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## **Executive Summary**

Ferrer, a leading pharmaceutical and healthcare company, is at a pivotal juncture in its journey towards digital transformation. With its headquarters in Barcelona, Spain, Ferrer has been leveraging its Ferrer Digital Business Experience (DBE) initiative to modernize operations across its global landscape. This report evaluates Ferrer's current strategies and structures, identifying potential opportunities and challenges, and provides strategic recommendations for future directions to enhance competitive position and operational efficiency through digital innovation and AI adoption.

## **Strategic Recommendations**

1. **Organizational Structure for DBE:** It is recommended that Ferrer maintains its DBE as a transversal unit but integrates specialized teams within business units. This hybrid structure will allow for centralized oversight while fostering agility and customization needed for specific market challenges.
2. **Future Direction of Digital Transformation:**
  - a. **Global Extension:** Slowly extending digital transformation efforts globally will ensure consistency and efficiency across all markets. This approach allows Ferrer to leverage successful templates from Spain across other operations, adapting to local needs.
  - b. **Deepening Current Initiatives:** Prioritizing the deepening of current digital initiatives in R&D and marketing will utilize AI to drive efficiencies and innovation, aligning with industry trends and maximizing ROI.

## Introduction

Ferrer, officially known as Grupo Ferrer Internacional, S.A., is a pharmaceutical and healthcare company headquartered in Barcelona, Spain. The company has vertically integrated operations, encompassing the development, production, and marketing of pharmaceuticals and active pharmaceutical ingredients. The vertical integration allows Ferrer to maintain control over every aspect of their product lifecycle, from initial research and development to manufacturing and final market delivery, ensuring high standards of quality and compliance throughout. In addition to its core pharmaceutical business, Ferrer also ventures into healthcare services and technology, reinforcing its strategy to deliver comprehensive healthcare solutions. This expansion includes digital health initiatives, which leverage cutting-edge technologies to enhance patient care and access to medical services.

The company has also embarked on a significant digital transformation, incorporating various technologies to modernize its global operations. Ferrer's current digital transformation strategy, known as FerrerGo (later renamed Ferrer Digital Business Experience, DBE), was initiated in response to the COVID-19 pandemic's disruption to traditional business operations. Organized as a transversal unit, this unit is devoid of profit and loss responsibility, and aims to bridge the digital divide across the organization by focusing on two main areas: DBE Business and Data & Excellence. This structure implies that the DBE spans across different parts of the organization to integrate and streamline digital initiatives.

The document explores and provides recommendations for the below **two main questions**. The focus will be on analyzing and recommending the optimal organizational structure for Ferrer's

Digital Business Experience (DBE) and determining the future direction of the company's digital transformation efforts.

- 1. Question 1 - Organizational Structure for DBE:** How should Ferrer organize its DBE to best exploit AI growth in the pharmaceutical industry? Specifically, should the DBE remain a transversal unit across the company, be established as a separate business unit with its own profit and loss responsibility, or be integrated directly into each business unit?
- 2. Question 2 - Future Direction of Digital Transformation:**
  - a. Should Ferrer extend its digital transformation initiatives to its global operations to ensure a cohesive and unified approach worldwide?
  - b. Is it more strategic to transform the entire value chain from end-to-end, thereby redefining how each segment of the business operates and interacts?
  - c. Or should Ferrer focus on deepening and expanding its current digital initiatives to maximize the value and impact of already implemented strategies?

By addressing these questions and objectives, the document aims to deliver actionable insights that Ferrer can use to enhance its competitive position and operational efficiency through digital innovation and AI adoption.

## *Question 1*

### **Current Digital Transformation Strategy at Ferrer**

Ferrer's current digital transformation strategy is encapsulated under the Ferrer Digital Business Experience (DBE). The DBE is split into two primary areas:

1. **DBE Business:** Aims to enhance relationships with healthcare professionals (HCPs) by transitioning beyond traditional sales visits to more integrated digital interactions.
2. **DBE Data & Excellence:** Focuses on leveraging data for better decision-making and improving stakeholder interactions through predictive and automated tools.

### **Current Structure of DBE**

The Ferrer Digital Business Experience (DBE) is structured as a "**traversal unit**" within the company. This structure implies that the DBE spans across different parts of the organization to integrate and streamline digital initiatives. As a transversal unit, DBE is not confined to a specific department or function; rather, it intersects with various business units (BUs) to foster collaboration, share digital expertise, and support the overall digital transformation of Ferrer.

