

# Opportunities and threats under PSD3 – A Case Analysis of Sparebank 1 Nord-Norge

## Executive Summary: Data Economics and PSD3 Implications by Jørgen Leiros

Jørgen Maurstad Leiros, as part of his MSc in Business Administration and Data Science, conducted a **strategic analysis of data economics and regulatory challenges** under **PSD3**, focusing on **SpareBank 1 Nord-Norge (SNN)**. His research explores the **impact of digital transformation, datafication, and dynamic capabilities** on financial institutions adapting to new EU regulations in the payment market.

### *Key Focus Areas:*

1. **Impact of PSD3 and Financial Data Access (FIDA)** – Jørgen analyzed the **European Commission's PSD3 and FIDA frameworks**, which aim to **enhance consumer rights, improve security, and mandate data sharing** between financial institutions. His study examines how these regulations **reshape competition and innovation** in the European banking sector.
2. **Strategic Search and Datafication in Banking** –
  - a. SNN's **strategic compass** prioritizes **local economic development and customer-centric banking**, shaping how the bank evaluates **opportunities and threats** under PSD3.
  - b. The study applies **Gavetti & Rivkin's strategic search model**, highlighting **how datafication can improve decision-making** and unlock new business models.
  - c. Jørgen identifies **big data as a crucial enabler** for banks, allowing them to **analyze customer behavior, optimize services, and anticipate market shifts**.
3. **Dynamic Capabilities Framework for Competitive Advantage** –

- a. **Sensing:** SNN has leveraged **strategic acquisitions** of AI and cloud-based accounting firms to enhance technological capabilities but needs **stronger market intelligence mechanisms**.
- b. **Seizing:** While SNN has successfully **invested in mobile banking and fraud prevention**, its failure to capitalize on innovative payment services (e.g., **Buy Now, Pay Later**) demonstrates **gaps in exploiting market opportunities**.
- c. **Transforming:** The bank's **decentralized structure within the SpareBank 1 alliance** allows flexibility but requires **better integration of financial products and services** to maintain a competitive edge.

#### 4. Challenges and Recommendations:

- a. **Risk of regulatory compliance complexity** – PSD3 requires **enhanced security measures and transparent data-sharing agreements**, which demand **robust data governance**.
- b. **Need for advanced analytics** – The study suggests **investing in AI-driven data analytics** to extract insights from **big data and customer transactions**.
- c. **Strategic agility** – SNN must continuously refine its **digital transformation strategy**, ensuring **rapid adaptation to financial market disruptions**.

#### *Key Takeaways:*

- **Datafication and AI adoption are essential for banks** to stay competitive under PSD3.
- **Banks need to balance compliance with innovation**, ensuring **regulatory alignment while developing customer-focused digital solutions**.
- **Strategic agility and investment in analytics** will determine success in the evolving payment ecosystem.

Through this research, Jørgen has demonstrated **expertise in financial regulations, data economics, and banking strategy**, providing **actionable insights for financial institutions adapting to PSD3**.

## **1 Introduction**

In an age of rapid digital transformation, market players are increasingly challenged to adapt and thrive. Central to this shift is the phenomenon of datafication, where business processes, actions, and interactions are systematically converted into data streams, reshaping the competitive landscape and pushing enterprises to redefine their strategic outlooks (Iansiti & Lakhani 2020: 60-65). This paper aims to analyze the various layers of this digital transformation by employing a focused analysis on Sparebank 1 Nord-Norge (SNN), a notable player in the Norwegian banking sector. In the context of regulatory changes, the paper will leverage strategic frameworks to critically examine how digital transformation affects the strategic choices available to a company, the role of datafication on decision-making processes, and the importance of continuous change. The goal is to explore how data-driven environments can foster innovation and what is required for an incumbent market player to compete in such dynamic environments. By integrating theoretical insights with practical analysis, this paper seeks to provide a comprehensive understanding of the role of information and the impacts of datafication on the market dynamics within the European payment market.

