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► **To cite this version:**

Claire Capo, Valérie Michon. Forced transformation of the business models of the historical players in home delivery -The cases of La Poste (France) and Yamato Group. The 15th conference of AIRL-SCM / 15ème conférence de l'AIRL-SCM, AIRL-SCM - Excelesia Business School, May 2024, La Rochelle, France. hal-04650378

HAL Id: hal-04650378

<https://hal.science/hal-04650378>

Submitted on 16 Jul 2024

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Forced transformation of the business models of the historical players in home delivery – The cases of La Poste (France) and Yamato Group (Japan).

Work in Progress

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Forced transformation of the business models of the historical players in home delivery – The cases of La Poste (France) and Yamato Group (Japan).

Working paper

Summary

La Poste Group and Yamato Group represent historical players in home delivery services in France and Japan, respectively. Each deeply integrated into their national environments, these groups center their core business around home delivery but are progressively evolving their offerings to adapt to societal demands (environmental and social). Therefore, it is intriguing to explore the origins of their home delivery services and their unique features, through their business model. A business model (BM) or business framework can be defined as « *the set of which activities a firm performs, how it performs them, and when it performs them as it uses its resources to perform activities, given its industry to create superior customer value*” (Afuah 2004, 9). Hamel (1998) identifies four components of the business model: strategic axis, strategic resources, customer interface, and partnership network. These components are interconnected. In logistics, according to Björklund et al. (2017, 38), it incorporates activities throughout the supply chain, notably the internal and external coordination of goods flows. Regarding home delivery, the BM adapts to the specificities of the service offered. Moreover, more and more organization integration innovation at the core of their BM and the concept of BMI (Business model of Innovation) we developed. Through 2 case studies of the BM of LaPoste Group in its delivery activity (excluding banking and insurance) and Yamato Group, , we will analyze the components of the BM for home delivery in an environmentally changing context and address the question of the type of BM developed. Based on an in-depth qualitative analysis of abundant secondary data on both groups (annual reports, websites, academic and press articles, official press releases...) and expert interviews, we will identify common and unique elements to each model and study the evolution of these business models and their characteristics and limits.

Keywords Home Delivery; Business Model; La Poste (France); Yamato (Japan); Case Study

INTRODUCTION

Last-mile delivery presents a significant challenge for companies, involving numerous constraints such as customer availability, geographical limitations, restrictive local regulations, multiple delivery points, transfer breaks, congested roads, expensive and sometimes scarce real estate, and even temporary parking difficulties. Some entities have been managing this delivery process for decades, and it has become part of their DNA. This is the case with La Poste Group¹ in France and Yamato Group in Japan. As historic players in home delivery within their respective countries, they are deeply integrated into their national contexts.

Given the current challenges of last-mile delivery and the new economic and societal demands (environmental and social) associated with it, both groups rely on their core competency in home delivery but are gradually evolving their services. To this end, their strategic approaches incorporate a constant drive for optimization, as well as a choice to diversify the range of services and evolve the roles of mail and delivery carriers. These choices are variably supported by innovations, indicating an evolution in their business models. The competition in the last-mile delivery sector also necessitates the search for distinctive strategies, including in delivery methods. Indeed, the concept of value migration (Jacobides et al. 2013) helps to understand that a business model is not static, especially in delivery services. The emergence of changes in the environment of historic companies like La Poste or Yamato forces these firms to revise their strategies or risk losing a significant market share.

This research explores the development of their home delivery offerings (B2B, B2C, C2C) and their specificities, through the lens of their business model (BM). Additionally, it examines the characteristics and nature of these BMs and their level of innovation especially in terms of logistics services and new technologies adapted to urban logistics management. Relying on an in-depth qualitative analysis of abundant secondary data on both groups (annual reports, websites, academic and press articles, official press releases...) and on expert interviews, this

¹ We will use the term 'La Poste' instead of 'La Poste Group', which refers to the La Poste Group with all its banking and insurance activities, and 'Yamato' instead of 'Yamato Group', which refers to all the national and international activities of the Yamato Group.

study presents two case studies through the prism of the business model framework. It will identify characteristic elements of each BM of the two groups and their evolution to pinpoint commonalities and divergences and the kind of logistic services offers that are linked to those BMs.

HOME DELIVERY BUSINESS MODELS: BMI?

The components of the business model (BM) for home delivery will be first defined. Subsequently, in a context of environmental change, the "innovation" dimension becomes increasingly prominent, leading us to question whether the BMs of La Poste and Yamato might be Business Models of Innovation (BMI), and how these models coexist or substitute one another.