Ferrer has introduced the role of **digital business partners** within the DBE. These partners are consultants who work inside the traditional BUs such as Hospital, Consumer Care, and Prescription. They collaborate directly with product managers to develop tailored digital strategies and business plans. This arrangement ensures that digital developments created by the DBE are effectively deployed by the BUs, aligning digital initiatives closely with the business goals.

## Key Initiatives

Project	Description
<b>CRM Integration</b>	Centralizing communication through an integrated CRM system to improve stakeholder interaction feedback
<b>Digital Campaigns</b>	Using digital means to expand reach to healthcare professionals previously not engaged, enhancing Ferrer's market presence and stakeholder engagement .
<b>AI and Automation</b>	Implementing AI solutions to radically change product reporting and interactions, focusing on predictive models and automated tools for more efficient operations.
<b>Upskilling and Cultural Shift</b>	Initiatives to train and upskill employees, particularly medical representatives and other key staff, to effectively utilize new digital tools and processes .

## Shortcomings and Challenges

According to the IESE Business School report on Ferrer's digital transformation, there is a noticeable disconnect between the digital strategies developed by the Digital Business Experience (DBE) team and the existing business models of the BUs. The reason stated for misalignment stems from the DBE's 'push' approach, where digital initiatives are driven by the DBE without sufficient demand or initiative originating from the BUs themselves.

Also there is an intent to increase the scale of digital interactions to enhance both their quality and quantity, but Ferrer faces difficulties in achieving this scale effectively. The heterogeneity of Ferrer's various affiliates, which vary widely in terms of size, scope, and the specifics of their domestic markets, complicates these efforts.

The DBE is organized as a transversal unit without profit and loss responsibility but is tasked with supporting digital transformation efforts across Ferrer. This structure is intended to foster integration and support but has shown limitations in facilitating effective interaction and knowledge transfer between the DBE and the BUs.

Detailed breakdown of the challenges and shortcomings of Ferrer's current digital transformation strategy.

Challenge	Shortcoming
<b>Integration and Scalability</b>	Gap in aligning digital strategies with traditional business models, and the initiatives often experience a 'push' rather than 'pull' from the BUs.
<b>Proving the Value of Digital Tools</b>	Better measure and demonstrate the impact of digital tools on Ferrer's business outcomes,
<b>Heterogeneity in Global Operations</b>	Varied levels of digital readiness among Ferrer's international affiliates make it challenging to implement a uniform digital transformation strategy that fits all contexts.
<b>Cultural Resistance to Digital Adoption</b>	Resistance within the organization to fully embrace digital methods over traditional practices.

## AI Potential in Pharmaceuticals

Ferrer's ongoing AI initiatives in the pharmaceutical industry showcase significant potential and alignment with industry best practices, but there are still expansive opportunities for growth and structural optimization. According to the McKinsey Report on AI in Pharma, AI technologies, particularly generative AI, are transforming the pharmaceutical industry by enhancing drug discovery, clinical trials, and marketing strategies. The potential for AI to generate significant economic value (\$60 billion to \$110 billion annually) underscores the importance of integrating advanced digital capabilities into core business functions. (Adabala C ,McKinsey & Company, 1)

### Current AI Projects at Ferrer

Project	Description
Next Best Action	Utilizes data to guide medical representatives on optimal actions, improving efficiency in doctor engagements and information sharing.
Prescription Propensity Model	AI model that evaluates the likelihood of doctors prescribing Ferrer's medications, aiding targeted marketing strategies.
Digital Audience Generation	Profiles healthcare professionals based on digital behavior to enhance marketing efforts.
Personalized Pharmacy Ordering	Forecasts pharmacy orders, optimizing logistics and supply chain management.

Ferrer's AI projects are distributed across different business units, aligning each project with the BU that either benefits from or directly manages the initiative.



**Challenges Facing AI Projects at Ferrer**

Ferrer's AI projects are advancing but face several challenges: technical and resource constraints limit swift development, with slow recruitment of specialized staff and reliance on external partners for key tasks. Stakeholder buy-in and cultural adoption are also major hurdles, as projects like 'Next Best Action' need customization to foster broader acceptance among medical representatives.