## **2 Case Presentation**

In 2023, the European Commission performed a review which identified that evolving industry dynamics, gaps in the existing regulatory measures, and a push for greater innovation warranted a revision of the current regulatory framework around the European payment market and data sharing between market actors (Ferrie et al., 2023). The proposed revision includes a new directive which aims at providing strengthened consumer rights, increased security protocols, removal of barriers to entry, and an obligation to share account data subject to consumer consent. Along with the proposed regulation, the European Commission proposed the Financial Data Access (FIDA) framework which will facilitate the sharing of customer data between financial institutions.

SpareBank 1 represents a cooperative alliance of 12 independently operated banks located throughout Norway and offering traditional banking services (Sparebank1.no, 2023). As these banks operate independently, the alliance covers the entire Norwegian market while appealing to local communities. This is also reflected in each bank's website communicating different strategies from each other. In this paper I will discuss SNN, one

of the banks in the alliance, as an independent bank pursuing their own strategic objectives. As a bank with a significant market share in Northern Norway, and a diverse portfolio of financial services, they have a wide array of strategic opportunities with regards to the proposed regulatory changes. This paper will analyze SNN's strategy through a framework that considers their strategic search elements and mechanisms. It will discuss the role of datafication in this strategic search and analyze their ability to compete in the increasingly dynamic payment market through a framework on the microfoundations of dynamic capabilities.

### **3 Theoretical Frameworks**

#### **3.1 Strategy formulation and datafication**

Gavetti and Rivkin (2007) argue that strategy has a dual nature as it exists in managers minds as well as in an organization's actions, rules and routines. To gain a comprehensive understanding of SNN's strategy as a product of both physical and cognitive components, I will utilize a framework proposed by Gavetti and Rivkin. This framework retains traditional elements of the positioning and evolutionary schools of strategy and search mechanisms, while introducing previously neglected constructs and a case-based mechanism for strategic search. The authors have produced the model visualized in figure 1 which contains the elements that shape strategic search and the search mechanisms employed by companies. At the top level are executive managers with their personal values and cognitive representations of the organization. These elements shape the heuristics, the second part of the "world of cognition". The "world of action" consists of activities and assets, and these activities can be tracked by sensors providing a level of datafication.

The availability of large amounts of data in a variety of structures with frequent updates represents opportunities for new ways to shape strategy while challenging use of traditional tools for strategy formulation. According to Constantiou and Kallinikos (2015), traditional tools for strategic search have been reliant on predefined information purposefully gathered, while big data is often collected unintentionally and can be made business relevant after collection. The proposed regulatory changes mentioned above will make available vast amounts of data. If the bank is successful in combining internal datafication with external data sources, they could potentially provide increased customer value through a range of innovative solutions.

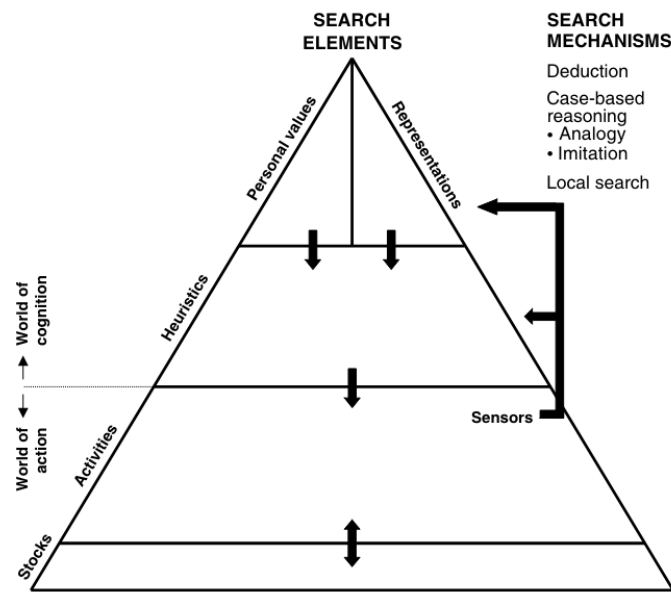


Figure 1: A Frame of Reference to explain the origin of strategy (Gavetti & Rivkin, 2007)

### 3.2 Dynamic capabilities

Dynamic capabilities refers to the firm's ability to integrate, build, and reconfigure its operating routines to improve effectiveness (Teece, 1997; Zollo & Winter, 2002). Teece would add to this definition that these capabilities are supposed to address rapid change, while Zollo and Winter argue that dynamic capabilities are present in firms operating in relatively static environments too. Still, they seem to agree that the value of dynamic capabilities is greater in dynamic environments, and necessary for sustainable advantage in environments of global competition that are characterized by dispersion in organizational sources of innovation (Teece, 2007; Zollo & Winter, 2002).

