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Ux Strategy as A Factor in Enhancing the Competitiveness of Digital Products in The International Market

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Abstract: Under conditions of escalating competition in the global digital products market, which is projected to exceed $5.4 trillion by 2025, UX strategy is transforming from a supporting function into a key driver of competitive advantage. The aim of the study is to analyze and conceptualize UX strategy as an integrated, measurable system aimed at enhancing competitiveness in the global market. The methodology includes a systematic literature review (Scopus, IEEE, ACM), analysis of industry reports (McKinsey, Gartner), and a multiple case study method (Netflix, Spotify, Airbnb). The results demonstrate that a mature UX strategy is a direct driver of financial performance: companies with superior design (top quartile of the MDI) outperform competitors in revenue growth by 32 p.p. The study decomposes the UX process (definition, design, validation, scaling, implementation, alignment) and shows that, at the international level, simple localization is insufficient. Deep cultural adaptation is required, as evidenced by the analysis of the Airbnb case (trust adaptation for China) and Spotify (16.5 % revenue growth after localization). In conclusion, it is confirmed that success requires overcoming methodological (transition to Participatory Design), technological (implementation of design systems), and organizational (synchronization of GSD teams) barriers. The information presented in the article will be of interest to digital product leaders, UX leaders, and HCI researchers seeking to optimize design processes for global markets.

Keywords: UX strategy, competitiveness, international market, localization, cross-cultural design, UX adaptation, UX ROI, design systems, case study, digital products.

Introduction

The global market for digital technologies is undergoing a phase of exponential growth and fundamental transformation. According to forecasts by the analytical company Gartner, global spending on information technology in 2025 will exceed $5.4 trillion, which is 7.9% more than in 2024 [1]. This growth is largely driven by current digitalization initiatives and the integration of generative AI (GenAI) [1]. Technological trends for 2024–2025 indicate that AI is increasingly woven into the fabric of everyday life, making interactions with technology smarter, faster, and more intuitive [8]. In this new paradigm, 62% of senior executives view AI, whose interface constitutes a central digital product, as a defining factor of competitiveness for the next decade [1].

The increasing intuitiveness and seamlessness of technologies exponentially raises user expectations regarding the quality of digital products. Under conditions in which McKinsey (2024) identifies arenas of escalating competition (including software and AI services) characterized by advanced technologies and large-scale investments [10], user experience (UX) ceases to be a secondary factor and becomes the principal battleground for the consumer.

Despite the widespread recognition of the value of design, there is a research gap in academic and industry literature. Existing studies are generally fragmented. On the one hand, analytical reports quantify the aggregate ROI of design [2]. On the other hand, numerous case studies analyze international localization strategies of individual companies such as Netflix [12] or Spotify [4]. However, there is no integrated model that links the full operational cycle of a UX strategy (from the creation of artefacts such as user personas to the maintenance of design systems) with specific metrics of international competitiveness. It remains insufficiently explored how exactly UX processes and artefacts function as mediators of market share growth, particularly in the transition from simple localization to deep cross-cultural adaptation [3, 5].

The aim of the study is to analyze and conceptualize UX strategy as an integrated, measurable system aimed at enhancing the competitiveness of digital products in the global market.

The author's hypothesis is that a mature UX strategy, characterized by proactive cross-cultural adaptation (rather than reactive localization) and validated through iterative metrics, is not merely a supporting function but a direct driver of sustainable international growth and the achievement of superior financial performance.

The scientific novelty of the study lies in the conceptualization of UX strategy as a dynamic system in which cross-cultural adaptation, validated through iterative metrics, acts as a key mediator between the design process and market share growth in the international arena.

Materials and Methods

To achieve the stated aim and test the hypothesis, an interdisciplinary study was conducted, based on three main methodological approaches.

First, a systematic literature review was applied. An analysis was carried out of academic publications indexed in the Scopus, IEEE Xplore, and ACM Digital Library databases. The review was focused on identifying the theoretical foundations of cross-cultural design, contemporary validation methodologies (for example, culturally adaptive A/B testing), and operational processes (for example, the integration of UX into Agile and Participatory Design).

Second, an analysis of industry reports was used to establish the economic correlation between design maturity and market indicators. Strategic reports of leading consulting agencies, including McKinsey, Gartner, and Deloitte, were analyzed, with emphasis on quantitative data for 2024–2025.

Third, a multiple case study method was employed. This approach made it possible to examine practical strategies and outcomes of international adaptation using the example of leading digital companies whose models have had a formative influence on the industry: Netflix (staged market entry strategies), Spotify (the relationship between localization and revenue growth), and Airbnb (the nuances of cross-cultural trust).