***BM*s**

A business model (BM), or business framework, remains a conceptual tool without a single, universally agreed-upon definition. Furthermore, depending on the author, it can be understood either as the components of the model itself, its operationalization, or the changes in models (Macário et al. 2008).

Defined by Afuah (2004, 9) as “*the set of activities a firm performs, how it performs them, and when it performs them as it uses its resources to perform activities, given its industry to create superior customer value*”, it can be seen as a unit of analysis that explains how companies “do their business” (Zott et al. 2011). Hamel (1998) bases the business model on four components: the strategic axis, strategic resources, customer interface, and partnership network. These components are interconnected. The consistency and complementarity of these components reveal the strength of the BM in an iterative functioning (Grandval and Ronteau, 2011). Most authors share the common idea that a BM is the articulation of the company's value proposition, its sources of revenue, its resources, and the governance mechanisms of stakeholders (Amit and Zott 2010), to which are added value creation and value appropriation for itself. Often depicted as a system (Magretta 2002), it describes the “pieces” of an economic activity that “fit” together. At the core of the business model (BM) concept lies value creation. Thus, Xu et al. (2018) view the BM as the logic businesses use to deliver value to the consumer while generating revenue. BMs can be potent tools for analyzing strategic choices of companies, as well as for

implementing and justifying these choices, as they present the core logic of business of the company (Shafer et al. 2005).

To study the BMs of companies offering last-mile logistics services as their core business, it is insightful to identify the generic elements present in the literature on last-mile delivery.

The business models applied to last-mile delivery

Last-mile delivery refers to “(...) the activities necessary for physical delivery to the final destination chosen by the receiver” (Olsson, Hellström and Palson 2019, 13). It is, therefore, the final segment of the delivery process (Kull et al. 2007). At the end of the delivery, there is potential for human contact between the delivery company and the final consumer (Dablanc 2019), and this section of the delivery can have a significant impact on customer satisfaction (Vakulenko et al. 2018). However, it is also the most expensive part of the delivery process and represents a continual challenge for companies in terms of strategic and operational choices.

Examining the business model (BM) of a company offering last-mile delivery services involves considering the specifics of creating customer value through logistical activities. This creation of value takes various forms and must adapt to the different services offered. Depending on the logistic service, the BM often relies on customer segmentation, enabling a range of different service offerings. Many businesses, consultants, and researchers emphasize the need to develop an activity with essential qualities such as seamlessness, quickness, and sustainability (cited by Liu and Goh, 2015), particularly in the Asian context. In the realm of last-mile delivery, numerous services complement the core service (Liu and Goh 2015; Capo, Chanut, and Moriwaki 2018). The services offered by an organization can be directly linked to the main service and indirectly related (Gallowj and Gallowj 2009). Some are established while others are new. Some are intangible (e.g., face-to-face delivery) and are perceived by customers in very diverse ways (Inoue and Hashimoto 2023).

Furthermore, in the realm of creating logistical services, according to Björklund et al. (2017, 38), the business model incorporates activities throughout the supply chain, including internal and external coordination of goods flows. Thus, the component of the business model proposed by Hamel (2002), the value network, represents a key element of last-mile delivery BMs. These services rely on both internal and, more importantly, external coordination of numerous stakeholders. Therefore, relationships with customers, suppliers, partners, public regulators, and others are at the core of last-mile delivery BMs.

Furthermore, the evolution of the environment brings about changes in the activities of businesses and introduces a constant need for adaptation of business models (BMs). According to Chaharbaghi et al. (2003), dynamic environments lead to misalignments in the components of BMs and introduce waves of BM changes. Thus, e-commerce has brought about a wave (profound changes) in commerce since the 1990s (Riggins and Rhee 1998), introducing key aspects into BMs such as "a focus on new technologies and new market opportunities, an explicit focus on speed, a total customer focus, a principle of exploiting the advantages of networks, and a way to organize businesses" (Chaharbaghi et al. 2003, 377). They particularly emphasize the intensive use of alliances and cooperation in these BMs. Closely tied to e-commerce, last-mile delivery is equally affected by these changes.

Many researchers also highlight that the specificity of logistics business models is to offer value creation not only for customers but also for society as a whole through social and environmental contributions (Björklund and Gustafsson 2015; Lindholm and Ballantyne 2016; Patier and Browne 2010). Therefore, many connect logistics business models with Sustainability Business Models (SBMs). Far from the ideal SBMs described by Stubbs and Cocklin (2008), SBMs are mainly characterized by the desire to move beyond the sole pursuit of profit maximization to focus on societal, organizational, or market aspects (Schaltegger et al. 2016). Thus, SBMs would offer attractive alternatives to integrate responsible management and value creation (Breuer and Lüdeke-Freund 2014). Schaltegger et al. (2016, 6) suggest adding to the classic BM definition "...while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries." Finally, SBMs can also rely on shared value creation through responsible initiatives (Porter and Kramer 2011).

