



(REVIEW ARTICLE)



FinTech logic in a traditional service: How the product approach transforms automated photo studios

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International Journal of Science and Research Archive, 2025, 14(03), 1839-1843

Publication history: Received on 05 February 2025; revised on 24 March 2025; accepted on 28 March 2025

Article DOI: <https://doi.org/10.30574/ijrsra.2025.14.3.0725>

Abstract

Automated photo studios are typically perceived as a traditional offline service focused primarily on equipment and location. However, when scaled to dozens of regions, such a project naturally evolves into a fintech product with a digital core, complex unit economics, and risk management.

This article examines the case of building a network of automated photo studios in the United States and Europe from the perspective of fintech product management: from applying credit analysis and financial modeling practices to location selection to building a data-driven infrastructure and enabling international scaling.

The study demonstrates that applying a product-oriented and financial approach allows a traditional service to reach a new level of operational control and investment attractiveness.

Keywords: Fintech; Product Management; Automated Photo Studios; Self-Service; Unit Economics; Risk Management; Digital Infrastructure; United States; Europe

1. Introduction

1.1. When an Offline Service Behaves Like a FinTech Product

Projects based on automated photo studios belong to the self-service infrastructure category: the user does not require an operator, and the entire process—from selecting a service to payment and receiving the final result—takes place through a digital interface. Formally, this is “hardware with software” installed in shopping malls, government institutions, universities, or business centers.

However, when launching a network with dozens of locations across approximately 30 regions of the United States and several sites in Europe, the business begins to resemble not so much a retail chain as a fintech product:

- Each machine becomes an economic unit with its own payback period and risk profile;
- A region functions as a portfolio segment with unique demand patterns;
- The entire network forms a system with distributed cash flows that requires modeling, forecasting, and stress testing.

The experience of Artem Blazko, who combines work in banking credit analysis and financial analytics with product management in the field of automated photo studios, demonstrates how a fintech approach can be integrated into what might appear to be a traditional service.

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1.2. Product Thinking: From “Installing a Machine” to “Creating a Manageable Unit”

A typical launch of a self-service location often follows a simple sequence: find an available location, negotiate rent, install equipment, and connect payment systems.

In the product logic shaped within fintech, however, the order is different: first it is determined what the product should be, and only afterward where it should be placed and how it should scale.

Key questions addressed before installing the first machine include:

- Who the target customer is — a person needing a photo for official documents, a content creator producing images for social media, or a company employee quickly issuing access passes;
- Which user scenario is critical in terms of time and convenience (for example, taking passport photos before submitting an application);
- How payment and the delivery of digital or printed results can be integrated into the user’s familiar digital journey;
- Which metrics will indicate that the product is “alive” rather than merely a terminal installed somewhere.

This shift in focus makes it possible from day one to view the photo studio as a digital product that happens to have a physical shell, rather than as a physical object with attached software.

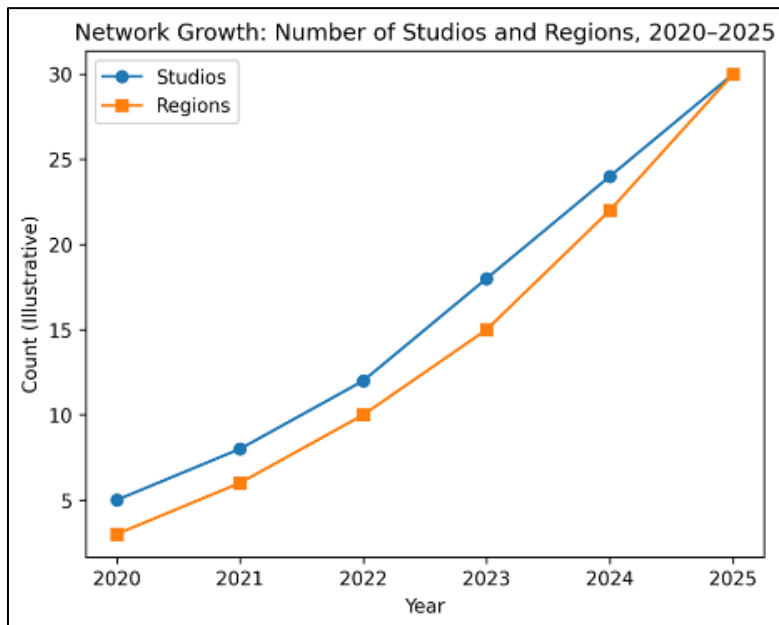


Figure 1 Network growth: number of photo studios and regions (2020–2025)

1.3. Unit Economics: The Studio as a Manageable FinTech Unit

In fintech, a product is always described through unit economics: customer acquisition cost, lifetime value (LTV), margin, and payback period. For an automated photo studio, a similar logic applies at the level of each individual location:

- Revenue — number of sessions × average transaction value;
- Variable costs — payment processing fees, consumables (in the case of printed photos), and service maintenance;
- Fixed costs — rent, connectivity, and equipment depreciation;
- Financial result — margin and investment payback period.

An analytical approach shaped by experience in the banking sector adds another important dimension: the habit of analyzing performance indicators dynamically and across scenarios:

- How the unit economics of a location would change if traffic decreases by 20%;

- What would happen to the payback period if rent increases;
- What level of financial resilience the studio has in case of temporary closure of the location (for example, due to shopping mall renovations or regulatory changes).

Studios that demonstrate sustainable positive unit economics become the foundation for scaling the network. Locations with “borderline” performance indicators move into a zone of increased attention, where new pricing models, promotional strategies, and usage scenarios are actively tested.