**Potential AI expansion utilizing Gen AI**

Expansion Area	Potential Impact
Clinical Trial Optimization	AI can enhance trial design and patient recruitment, potentially reducing costs by up to 20% and shortening trial durations by 1-2 years.
Smart Data Management	Automation of data processes could lead to 30% cost savings and 50% reduction in time to database lock.
Enhanced Regulatory Interaction	AI-driven tools could streamline the creation and review of regulatory submissions, speeding up approval processes.

*Source: Mckinsey Report on Gen AI in Pharmaceuticals (1)*

## **Recommendation: Organizational Structure for DBE**

When considering organizational structure options for digital business ecosystems (DBE), such as in the case of Grupo Ferrer, it is crucial to weigh the pros and cons of different structures.

### **Organizational Structure Options for DBE**

#### **A. Traversal Unit**

- a. **Pros:** Promotes integration across various business units, ensuring that digital capabilities are leveraged uniformly across the organization to enhance overall agility and responsiveness.
- b. **Cons:** May lack the focus and speed in decision-making specific to individual market needs.

#### **B. Separate Business Unit**

- a. **Pros:** Allows focused development of digital products and services with dedicated resources and clear accountability.
- b. **Cons:** Risks creating silos that might hinder cross-functional collaboration and the sharing of digital innovations.

#### **C. Integration into Business Units**

- a. **Pros:** Ensures that digital initiatives are closely aligned with specific business goals and market dynamics, promoting rapid application and adaptation of digital solutions.
- b. **Cons:** May lead to inconsistent levels of digital maturity across different units, depending on the leadership and emphasis within each unit.

## **Recommended Structural Model for DBE**

Considering the rapid evolution of AI technology and the need for specialized knowledge and consistent strategy execution, **a hybrid model** seems most advantageous for Ferrer. This would involve:

**Maintaining a central DBE:** Retain a central traversal unit responsible for overarching digital strategy, governance, and core AI capabilities. This central team would ensure alignment with Ferrer's strategic goals and maintain high standards for technology implementation.

**Embedding specialized DBE teams with P/L within business units:** Each business unit should have its own digital team, which reports both to the central DBE and the business unit head. These teams would tailor the digital strategies to the specific needs of their units, driving more effective implementation and innovation. They would also have profit and loss responsibility

### **Justification**

This hybrid approach leverages the strengths of both centralization and decentralization. It allows for strong central oversight and strategic alignment while providing the agility needed for specialized, business unit-specific initiatives. Dynamic capabilities theory supports this, emphasizing the need for organizations to be able to integrate, build, and reconfigure internal and external competencies to address rapidly changing environments. (Dynamic Capabilities, 3)

Moreover, as highlighted in the McKinsey report, the pharmaceutical sector is increasingly dependent on sophisticated AI applications which require deep integration into operational processes to realize full potential (Adabala C, McKinsey & Company, 1). This approach ensures that Ferrer remains agile in a competitive and fast-evolving industry landscape.

## Overview of Proposed Structure

Component	Details	Justification
<b>Central Coordination</b>	Maintain a central DBE team to coordinate digital strategy, oversee AI integration, and ensure alignment with corporate objectives.	Ensures consistency and holistic oversight across Ferrer's global operations, leveraging centralized governance while promoting agile local execution .
<b>Embedded AI Teams in BUs with P/L</b>	Implement embedded AI teams within each BU to drive specific digital projects tailored to the unique needs and challenges of the BU.	Facilitates responsiveness and customization of digital solutions, ensuring that AI initiatives are relevant and effectively integrated within each BU's operations.
<b>Dynamic Capabilities Focus</b>	Regularly reconfigure resources and strategies to quickly adapt to new technologies and market changes, ensuring continuous innovation and competitive advantage.	Enhances Ferrer's ability to respond to dynamic market conditions and technological advancements, fostering a culture of continual learning and adaptation .
<b>Cultural and Process Renewal</b>	Implement continuous training programs and cultural change initiatives to enhance digital fluency across the organization, aiming to reduce inertia and manage entropy within the company. (Entropy, 6)	Addresses the challenges of cultural resistance and ensures that the entire organization supports digital transformation efforts, crucial for sustained innovation.

## ***Question 2***

### **Future Direction of Digital Transformation**

For future directions we will analyze three directions - extending digital transformation to global operations, transforming the value chain end-to-end, or going deeper with current initiatives.