However, the need for adaptation to changing environments, especially through the adoption of new technologies and sustainable adaptations, leads to a need for innovation. Therefore, it is interesting to question the relevance of analyzing last-mile business models through the lens of Business Models of Innovation (BMI).

Business model innovation (BMI)

BMI is a field of literature that is still under development (Andreini et al. 2022). Additionally, Foss and Saebi (2017, 216) define BMI as "designed, novel, and nontrivial changes to the key elements of a firm's BM and/or the architecture linking these elements." The notion of "nontrivial" is important as it emphasizes the need for substantial change rather than minor

changes in the way of doing business. The ultimate goal is to acquire or strengthen a strategic advantage (Zott and Amit 2015). While it has been the subject of numerous articles, the consolidation of the process of an innovative business model is still fragmented and even ambiguous. Authors like Wirtz and Daiser in 2018 have worked to clarify the meaning of BMI, especially as the most recent view approaches BMI as a process that Wirtz (2016a, 189) explains as describing: “the design process for giving birth to a fairly new business model on the market, which is accompanied by an adjustment of the value proposition and/or the value constellation and aims at generating or securing a sustainable competitive advantage.” In this context, value creation extends to citizens, not just consumers, and considers not only economic but also cultural and social aspects. Thus, for Shetty et al. (2019), it is a strategic architecture of governance, consumer relations, marketing, and revenue that improves the quality of life for citizens. Several processes have been identified (Andreini et al. 2022), particularly through a state of the art on this subject. These processes include “generative cognition processes, knowledge-shaping processes, strategizing processes, value creation processes, and evolutionary learning processes” (Andreini et al. 2022, 1090). The study of these different processes has led us to isolate two that are particularly relevant to our research in order to identify the vision and value proposition of the companies studied: strategizing processes and value creation processes for BMI.

Strategizing process for BMI

The strategizing process refers to the decisions that will be made to maintain or increase the company's competitive positioning in its market. The strategies that companies can choose from are diverse and may involve copying strategies used by competitors to benefit from adjustments made for better results or transitioning from a product-based model to a more service-based model (servitization) (Naor et al. 2018; Sjödin et al. 2020; Storbacka et al. 2013). This process can lead to a complete BMI overhaul or an adaptation of the existing BMI. A completely new BMI is primarily linked to technological innovations, relying on digitization (Jensen and Sund 2017; Vasarhelyi and Alles 2008) or the Internet of Things (García-Gutiérrez and Martínez-Borreguero 2016; Tesch et al. 2017). Building on an existing BM requires a continual process of implementing innovations, a process that continues without a real end, with constant search for improvements. Thus, for Geissdoerfer et al. (2018), BMI can take several forms as identified in the literature: new BMs like startups, transformation from an old BM to a new one, diversification into additional BMs, or acquisition of BMs.

Value creation processes in BMI

The organization engages in a BMI because it seeks value creation that can take various forms for the company: economic, social, or environmental. The current situation aims to achieve both value creation and reduce the impacts of this creation, at the environmental and societal levels. This is what sustainable BMI allows, as we have seen for sustainable BM (Schaltegger et al. 2016). Additionally, the processes of a sustainable BMI (SBMI) are defined as innovative means that have a positive impact or reduce negative impact on the environment and society through changes made by the organization to create value (Baldassarre et al. 2017).

BMI processes allow for a variety of actions for value creation. However, their implementation remains costly and requires the identification of the most profitable BMIs and cost reduction (Andreini et al. 2022). For example, the marketing of innovative products, as well as business models oriented towards “pay-per-use” for products or services, are examples of profit capture for the organization, such as co-creation of value with the organization's stakeholders. In the latter case, a triad composed of suppliers, users or buyers, and companies is identified, which, through collaboration, allows for the development of all or part of an innovative business model aimed at creating value for stakeholders. This BMI is an asset for service creation. Furthermore, changing a BM through innovation tends to increase the resilience of organizations and their capacity for change. Apart from innovation through products, services, or processes, BMI is also a solution to face challenges coming from changes in the competitive environment. For example, in aging societies, the need for innovations in services is prevalent. This is the case in Japan, which can be considered a “lead silver market” (Reinmoeller 2011) and could be a source of experimentation for technological and/or service innovations. However, BMIs face challenges that make them fragile, and many failures of these BMIs have been recorded, especially when they relied on disruptive new technologies (Evans et al. 2017). Our research proposal is based on the identification of the BMs of La Poste and Yamato Group as Business Models of Innovation and relies on a qualitative study of these two corporate cases.

