory in various manners. Firstly, it broadens the conceptual limits of strategy by melding the emergent and deliberate strategies into one consistent model that acknowledges the beneficial role of chance in organizational adaptation (Stacey, 2012; March, 1991). Secondly, the study emphasizes the role of luck as an actual contingent factor, referring to the resource-based view and dynamic capabilities literature, it demonstrates how firms may use unplanned events to create a source of competitive advantage (Barney, 1991; Teece, Pisano, & Shuen, 1997). Thirdly, it highlights the significance of microfoundations—cognition, culture, and leadership—in the process of turning randomness into strategic value, thus connecting individual-level processes with firm-level results (Felin & Foss, 2005). Lastly, the research extends the scope of the innovation theory by demonstrating how fortuitous insights can be instrumental in the development of breakthrough products, services, and organizational learning (Dougherty & Hardy, 1996; Tushman & O'Reilly, 1996).

7.3 Managerial and Practical Implications

The insights from the research confirm that intentionally seeking serendipity is achievable and has strategic worth for practitioners. Managers can create a setting in which accidental discoveries are more likely to happen and be more efficiently utilized by:

- Supporting a culture of experimentation that is characterized by risk-taking encouragement and failure tolerance (Edmondson, 1999).
- Developing adaptable structures and processes that facilitate the exploration and the cross-fertilization of ideas (Nonaka & Takeuchi, 1995).
- Upgrading sensemaking and interpretive abilities so as to spot the strategic value of unexpected results (Weick et al., 2005).
- Using adaptive leadership to not only support the legitimacy of emergent opportunities but also to integrate them into strategic agendas (Doz & Kosonen, 2010).
- Maintaining the balance between exploration and exploitation, thus ensuring that serendipitous discoveries are in harmony with, rather than disturbing, ongoing operations (March, 1991; Levinthal & March, 1993).

By doing so, managers can transform unpredictability from a passive externality into a proactive driver of innovation and strategic adaptation, which, in turn, will enable them to operate successfully in VUCA (volatile, uncertain, complex, and ambiguous) environments.

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7.4 Directions for Future Research

This research, in addition to its contributions, indicates different areas where future research can be conducted. Firstly, empirical studies that use quantitative methods can determine the frequency and the impact of serendipitous events in various industries, thus, broadening the generalizability of the findings. Secondly, comparative studies could investigate differences in perception of and using serendipity by organizations based on their culture and region. Thirdly, longitudinal research can follow the changes in the use of a serendipitous strategy over time and its relations with technological, market, or regulatory changes. Lastly, the study can incorporate digital technologies, artificial intelligence, and data analytics as potential contributors to and recognizers of serendipitous opportunities, thus extending the framework to present-day organizational contexts.

7.5 Concluding Remarks

To sum up, this research redefines serendipity as a phenomenon of strategic significance, emphasizing that chance events, if combined with organizational readiness, cognitive flexibility, and adaptive leadership, can be a major source of innovation and ensure long-term competitiveness. Instead of trying to control uncertainty, organizations can, by changing their point of view, use it to convert unexpected events into actionable insights and lasting strategic advantage. So, serendipity is not just a question of luck—it is a capability that can be developed, noticed, and strategically used to help organizations navigate complexity and change (Busch, 2016; Mintzberg & Waters, 1985).

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