Results and Discussion

The analysis begins with establishing the irrefutable financial value of design. In the modern digital economy, investments in UX strategy are not a cost center but a

direct driver of growth. The most compelling data linking design maturity to financial performance are presented in the McKinsey study The Business Value of Design [2].

The McKinsey study, which covered more than two million units of financial data, revealed that companies in the top quartile of the McKinsey Design Index (MDI) exhibit significantly higher growth rates. Over a five-year period, these companies increased their revenues by 32 percentage points and their total return to shareholders (TRS) by 56 percentage points faster than their industry peers [2].

A key aspect of these data is that the difference in financial performance between the second, third, and fourth MDI quartiles was marginal [2]. This observation has critical strategic implications: the market does not reward companies that merely invest in design or achieve an average level of UX maturity. Financial rewards appear to be concentrated exclusively at the top tier. This implies a winner-takes-all market dynamic, in which competitive advantage is achieved not simply by having a UX strategy, but by excelling in its execution. Strategically, being good enough in UX is equivalent to failure.

This macroeconomic correlation translates into direct operational metrics that underpin growth (Table 1). Forrester research shows that well-designed user interfaces (UI) can increase conversion rates by up to 400%. The Nielsen Norman Group (NNG) confirms that improving usability can increase conversion by 200%. Bain & Company closes this loop by linking UX to long-term profitability: a 5% increase in customer retention achieved through UX improvements can raise profits by 25% or more.

Table 1. Correlation of the McKinsey Design Index (MDI) with financial performance indicators (5-year period) (compiled by the author based on [2]).

MDI quartile (design maturity)	Revenue growth (relative to the industry average)	TRS growth (relative to the industry average)
Top quartile (Top 25%)	+32 percentage points	+56 percentage points
2nd, 3rd and 4th quartiles	Marginal difference	Marginal difference

Below, Table 2 presents summary ROI metrics from investments in UX.

Table 2. Summary ROI metrics from investments in UX (compiled by the author based on [1, 2, 6, 23]).

Source	Metric	Impact measure
Forrester Research	Conversion rate (UI)	Increase up to 400%
Nielsen Norman Group	Conversion rate (Usability)	Increase by 200%
Bain & Company	Profit (from retention)	+25% (with +5% retention)

To achieve the financial results presented in Tables 1 and 2, a mature, reproducible, and scalable process is required. Based on the analysis of industry best practices (reflected in the provided materials), an Integrated UX Strategy Process Model was synthesized. This model decomposes the full cycle of UX tasks into six interrelated stages:

Definition: Research and synthesis, creation of

empathy artifacts (User Personas, Journey Maps).

Design: Development of structures (Wireframes) and creation of interactive, high-fidelity prototypes (High-Fidelity Mockups, Prototypes).

Validation: Iterative hypothesis testing through Usability Testing and A/B Testing, collection of feedback.

Scaling: Development and maintenance of Design Systems to ensure consistency.

Implementation: Ensuring seamless developer handoff and optimization (Accessibility, Performance, Responsiveness).

Alignment: Continuous synchronization with Product Managers and Marketing to achieve shared business goals (Business Goals).

When entering the international market, this model does not remain static. It is transformed under the influence of an external feedback loop from the global market. Cross-cultural feedback directly informs the Definition stage (modifying personas) and the Validation stage (modifying the testing context).

The analysis shows that the most common mistake when entering the international market is reducing the UX strategy to reactive localization (i.e., text translation and currency adaptation) [20-22]. However, case studies of market leaders demonstrate that competitive advantage is achieved through proactive and deep cultural adaptation.

The Spotify case study is a vivid example of a direct correlation between UX adaptation and financial growth. Spotify's strategy is based on three pillars: (1) language accessibility, (2) cultural sensitivity in communications, and (3) UX that curates local musical tastes and trends [4]. This is not merely theoretical: in 2021, Spotify initiated a large-scale expansion into 80 new markets, adding 36 new languages. The financial result was immediate. The company's revenue increased from €2147 mln in the first quarter of 2021 to €2501 mln in the third quarter of 2021 — an increase of 16.5% in just two quarters [4]. In 2022, continuing its expansion, the company increased its revenue by a further 21% [4]. This demonstrates that UX localization (Figure 1) is a direct catalyst for the growth of the user base and, consequently, revenue.