METHODOLOGY

This research is based on the realization of two case studies of companies with exceptional and exemplary characteristics in the home delivery service. The choice of these cases is based on the fact that both companies have a market share of around or more than 50% or more in the

parcel market in their respective countries. We chose France and Japan for reasons of maturity of urban logistics services and the long history of the two groups envisaged in their respective society. In addition, both groups have significant investment and innovation capacities needed to adapt to a population that is increasingly sensitive to the effects of climate change on the one hand, and whose is ageing and requires innovations in terms of customer offerings and processes (job shortage) on the other hand.

This chapter present, firstly, the design of the research and the Case study methodology employed, then present the context of urban logistics and last-mile delivery in both France and Japan that will impact the offers and BM of La Poste and Yamato.

Case study and research design

The use of the case study methodology in the context of last-mile logistics allows for the integration of multiple interdependent factors, including technological, organizational, and socio-economic aspects that are representative of the urban logistics context, especially in two different national contexts, France and Japan. Furthermore, the use of case studies will highlight diverse and complex practices, the roles and positions of actors and stakeholders around the two analyzed groups. Finally, the analysis should be able to highlight innovations developed in the last-mile delivery and their characteristics. Wirtz et al. (2016b) identify this methodology as widely used in research. Thus, according to Yin (2014), case studies allow for the exploration of the real context in which each group operates and the dynamics of their evolution.

The case studies rely on interviews with experts and professionals at La Poste and Yamato Group [work in progress] and an in-depth thematic qualitative analysis of abundant secondary data on both companies from internal sources (annual reports, social reports, press releases, websites) and external sources (general, economic, and specialized newspapers, academic articles and books, official reports) [completed]. All sources have been analyzed using the analysis framework below.

Table 1. Themes for Thematic Analysis

Themes	Subthemes
Strategizing process	Evolution of Strategic Vision
	Direct Services
	Indirect Services

Value creation processes	Evolution of Partnership Networks
	Organizational Innovations
	Technological Innovations
Evolution of the value capture	Revenue Sources

The French and Japanese contexts of last-mile delivery.

France has 82% of its population in urban areas, and Japan, with 92% of its population in 2022 (World Bank), is highly urbanized. The majority of their economies are concentrated in cities, and both countries have shown a strong concern for urban logistics for decades (1). In an economy increasingly focused on e-commerce and home deliveries (2), there is a growing awareness among public policies of the social, economic, and environmental issues associated with this activity. [This part has been intentionally shortened to limit the length of the communication]

- Urban logistics and its impacts

Scientific research in city logistics in Europe is extensive, but it developed early in Asia. Japan, in particular, has been a pioneer in this field, led by Professor Taniguchi Eiichi. In the 2000s, Taniguchi and his colleagues highlighted the paradox between the reluctance to increase logistics costs and the desire to achieve better environmental performance. This paradox remains relevant in both France and Japan and is becoming more complex as the environmental impacts of logistics are more accurately estimated and scrutinized. However, each city and each national context, depending on their own objectives and constraints (Capo and Michon 2017) will influence urban logistics structuration and the maturity of the stakeholders.

- Home delivery

In France, for the current 41.8 million e-shoppers, home delivery takes on various forms. As for the delivery of groceries to the home, there is a wide range of actors involved. Home delivery in Japan revolves around the “Takkyubin” (ou Ta-Q-Bin) service, which offers fast home delivery services in B2B, B2C, but mainly in C2C (Libeskind, 2015). It was initiated by the company Yamato in 1976 but is now provided by numerous companies in an essentially oligopolistic market dominated by three major players: Yamato Group, Sagawa Express, and Nippon Express. Home delivery may not require infrastructure but may incur potential

additional costs in case of failed delivery due to customer absence or the need for customer presence.

- Public policies and the influence of public actors

In France, the study of urban freight transport is relatively recent compared to the extensive research on household travel in urban areas and the infrastructure developments that have facilitated their mobility. Of more recent origin, local regulations regarding urban delivery vary widely in France and depend on the size of cities or metropolitan areas. In Japan, new challenges are emerging. The government and cities are advocating for resilience and sustainability in the face of a severe labor shortage and urban congestion. The government has identified a potential shortage known as the “logistics problem 2024,” highlighting a potential 14% reduction in truck transport capacity by 2024 and a 34% reduction by 2030 due to labor reforms limiting truck drivers' overtime hours. Regarding the environmental impact of deliveries, the Climate and Resilience Law, which includes the implementation of Low Emission Zones for Mobility (ZFE-m) in urban units with more than 150,000 inhabitants by the end of 2024, restricts deliveries and eliminates “polluting” heavy vehicles from city centers. CRIT’Air stickers indicate these restrictions, with increasing ZFEs over the years. Currently, there are no such stringent initiatives planned in Japan (source: expert interview, JILS, September 2023).