#### **Global Extension**

Ferrer's current digital transformation efforts are primarily centered in Spain, where initiatives like FerrerGo have been spearheading transformations across various business functions. Geographically, while Spain remains the hub of Ferrer's digital transformation, the company's presence in international markets suggests varied levels of digital maturity. The affiliates in other regions have not yet reached the same level of digital integration and sophistication.

These international operations present a diverse landscape, with some markets at the nascent stages of digital adoption and others gradually progressing towards more integrated digital solutions. This disparity highlights the uneven geographical spread of Ferrer's digital transformation, emphasizing the need for a tailored approach to scale these efforts effectively across its global operations. The strategic push from Spain provides a template, but each market's unique characteristics and readiness must be considered to truly globalize Ferrer's digital transformation initiatives.

#### **Extending in Value Chain**

Ferrer's value chain is structured to cover the entire lifecycle of pharmaceutical and medical products, integrating activities across research and development (R&D), manufacturing, distribution, and marketing. The transformation currently primarily encompasses R&D, and marketing.

- A. In R&D, Ferrer is leveraging artificial intelligence (AI) to accelerate drug development, employing AI tools like the "Next Best Action" tool. This tool uses data from physicians to guide medical representatives on the most efficient actions to take, thus optimizing their engagement strategies.
- B. In the marketing sector, the "Living Lab" project is a significant initiative aimed at fostering a community of interest in digital solutions within the healthcare environment. This project allows healthcare professionals to bring real-life issues into the lab, co-create, and co-develop solutions with Ferrer, which can then be piloted in their hospitals and medical practices.

### **Deepening Current Initiatives**

Ferrer could further enhance their current digital transformation efforts by intensifying the use of AI and digital technologies in the areas where they are already active, specifically in R&D and marketing, while expanding these technologies into new business areas. As highlighted in the McKinsey report, expanding could include integrating advanced data analytics and machine learning models to predict drug interactions more accurately and speed up the bioinformatics processes (Adabala C ,McKinsey & Company, 1). This approach aligns with industry trends where AI expedites the drug discovery process and improves the prediction accuracy of drug targets and efficacy. By strengthening these initiatives, Ferrer can not only increase efficiency and reduce costs but also enhance the value they deliver to patients and healthcare providers, leveraging technology to create more personalized, efficient, and responsive healthcare services. This strategic focus aligns with insights from the "dynamic capabilities" framework, emphasizing the need for organizations to adapt and reconfigure their assets and capabilities in response to changing environments. (Dynamic Capabilities, 3)

For Ferrer to decide its future direction in digital transformation, it should consider a strategic blend of extending digital transformation to global operations, transforming the value chain end-to-end, and going deeper with current initiatives. Each approach has its merits and can significantly contribute to Ferrer's overall growth and competitiveness in the pharmaceutical industry.

### **Justification and Challenges of each strategy**

#### **I. Extending Digital Transformation to Global Operations**

##### ***A. Justification:***

- a. **Global Consistency and Efficiency:** Extending successful digital initiatives globally can ensure consistent service and operational standards across all markets. This standardization can lead to significant efficiency gains, particularly in logistics and compliance management. For instance, digital tools that streamline regulatory compliance or market entry processes in one region can be adapted for use in others, reducing the time and cost associated with these activities.
- b. Similar to the case of Téo Taxi, where the integration of technology was crucial for scaling operations in a competitive market, extending digital initiatives globally allows Ferrer to standardize operations and enhance service quality across all markets. (Téo Taxi, 4)

##### ***B. Challenges:***

- a. The primary challenge here involves the variability in digital readiness and regulatory environments across countries, which could complicate the standardization of processes and systems.
- b. There may also be significant upfront costs associated with setting up infrastructure and training personnel in diverse markets.

## **II. Transforming the Value Chain End-to-End**

### ***A. Justification:***

- i.* Enhanced Integration Across Functions: Digitizing the entire value chain—from R&D through manufacturing to distribution and marketing—can create a seamlessly integrated workflow, reducing delays and inefficiencies at each stage.
- ii.* For example, IoT devices and AI can be used in manufacturing for real-time quality control, while blockchain could secure supply chains against counterfeiting and compliance risks.
- iii.* Data-Driven Decision Making: Integrating advanced analytics and machine learning models across the value chain can lead to better forecasting, improved supply chain management, and more targeted marketing efforts.
- iv.* These technologies can help predict market demand more accurately, optimize production schedules, and reduce waste.

