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From Services to SaaS: Creating a Service-First, Product-Next Startup for International Trade Companies

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ABSTRACT

This work presents the development of a Service-First, Product-Next B2B startup focused on the international trade sector. The startup emerges from the intersection of entrepreneurial experience and a culture of continuous innovation, emphasizing close customer interaction, rapid experimentation, and validated learning as core principles. Initially, the team provides consulting-like services to identify client pain points, map workflows, and co-create tailored solutions, generating immediate value while acquiring deep sector knowledge.

Building on prior entrepreneurial experience and a network inherited from previous ventures, the startup applies these insights to design scalable software-as-a-service (SaaS) products that address real market needs. The approach is guided by a community-oriented mindset, fostering collaboration with clients and partners to create sustainable and impactful solutions. This work highlights the importance of practical experimentation as a foundation for developing products that are both relevant and effective, demonstrating a model that integrates academic rigor, systemic thinking, and market pragmatism in the process of creating innovative B2B solutions.

Keywords: SaaS; B2B; palavra 3; Business Model Validation; Product Development.

LIST OF ACRONYMS

- **SaaS** – Software as a Service
- **B2B** – Business to Business

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1. Introduction

This work presents the development of a B2B startup guided by the Service-First, Product-Next model, focusing on the creation of SaaS solutions to automate the issuance and receipt of Electronic Service Invoices (NFS-e) in the context of international trade. The startup originates from the founders' previous entrepreneurial experience, inheriting from Clonex values such as resilience, pragmatism, and an established client network. Initial operations focus on the international trade sector, identifying urgent needs and automation opportunities while aiming to develop a scalable product aligned with market demands.

1.1 Problem

The Brazilian international trade market faces complex and often manual fiscal processes. Issuance and receipt of NFS-e involve multiple channels, manual entries, risk of inconsistencies, lack of traceability, and auditing difficulties. Existing tools, such as ERPs and taxtechs, only partially meet these needs, leaving gaps in integration, automation, and real-time visibility. These factors lead to rework, increased costs, and exposure to fiscal risks, highlighting the need for automated and scalable solutions.

1.2 Objectives

The general objective of this work is to develop a SaaS solution to automate the issuance and receipt of NFS-e, starting with applied consultancy and gradually evolving into a scalable product.

1.2.1 Specific Objectives

Map and understand the problems and needs of the international trade sector related to NFS-e issuance and receipt;

Apply Service-First practices to co-create solutions with clients, validating business hypotheses;

Develop prototypes and MVPs using technologies such as n8n, Supabase, OCR, and AI APIs;

Ensure data security, compliance, and integrity according to LGPD;

Evaluate technical feasibility and scalability of the solution for subsequent SaaS development;

Generate dashboards and KPIs for real-time monitoring and control.

2. Methodology

The methodology combines applied research with incremental development, guided by Action Research, enabling continuous learning from practical interactions with clients and hypothesis validation in real scenarios.

2.1 Action Research Methodology

Action Research focuses on solving real-world problems collaboratively with stakeholders, promoting continuous learning and adjustment. In this startup, it was used to identify client pain points, map NFS-e workflows, test technical solutions, and validate the feasibility of a scalable SaaS product.

2.2 Action Research Approach

The Action Research cycle involved iterative steps of diagnosis, planning, implementation, evaluation, and reflection. Each project module — from business discovery to final product consolidation — corresponded to a sprint with hypotheses, experiments, and validations. This approach ensured that solutions were aligned with real market needs and allowed the technological architecture to be adjusted according to practical results.

3. Project Context

The project was structured into four main modules, focusing on NFS-e automation in the Brazilian international trade sector.

3.1 Startup Background

The founding team brings entrepreneurial experience and a culture of continuous innovation inherited from Clonex. Core values include resilience, pragmatism, validated learning, and collaboration with clients and partners. Initial operations target micro and small companies in international trade, leveraging pre-existing connections and addressing urgent market needs.

3.2 Market Context

The NFS-e market in Brazil is growing (adopted in 70% of capitals and 19% of municipalities) but remains fragmented, causing rework and fiscal risks. Key players include ERPs such as SAP and TOTVS, as well as taxtechs and specialized startups (Oobj, eNotas, NFe.io). Opportunities exist for integration, fiscal automation, and application of AI/ML, but regulatory and cybersecurity risks remain.

3.3 Business Model and Approach

The startup applies the Service-First, Product-Next model, beginning with applied consultancy to identify pain points, map workflows, and co-create solutions. This phase generates immediate revenue, provides practical learning, and forms the foundation for a scalable SaaS product.

3.4 Technical Context

The technical architecture involves:

- **n8n**: low-code workflow automation;
- **Supabase**: scalable database and storage;

- **OCR/OpenCV and AI APIs**: automatic data extraction from NFS-e;
- **Integration with ERP**s and existing systems;
- **Monitoring**, **logging**, and **manual fallback** for risk mitigation.

3.5 Risks and Requirements

Critical risks include ERP integration, OCR/AI accuracy, data security, and dependence on external APIs. Functional requirements cover automatic capture, validation, normalization, and secure storage of NFS-e, alongside minimal dashboards. Non-functional requirements include availability, scalability, security, observability, and modularity.

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