FINDINGS

Case Study La Poste (France) - General Presentation of the Case

In France, La Poste is a historical actor that has been serving the French population since the 16th century. It officially became La Poste in 1991 and transitioned into a public limited company (*société anonyme-SA*) in 2010. It is jointly owned by Caisse des Dépôts et Consignations and the French government. La Poste Groupe obtained the status of a "mission-driven company" in June 2020, which assigned it four missions: universal postal service, banking accessibility, press distribution, and contributing to regional development. Additionally, La Poste has expanded its operations internationally through Geopost, which covers both the national territory and international parcel delivery. Regarding traditional mail services, the volume has decreased significantly from 18 billion items in 2013 to 6 billion in 2023, with a projected further decline to 3 billion by 2030. Mail services now account for only 17% of La Poste Groupe's revenue in 2022, compared to 70% in 1990. In 2022, La Poste

reported delivering 2.6 billion parcels, a 3% decrease compared to 2021, through its Geopost branch, which includes brands like DpD, Chronopost, and Asendia in France. La Poste faces competition in its parcel delivery services, despite this segment representing 52% of its total revenue. Strong competitors like Mondial Relay and Point Relay have prompted La Poste to reorient its strategy and diversify its offerings (Imbert 2023).

Strategy and core strengths supporting proximity

For La Poste, competition and societal changes, such as the increased use of emails instead of traditional letters, have driven the company to diversify its offerings. This diversification extends not only to the type of mail delivered, with more parcels than letters and the necessary infrastructure to support this strategic shift, but also to a broader range of services aimed particularly at businesses. La Poste's in-depth understanding of the economic landscape, business needs, and its specialized delivery capabilities enable it to meet the requirements of both businesses and individuals. La Poste's extensive knowledge of the territory and its obligatory presence in all areas translate into accessibility to a potential customer base, whether professional or individual.

Figure 1. La Poste's Commitments for 2030



Source: <https://www.lapostegroupe.com/fr/la-poste-2030-engagee-pour-vous>

At the core of the BM, are the territorial coverage and the human resources (drivers /mailmen) permitting proximity.

- Territorial coverage

The strengthening of postal teams has accompanied the growth of the French population. The variable of territory is a central value in La Poste's activity and is evident every day through the presence of postal workers. Indeed, La Poste is present throughout the French territory, with 17,000 points of contact and 250,000 postal workers, serving as a real link between the French people primarily through activities such as letter and parcel delivery and banking services. La Poste aims to develop a local offering, building on an already well-established network. Its activity, primarily focused on mail, is on the decline.

- Mailman / Delivery driver

The role of a mail carrier/delivery driver has also evolved, while remaining a major player in revitalizing territories, including isolated and less attractive areas that may not be profitable for

traditional economic sectors. The reality of the field, including the social connections created by mail carriers, their knowledge of the territory, and their identification of local populations, has allowed La Poste to recognize the potential use of these skills and resources, which were previously undervalued.

The introduction of new services, especially those aimed at seniors, has required mail carriers to undergo training in building relationships with seniors and ensuring food safety (including the delivery of meals at home). Mail carriers, with their high level of trust and familiarity with their customers, have become “ambassadors” of value creation for La Poste. By offering a variety of services to both professionals and individuals, tailored to the specific needs of customers, they enhance the company's value.

This diversity of potential actions is not the responsibility of a single employee. For example, the delivery of fresh products to professionals is often carried out by specialized couriers rather than the daily mail carrier. The need for multiple personnel is sometimes driven by routes that cannot be consolidated, such as delivering mail, parcels (including some bulky items), and fresh products in a single visit. On certain routes, La Poste's “new services” are added to the mail carrier's daily route, further increasing their workload.

Another significant change is the shift from using “route verifiers” (La Poste employees who organize routes with direct contact with the mail carrier's experience) to constructing routes using optimization software (Jounin 2019). The use of such algorithms optimizes routes without necessarily considering the new services and the time required to deploy them effectively.