### ***B. Challenges:***



- i.* Transforming the entire value chain requires substantial investments in technology and retraining staff across multiple departments, which could be costly and time-consuming.
- ii.* The risk of disruption to existing processes could also lead to short-term losses before the benefits of transformation are realized.

### ***III. Deepening Current Initiatives***

#### ***A. Justification:***

- i. Current Success & Future Potential:* The McKinsey report estimates that generative AI in R&D can contribute significantly to the pharmaceutical industry, potentially generating \$15 billion to \$28 billion annually through enhanced drug discovery processes and clinical developments (Adabala C ,McKinsey & Company, 1).
- ii.* AI-driven tools like "Next Best Action" already enhance decision-making in marketing and can be expanded to other aspects of R&D and marketing to create more targeted strategies and improve patient outcomes .
- iii. Industry Benchmarking:* Pharma leaders using AI have reported reductions in drug development times by approximately 70%, which directly translates to cost savings and quicker time-to-market. Companies implementing AI in marketing have seen improvements in campaign effectiveness by up to 30%, optimizing both resource allocation and market reach.

### **Recommendation: Future Direction**

By focusing on deepening current initiatives, Ferrer can significantly enhance its operational efficiencies, accelerate drug development, and create more effective marketing strategies. This approach is not only aligned with current capabilities at Ferrer but also leverages existing successful outcomes to drive future growth and innovation. This strategy is expected to provide a high return on investment by reducing costs, improving time to market, and enhancing Ferrer's competitive edge in the pharmaceutical industry. The other strategies, while promising, involve broader changes and present challenges that might delay their impact or require more substantial initial investments and preparations. This makes deepening existing initiatives a more attractive option in the short to medium term, particularly in maximizing ROI and competitive advantage quickly.

But if Ferrer decides not to extend its digital transformation efforts globally, there are several potential risks and consequences that could impact its competitive position and growth potential

### **Risks of Not Extending Digital Transformation Globally**

1. **Missed Market Opportunities:** DBS Bank, which embraced a comprehensive digital transformation, significantly enhanced its service offerings than traditional banks that were slower to adopt digital technologies. (Sia, DBS, 5) Not following a similar path might prevent Ferrer from exploiting similar growth opportunities.
2. **Inconsistencies in Operation:** Without a unified digital strategy across all regions, Ferrer might experience inconsistencies in data management, operational efficiency, and

regulatory compliance. This lack of cohesion can lead to inefficiencies and increased costs.

3. **Impact on Brand Perception:** Companies that are seen as technology leaders often enjoy a more favorable brand perception, attracting better talent and more collaborative opportunities. By not extending digital transformation, Ferrer might not be perceived as a forward-thinking leader, affecting its employer brand and partnership appeal.

Hence there should be also effort on global digital transformation expanding slowly, so Ferrer should consider the following strategic actions as well apart from deepening current initiatives:

1. **Selective Implementation:** Even if a full global rollout is not feasible immediately, Ferrer can select key markets for digital transformation based on strategic importance and readiness. This approach allows for focused investment and management attention where it can have the most impact.
2. **Collaborative Partnerships:** Partner with technology firms and other healthcare entities in regions where Ferrer's presence isn't as strong. These partnerships can help accelerate digital transformation through shared resources and expertise. (Taking a leaf from Valve's playbook)
3. **Incremental Innovation:** Focus on incremental digital innovations that can be implemented within current business models and processes without a complete overhaul. This could involve digital enhancements in customer engagement, data analytics, or supply chain management.

## **Conclusion**

Ferrer's journey towards a comprehensive digital transformation is complex yet imperative for sustaining its growth and competitiveness in the global market. The recommended hybrid organizational structure for DBE and a strategic blend of extending, transforming, and deepening digital initiatives provide a balanced approach. This strategy not only addresses Ferrer's immediate needs but also prepares it for future challenges and opportunities in the digital era.

By aligning its digital strategies with proven practices from other industries, such as those observed in DBS, Valve, and Téo Taxi, Ferrer can mitigate risks associated with digital transformation and capitalize on emerging technological advancements. Implementing these strategies will ensure Ferrer remains at the forefront of innovation in the pharmaceutical industry, delivering enhanced value to patients and stakeholders globally.

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