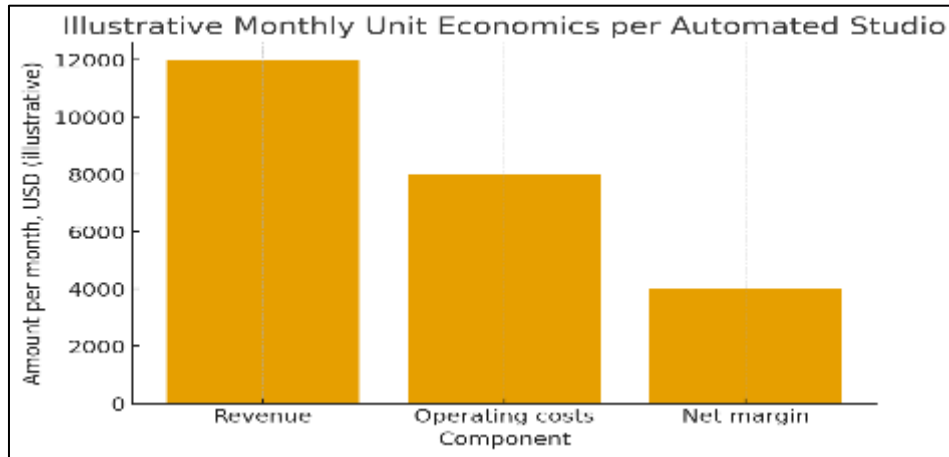


Figure 2 Illustrative monthly unit economics of an automated studio: revenue, operating costs, and net margin (USD)

1.4. Location Selection as Scoring: Transferring the Logic of Credit Analysis

Experience in commercial lending teaches professionals to treat every funding decision as a managed risk. In an offline network, this approach is applied to the selection of locations for installing a studio. A location is viewed as a “borrower” receiving a “loan” in the form of investments in equipment and operational costs.

The factors evaluated before making a decision include:

- Traffic and its structure: density of foot traffic by hours and days of the week, seasonality, and the presence of peak periods;
- Audience profile: the share of people for whom document photos or content creation represent a real and recurring need;
- Rental economics: the type of lease agreement (fixed rate, revenue share, or hybrid model), its duration, and the conditions for revision;
- Competitive environment: the presence of alternative services within walking distance;
- Operational risks: accessibility of the location for service teams, as well as requirements regarding operating hours and security.

These parameters are formalized in a scoring model. Locations are classified according to risk categories, and the portfolio of locations is balanced: high-risk experiments should not dominate the overall network, even if they appear promising based on certain metrics.

1.5. Data-Driven Infrastructure: The Network as a Source of Data Streams

Within a fintech-oriented approach, a network of automated photo studios is viewed primarily as a data-generating system.

A unified infrastructure is created, including:

- Equipment telemetry: device statuses, error codes, and downtime duration;
- Behavioral data: session frequency and duration, selected user scenarios, and drop-off points (sessions abandoned before payment);
- Financial data: revenue structure by service type, time-based distribution, and performance indicators by region and location type.

All these data streams are consolidated into a central repository where data marts are created for different levels of management:

- Operational reports for service and technical monitoring teams;
- Analytical dashboards for product and finance teams;
- Consolidated reports for investors and strategic partners.
- The data-driven approach produces two key effects:

Timely problem detection. Declining revenue or increasing error rates become visible before they appear in overall P&L indicators.

A constant flow of hypotheses. Data reveal which scenarios and pricing models perform best, which customer segments generate the core margin, and which locations overlap or cannibalize others.

2. The International Dimension: FinTech Experience as a Tool for Reducing Complexity

Expanding a network from the United States into European markets introduces new layers of complexity in addition to standard business challenges:

- Differing requirements for personal data processing and document photo standards;
- Variations in demand structure and user behavior;
- Differences in local payment systems and acquiring fees.

Here again, experience from fintech and international lending proves valuable:

- A legal and regulatory framework is built in advance, covering requirements for data storage and processing, receipt formats, and public offer terms;
- Multi-layer integrations with payment providers are established, allowing metrics to be compared across countries;
- Scenario modeling is applied to currency and operational risks.

As a result, entering new markets becomes less of a “leap into the unknown” and instead turns into a sequence of testing and scaling stages consistent with product management logic.

3. Team Structure: Where Finance, Product, and Operations Converge

A fintech approach is impossible without a team that combines several key competencies:

- Financial analysis and risk management — to build models and evaluate profitability and resilience;
- Product management — to define the value proposition, manage the backlog, and experiment with pricing models and usage scenarios;
- Operational management — to coordinate with locations, service contractors, and local partners;
- Software development and data analytics — to support the digital infrastructure.

A product manager with experience in commercial lending and financial analytics plays a crucial role in bridging these domains: communicating with investors and bankers in the language of metrics, with developers in the language of requirements and APIs, and with operations teams in the language of processes and SLAs.

4. Conclusion

An automated photo studio located in a shopping mall or government institution is no longer merely a “booth with a camera,” but part of a complex system where physical infrastructure, digital platforms, financial models, and customer behavior intersect.

Applying a fintech approach to such a project makes it possible to:

- Treat each location as a manageable unit with transparent economics and a defined risk profile;
- Use scoring and portfolio management tools to select and manage locations;

- Build decisions based on data rather than intuition or fragmented observations;
- Reduce risks in international scaling and increase the predictability of outcomes.

Experience shows that the boundaries between “pure” fintech and traditional offline services are gradually disappearing. Where previously a successful location and quality equipment were sufficient, today financial thinking, a product-oriented mindset, and a mature digital infrastructure are increasingly required.

For entrepreneurs and managers, this is not complexity for its own sake, but rather a pathway toward making a traditional service sustainable, scalable, and attractive for long-term investment.

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