Technological Innovations: toward sustainable transportation and digital transition

To support this development, especially in the last mile delivery, new transportation modes are being implemented. This includes cargo bicycles (with a target of 1,000 cargo bicycles by 2025), traditional electric vehicles, and innovative electric vehicles (15,000 by 2025) designed for specific configurations or the ability to keep perishable goods cool. These new transportation methods are favored for urban areas and low-emission zones (ZFE-m). La Poste's 2030 strategic plan is structured around seven strategic priorities outlined in the visual representation of La Poste's strategy. It encompasses environmental goals, social objectives for both customers and employees, and digital transition ambitions for its activities.

New services: Mail Service Enrichment

La Poste has embarked on the commercialization of services that were once free but not explicitly stated, primarily related to the mail carrier's personal relationship with individual customers. The mail carrier's proximity to customers is a historical and integral part of both urban and rural life in France. They serve as a link between the French people, delivering both good and bad news, gifts, and orders throughout the year, six days a week. A relationship of trust is established between the mail carrier and the recipients of the deliveries. Building on this experience and closeness, the La Poste strategy envisioned the possibility of offering a subscription-based service for monitoring and caring for seniors. Thus, the paid service “*Veiller sur mes parents*” (Watching Over My Parents) was launched in 2017, with mixed success to this day. The commercialization of the mail carrier/customer relationship and the trust it entails does not appear to have been positively perceived by the seniors' circle of acquaintances. To further leverage the strong potential of mail carriers (their presence across the territory and the trust they enjoy among residents), a home meal delivery service is offered to organizations responsible for senior care, in line with the concept of aging at home.

- Adaptation of logistics services to territory (needs of territory population)

Other services requiring proximity and trust have also been introduced since 2023, including the delivery of medications and medical equipment to non-motorized or isolated patients in rural areas. Traceability and extensive coverage of the territory, including rural areas, enable La Poste to offer these services, using daily routes to provide other innovative services. Services for professionals, businesses, and local authorities have also expanded with Log'issimo, in response to the growing demand for tailor-made delivery services to meet the requirements of specific sectors. This offering includes several sub-services: fresh products (Log'issimo Fresh), services for retailers (Log'issimo Retail), flow optimization (Log'issimo Facilities), and on-demand logistics (Log'issimo sur mesure).

- Sustainable logistics services as a general commitment

La Poste's delivery service has made significant commitments to decarbonize urban deliveries. Their commitment is to ensure deliveries on foot or with zero or low-emission vehicles in 22 French metropolitan areas starting from 2025.

Case Study Yamato (Japan) - General Presentation of the Case

The company Yamato was founded in 1919, while the fast parcel delivery service known today as Ta-Q-Bin was launched in 1976. While only 11 parcels were delivered on the first day, today, Yamato accounts for 47.5% of parcel deliveries in Japan and delivers 2.33 billion parcels annually (Yamato Annual Report 2023) with over 220,000 employees.

Strategy - An enterprise a support of the inhabitants

Their policy, named “Next 100” in tribute to the company's centennial, has been received as a significant shift both internally and externally. It signifies a desire to transition from “maintaining delivery” to “innovating delivery.” Thus, Yamato aims to transform Ta-Q-Bin into a “solutions-provider” and positions the company as a “Lead Logistics Provider” for its partners. However, this shift towards a 4PL role does not mean withdrawing from the company's historical role in Japanese society and is articulated around the vision of “Our future role is as a lifetime support infrastructure.” This is accompanied by an internal reorganization towards centralizing the company's managerial resources. To support these efforts, new collaborations have been established. Yamato has partnered with the Japan Post group to pool their resources and distribution networks to reduce their carbon footprint and mitigate the impact of the shortage of delivery drivers on the quality of deliveries and services offered by both entities

- High territorial coverage

Yamato has 180,000 collection/delivery points in Japan (including 3,331 sales offices) and covers 100% of the territory with approximately 60,000 delivery drivers and 57,000 vehicles. These points are supplied by and contribute to 70 regional bases. The company's delivery network is a key factor in its success.

- Mailman / Delivery driver: a figure accepted by inhabitants

In the role of mail carrier/delivery person, deliverers, according to Yamato, should work like "sushi chefs" (with respect for the product and its delivery). The company's logo, depicting a mother cat carrying her kitten in her mouth, underscores the care given to parcels. Their role as contact, information gatherers, and brand ambassadors is very prominent in the strategy, institutional communication, and in the daily lives of residents. This is also clearly reflected in the responsible initiatives supported by the company.

- Social acceptability

Since the 1930s, the founder of Yamato has aimed to integrate the company into people's lives, offering services that are in harmony with their needs. The company is a prominent institution in the minds of Japanese consumers and was ranked as the number one brand in Japan in 2022, ahead of Sony, Apple, Google, and Microsoft (Nikkei Research Inc., October 2023). This success is based on a deep understanding of the consumers with whom they are in constant contact, which fuels their innovative ideas but also cultural initiatives.