Teece decomposes dynamic capabilities into the capacity to sense opportunities and threats, seize opportunities, and reconfigure capacities (Teece, 2007). These capabilities can be further reduced into microfoundations or processes that can be developed to improve the various dynamic capabilities. The concept of microfoundations serves as a good framework for analyzing SNN's ability to compete in an increasingly dynamic environment and how they can improve their dynamic capabilities.

## **4 Case Analysis**

### **4.1 Strategic search**

The bank's 'strategic compass' guides decision-making, aligning with strategic goals to enhance value for the bank, its investors, and the community, emphasizing customer focus, quality, and sustainability (Sparebank 1 Nord-Norge, 2023). The overall strategic goal suggests that search elements will be affected by a focus on creating value for stakeholders as well as the local community. SNN views themselves as a bank for the people, aiming at aiding the economy, creating jobs and reducing population movement away from Northern Norway. These personal values and representations are likely to strongly impact the criteria used to guide evaluation of opportunities and threats. Through their strategic principles, the bank also communicates a central heuristic to base all decisions on insight and knowledge.

With regards to the world of action, we can consider the acquisition of firms that lead the way in technological development as a tangible representation of the bank's strategy. In the bank's yearly report of 2023, they announced the acquisition of two accounting firms based in Northern Norway who specialize in AI (artificial intelligence), cloud computing, and data driven development (Sparebank 1 Nord-Norge: 6-12). Interestingly, SNN does not communicate a desire to drive technological development like some of the other banks under the same alliance. Integrating cloud computing, AI and data capabilities can instead be tied to the bank's strategic principles of developing solutions that meet customer expectations and increasing insight to guide decisions. In addition to increased data sharing between financial institutions under FIDA, the desire for data can be facilitated through sensors producing data from all activities and customer interactions. When it comes to sensors, there is little information available about the bank's mechanisms for gathering market intelligence and customer feedback. However, it is important that managers' personal values and representations are considered when deciding on what information to gather as Gavetti and Rivkin (2002) argue that it is through these cognitive elements data must be interpreted.

An important contribution that Gavetti and Rivkin (2002) bring to the theory of strategic search is introducing the component of time in analyzing a company's rational capabilities and plasticity. The authors argue that the availability of search mechanisms depends on the information environment's maturity and the maturity of the firm. Given

SNN's age and experience in the banking sector, they should be considered mature. Although the payment industry has existed for a very long time, it has relatively recently gone through a digital revolution by introducing electronic payments; it is experiencing aggressive growth; and new regulation aim to increase innovation. Given the significant changes in the payment market, I would argue that information is likely to be ambiguous, at least to some extent. Gavetti and Rivkin propose that established firms facing industry punctuations are likely to be less plastic and utilize rational search mechanisms. In this situation, the established companies that are able to preserve more plasticity and persist less in rational search, will have a higher likelihood of succeeding. In the context of significant changes in the payment market the bank could benefit from employing case-based reasoning by considering their previous experience and strategies employed by other actors in the market in the context of the transition to digital payments and the introduction of PSD2.

SNN's capacity for adaptation and exploitation of insights derived from the case-based search mechanism may not be as readily apparent as those of new entrants, given that their strategic and operational approaches are not yet fully established. This may especially be the case if you consider their ambition to base all strategic choices on insight and data. If we consider their actions, however, the bank has displayed an ability to integrate new capabilities to stay ahead of the technological development in another sector of the banking industry. This action could be seen as a deviation from traditional banking pathways, demonstrating plasticity. Further evidence of plasticity can be seen in the bank's "strategic compass". Instead of defining a long-term strategy, they have defined the values which should be considered when assessing opportunities and threats, which allows them to be responsive to changes in technology as well as impulses in the market and local community.