- A Problematic low Price that need to change

Yamato has been offering services at extremely low prices for decades. This pricing policy has been called into question due to the company's financial losses resulting from rising delivery costs. However, despite these changes, which only begin a lasting trend of increasing rates, the prices remain quite low compared to those in France for the same type of service.

Logistics services diversification

- Old and new services

In terms of delivery services, Yamato offers a wide variety of services, both directly related to its core service and indirectly related. Many service innovations are also offered in different areas using the same resources (for example, logistic bases). The diversity of delivery services has a long history.

Yamato's delivery services are based on innovation, as "their emphasis on service innovation has turned haulage from a service for corporations into a service for families and individuals to help their haulage needs" (Reinmoeller 2011, p. 10). For professionals, increasingly customized combinations of services will be offered.

- Responsible Activities for reinforcing social acceptability

Yamato has played a very active role in providing aid to victims and those affected during earthquakes, from the great Tokyo earthquake in 1923 to the Noto earthquake in January 2024².

Similarly, in 2019, Yamato had 1075 local initiatives in Japan focusing on revitalizing territories and addressing social issues. These mainly involve the co-creation of responsible services in various geographic areas based on the population's needs, in collaboration with associations, cities, merchants, managers of Yamato contact points or branch directors, and NGOs (Paché 2020; Krubally, 2023). For instance, the initiatives known as "shopping support and watch-over services" have encouraged delivery drivers to spend more time with their clients and to step out of their usual roles, supported by new training offered by Yamato in communication, for example, or in managing people with dementia.

- Technological innovations: toward logistics optimisation

Historically, their delivery truck was developed in the 1980s specifically for Yamato, in collaboration with Toyota, to reduce delivery drivers' fatigue. Today, innovations are mainly focused on propulsion systems and energy sources, with hybrid or electric trucks. Numerous tests have also been conducted on autonomous delivery vehicles and truck platooning. In terms of logistics infrastructure, a significant effort has been made to reduce fossil fuel consumption (10% reduction in the year 2023). Facing the need for information system development, Yamato invested 100 billion yen (approximately 6 million euros) over three years (2022-2024) to develop their digital platform (YDP, Yamato Digital Platform) and integrate digital solutions into the platform (route management solutions, delivery zone management, replenishment, sales by delivery drivers, etc.).

DISCUSSION

Every company has fostered innovations in the strategizing process and the value creation process, leading to a revision of value capture. Most of the innovative elements implemented are linked to supply chain optimization and decarbonization. The table below summarizes the

² <https://www.nippon.com/en/news/yjj2024011600826/>

identified evolutions for each case. We identify two different transformation from La Poste Group and Yamato Group as the former is a transformation of the BM toward a more innovative BM and the second tends to create two overlapping BM using innovation.

Table 1. Summary of BMI Elements for La Poste and Yamato

Themes	La Poste Group	Yamato Group
Strategizing process	<ul style="list-style-type: none"> • Vision: A gradual but accelerated transformation of La Poste's historical business (mail and small parcel distribution) requiring a valorization of existing skills and territorial network. • Deployment of auxiliary delivery sites adjacent to postal offices. • Optimization software for route planning (use of Information Systems). • Utilization of knowledge about the territory and economic actors to offer diversified services tailored to their specific needs (boost from Covid on the delivery of meals / fresh products to businesses). • Shift towards the decarbonization of transport (partnership with WWF). 	<ul style="list-style-type: none"> • Vision: Acting as a societal support with a strong connection to residents AND a 4PL (Fourth Party Logistics provider) for professional partners, while addressing the challenge of labor shortages. • Maintenance and, in some cases, customization of services for professionals (possible combinations of multiple services: Ta-Q-Bin and other services related to commercial or logistical data analysis). • Development of a low-cost delivery service for small parcels and mail. • Addition of services unrelated to delivery but utilizing the same resources. • Services born from social initiatives. • Development of services targeting the silver market (older population).
Value creation processes	<ul style="list-style-type: none"> • Use of innovative transport vehicles (cargo bikes, specific electric vehicles for urban delivery, etc.). • Adding complementary and commercialized services to mail carriers' routes. • Utilizing personal mailboxes to transform them into pickup points. • Increasing the number of La Poste contact points at retail locations to benefit from broader hours for parcel drop-off and collection. 	<ul style="list-style-type: none"> • Resource sharing with competitors (Japan Post). • Creation of distribution networks dedicated to E-commerce. • Use of electric and hybrid vehicles / Tests on autonomous vehicles. • Development of a digital platform with integration of digital solutions.
Evolution of the value capture	<ul style="list-style-type: none"> • Commercialization of previously free services: "<i>veillez sur mes parents</i>". • Increasing delivery rates based on the mode of product collection. • Transferring the responsibility of printing stamps and postage to the customer. • Diversification of delivery and collection methods for letters and parcels. • Development of digital sending options for registered letters. 	<ul style="list-style-type: none"> • Consulting and services in supply chain deployment / support for e-commerce actors. • Increase in parcel delivery prices (regular re-evaluations). • Reputation and legitimacy that make Yamato top choice among Japanese consumers.

The shift made by La Poste, as well as Yamato, in offering diversified services was primarily due to the recognition of the added value of its intangible assets: proximity, trust, and the territorial knowledge of its mail carriers and delivery personnel. However, for La Poste, technological innovations in deliveries and parcel handling (route configuration using software, parcel deposit in mailboxes, etc.) are widely used to assist humans, but also to reduce human presence in post offices, leading to the closure of offices that were once emblematic landmarks in every city and village in France, alongside churches, bakeries, and *cafés*. The new missions of La Poste's mail carriers are both organized by a computer "regulator" in a logic of optimization, while also being added to the traditional duties of the same personnel. Training for these new missions is thus a prerequisite, which is not always a reality (Jounin 2019). The turnover on routes, the need to replace mail carriers during their holidays or absences, undermines the service when it is addressed to vulnerable people with entrenched habits. For more urban services, technological innovations for optimization or delivery in vehicles adapted to Low Emission Zones, possibly including refrigerated vehicles, allow La Poste to transform its delivery offerings with a goal of 100% decarbonization by 2040.

Regarding Yamato, the diversification of services and technological innovations to support logistics services sometimes seem to be in tension with the company's historical business model (BM). For Yamato, it is possible that two BMs overlap: one relying on the company's historical positioning as a mail/parcel delivery service, and another, referred to as a Business Model Innovation (BMI), which utilizes technology to offer diversified services, create value, meet customer needs, and face increasing competition in traditional segments (Casadesus-Masanell and Tarzijan 2012). These authors justify the coexistence of two BMs due to the desire to outperform competitors and the firm's wish to use resources more efficiently, while highlighting the risks of such an operation if the BM is planned in advance. Indeed, the BM is in a dynamic approach, as seen in a "process" acceptance. It is an iterative process aimed at constantly listening to a changing environment.

La Poste, on the other hand, in order to remain competitive, adapts its BM by varying a number of variables and transforming part of its activity to find the best posture in relation to its environment and competitors (Hacklin et al. 2018; Teece 2007). Authors Hacklin et al. (2018) use the analogy of a cricket player who keeps one foot on the ground and pivots the other to find the best angle to throw the ball. The company then constantly adapts to changes by pivoting to find the best axis. La Poste, given its historical missions now officially enshrined in law by

the State, seeks the best angle (the pivot) to offer its clientele, which it already captures through mail distribution (the foot on the ground), new services tailored to their needs. However, it can be questioned if the transformation has not irrevocably damaged La Poste's image in relation to its French customers by eroding its image capital around proximity.

The two groups La Poste and Yamato have invested in innovative means of transport or in route management tools and AI Tags: These are only tools for the implementation of a diversification strategy not only for the services offered, but also for varying delivery options, without completely sacrificing the very essence of the notion of proximity that has historically characterized their activity. The strong competition faced by these groups, the erosion of their turnover or their margins compel them to react. Their strategy allows them to keep the base of proximity, by adding services, means of transport to adapt to regulatory needs, and segmenting delivery options. The organization of the supply chain is becoming the tool at the service of a strategy that must integrate two major constraints: the scarcity of human resources and the decarbonization of logistics services activities.

LIMITS AND RESEARCH PERSPECTIVES

We have studied two types of Business Model Innovation (BMI) processes: strategizing processes for BMI and value creation processes in BMI. However, as Andreini et al. (2022) emphasize, the other three processes - cognition processes, knowledge-shaping processes for BMI, and evolutionary learning processes - are interrelated. Therefore, it would be interesting to study these additional processes in the context of these case studies to explain them more deeply and link logistic decisions to BMI more precisely. Furthermore, it is necessary to multiply case studies in the field of last-mile delivery to identify existing situations and the relevance of using the BMI concept for their analysis. It would also be interesting to consider the responsible evolutions of companies, in particular, to assess sustainable BMI (SBMI), a recent field of research that could more accurately reflect corporate evolutions in this area. Finally, due to national differences, the cultural factors and specificities of BMI could also be explored.

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