#### **4.1.1 Big data implications**

Big data can provide new perspectives on consumer behavior and enable in-depth understanding of market or social trends in real time. Constantiou and Kallinikos (2007) suggest that the strategic decision process utilizing big data ought to be bottom-up rather than the traditional top-down process. In the bottom-up approach, data would be gathered and analyzed without prejudice to identify relevant insights which could inform strategic decisions. With significant imminent changes in the payment market, big data

provides an approach to strategic search that could prove beneficial as both exclusively rational and exclusively experiential search mechanisms both fall short in this situation. This method would not rely as heavily on the executive manager's ability to interpret environmental information and as such, it reduces the effect their mental representations and bounded rationality has on the bank's strategy.

The time-horizon of insight gained through big data provides an opportunity to act quickly to changing conditions in the environment, but the value of the insight gained can be fleeting (Constantiou & Kallinikos, 2007). This introduces a trade-off as long-term strategic decisions are traditionally made based on enduring conditions while exploiting the value of big data requires plasticity and short-term decision-making. I would not consider the payment market to be so trend-oriented that it would make sense for SNN to use big data as their main strategic search mechanism. However, implementing new tools and techniques to interpret big data trends could help them discover new business opportunities. With the volume of big data, outliers can be valuable as they can represent sizeable numbers of people that drastically deviate from average trends and who represent a source of social or economic change with long-term effects on the business environment. As such, these outliers can be used to identify new opportunities for product innovation and service development.

## **4.2 Dynamic Capabilities**

The proposed regulatory changes include significant measures designed to create a more level playing field between banks and non-banks. This is intended to facilitate innovation and competition, with the objective of producing improved services and products for European consumers (Ferrie et al., 2023a). For static environments incremental improvements and sporadic acts of creativity may be sufficient to provide a company with a competitive advantage (Gavetti & Rivkin, 2002). However, in the increasingly dynamic payment market, persisting in the same operating routines and utilizing the same technology can become hazardous.

### **4.2.1 Sensing**

SNN is based in Northern Norway and have branch offices in the two largest cities in this region. With a local presence, the bank is well positioned to analyze and identify trends in customer needs, tailoring its services to meet the specific needs of its target customers



more effectively than national or even global competitors. This is not to say that the bank should narrow its focus to monitoring only the specific market they operate in. Scanning processes should be put in place to garner new technical information, tap developments in exogenous science, and monitor competitor activity to help shape new products and process opportunities. In fast-paced environments with a large portion of new product introductions coming from external sources, it is crucial that this search is not limited to the local environment (Teece 2007).

A review of the bank's services reveals that they have in place effective mechanisms to monitor changes in their environment. While the specific mechanisms employed are not known, the bank's swift acquisition of two technology-focused accounting firms suggests that it actively monitors technological developments, at least in the local market. The bank also provides mobile banking services, strong customer authentication (SCA), and support for fraud. These services align well with emerging customer needs identified by the European Commission (Ferrie et al., 2023). However, there are payment service innovations that the bank does not provide, such as "buy now, pay later", which is one of the major services that have made Klarna so popular. Therefore, while the bank has demonstrated its ability to sense changes in its environment, there are opportunities where they have not been proactive. In an increasingly dynamic environment, the bank may benefit from developing their sensing capabilities. Two main points of improvement for SNN could be to increase datafication and analytical capabilities as mentioned in previously, as well as allocating resources to R&D to encourage a broad and thorough search.

#### **4.2.2 Seizing**

If SNN effectively senses their environment, they can act early to exploit opportunities through various investment paths. Early on, multiple investment paths are available, but as a dominant design emerges, these paths become more limited (Teece, 2007). Teece also asserts that strategic choices depend on the position of the enterprise and given SNN's market share in Northern Norway, they can patiently wait for a dominant design before investing. Being able to delineate solutions and business models is an important microfoundation for SNN when it comes to product innovation in the payment market. One interesting instance where SNN seized an opportunity in relation to increased mobile banking and electronic payments was developing an app for SCA which was used for

approving payments and logging onto platforms (NTB.no, 2024). Even though this app was widely used by the bank's customers before, a new product called "BankID" has since been adopted by almost the entire Norwegian population leading to the bank now shutting down their service in favor of its competitor's product. Potential reasons for this could be lack of innovation in SNN's product or limitations in the business model employed. Instead of only targeting a single bank's customers, BankID can be used to log onto any bank's mobile banking platform, approve any payments and to access government platforms. In this case SNN might have failed to consider the potential of their new service, opting to limit themselves to a customer segment of only their existing customers.

The size and hierarchical structure of SNN can impede innovation as it slows down decision-making and can lead to "program persistence bias" and "anti-innovation bias". Additionally, the tendency to be constrained by established assets and routines which can increase risk aversion is another challenge for SNN's seizing capabilities. Such risk aversion may lead to less radical innovation compared to new entrants in the payment market. To overcome these biases, SNN needs to ensure quality in routines, decision rules, strategies and leadership around evaluating new investment opportunities. Becoming aware of the potential biases that can affect the bank's seizing capabilities is a good first step in assuring quality in these processes. In light of this information, it is recommended that the bank consider the factors that motivate decision-makers at both management and board levels, provide objective access to data, and encourage candid opinions. In a press release introducing the new CEO of the bank, Hanne Kraemer is quoted as stating continuous change as essential for the bank to remain the most relevant financial partner for people and businesses in the north (NTB.no, 2023). To achieve this, it will also be crucial for the bank to introduce routines for evaluating established assets, capabilities and operating routines, and shedding ones that are outdated as these can act as a false safety and torpedo new initiatives.

#### **4.2.3 Transforming**

As previously stated, SNN is one of many banks in the Sparebank 1 alliance, and the bank is further divided into specific business units. The decentralized nature of the alliance and the autonomy of banks and business units are essential to SNN's ability to continuously align their assets to support sensing and seizing activities. Specifically, decentralization

should aim to allow those in touch with marketplace realities to influence decision-making to increase responsiveness to changing trends in customer needs and technology. Kraemer's awareness of the importance of continuous change is a positive indication of SNN's potential transforming capabilities as Teece (2007) notes that achieving semi-continuous asset orchestration and corporate renewal are important managerial functions. A central part of this continuous transformation will be to empower business units to act on opportunities and reconfigure routines that can be improved upon. Decentralization must, however, not compromise integration where this might contribute increased value for the customer such as with cospecialization of products across business units.

A major advantage of the bank in its competition with PSP's and other new entrants in the payment market is its diverse portfolio of services. Combining existing services or leveraging existing services to increase the value of emerging trends are opportunities that the bank should be aware of and be prepared to exploit. Cospecialization should become part of the consideration in the continuous reconfiguration of routines mentioned above. That way, improvement or scraping of routines and assets considers the potential to increase the value or efficiency of processes or services by combining them with others. Evaluating competitor innovations for their potential as complementarities rather than substitutes also offers potential for value increase. This can help SNN achieve their objective of being the most relevant financial partner of people and businesses in the north.

## **5 Conclusion**

The analysis of Sparebank 1 Nord-Norge (SNN) within a rapidly evolving digital landscape offers crucial insights into how incumbent institutions can navigate and thrive in increasingly dynamic environments. SNN shows a commendable degree of strategic plasticity and dynamic capabilities, reflecting a strong commitment to integrating data-driven decision-making processes. While the bank's strategic compass effectively guides its adaptation to market trends, there is evident room for enhancement in areas critical for maintaining competitiveness. Specifically, expanding data analytics capabilities and enhancing datafication processes are imperative. This aligns with the broader goal of exploring how data-driven environments can foster innovation and underscores the

pivotal role of robust information management in influencing market dynamics within the financial sector.

To enhance its market position, SNN can invest in expanding its data analytics tools, which would provide deeper insights into customer preferences and emerging market trends. Strengthening these tools will bolster SNN's 'sensing' capabilities, making it more adept at anticipating market shifts and better prepared to respond proactively. Moreover, there is a crucial need to refine SNN's 'seizing' capabilities by not only capturing new opportunities but also by actively managing and updating its service portfolio. This includes implementing processes for shedding outdated routines or improving them to align with current technological and market trends. Additionally, enhancing 'transforming' capabilities will facilitate the strategic integration of services across business units, promoting cospecialization that leverages interdependencies among services to create superior customer value.

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