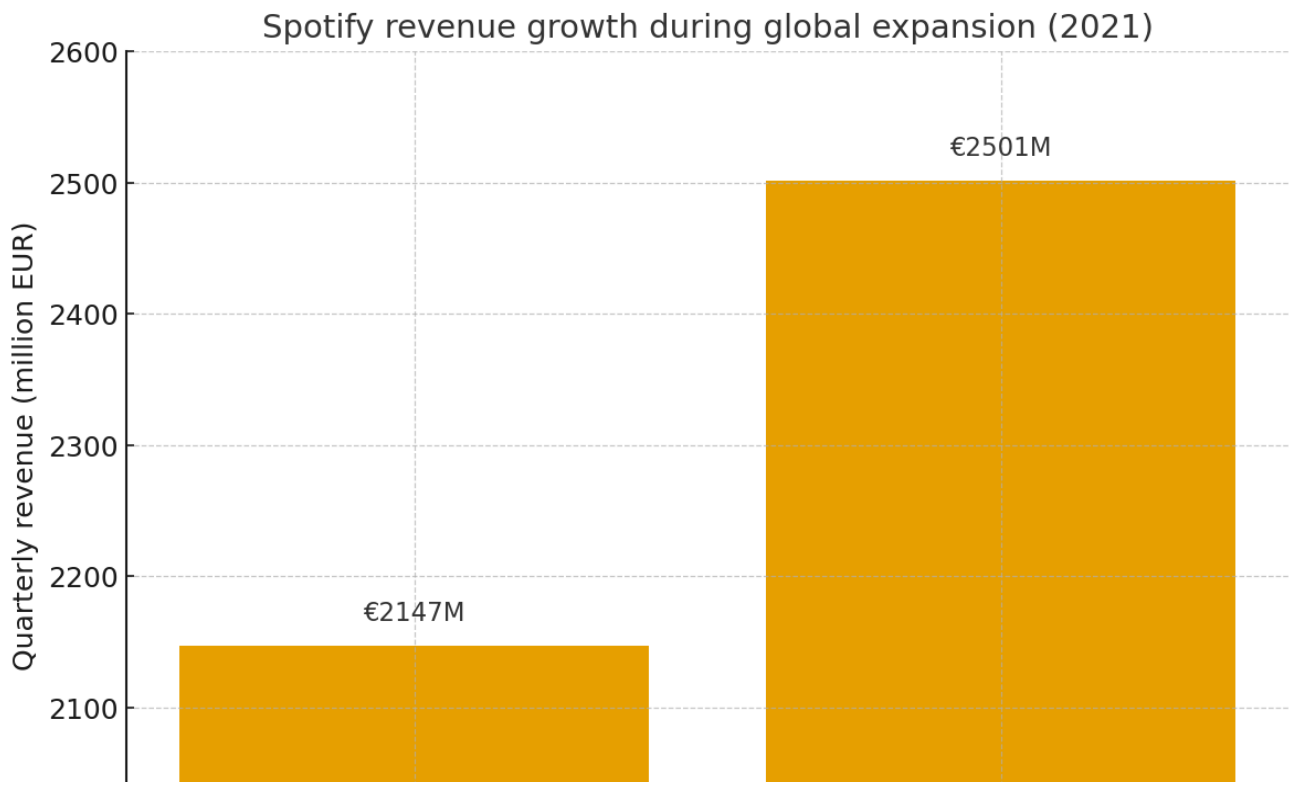

Fig.1. Spotify revenue growth dynamics (Q1-Q3 2021) in correlation with the increase in the number of supported languages (compiled by the author based on [4]).

The Netflix case study complements this picture, demonstrating an iterative approach to adaptation. The expansion of Netflix was not instantaneous. Phase 1 (2010) involved entering a culturally and geographically proximate market (Canada) for testing and learning [12]. Only after this did the company move to Phase 2, an accelerated global expansion [22]. This approach confirms the value of an iterative cycle at the international scale.

The Airbnb case study reveals the depth of adaptation required, addressing fundamental concepts such as trust. For sharing economy platforms, trust is a key UX metric [3]. However, the mechanisms of building trust are not universal. A 2023 study comparing Airbnb users from the Netherlands and China identified critical differences [3]. Dutch users (belonging to a culture with low uncertainty avoidance) exhibited greater trust in host profiles with implicit, emotional self-disclosure. In contrast, among Chinese users (high uncertainty avoidance), the same friendly profile did not elicit trust; they required explicit, factual self-disclosure.

This conclusion is fundamental: a one size fits all UX strategy is not merely suboptimal; it is counterproductive. A design that successfully builds trust in one market may actively undermine it in another. A successful UX strategy must adapt the UI and UX themselves to account for fundamental cultural dimensions [18, 19]. Further research in the field of digital health interventions confirms this: when adapting an application for the Arab world, it was not sufficient to translate the application, and a deep adaptation was required, shifting the focus from a Western, individualistic therapeutic model to a family-oriented worldview [13, 15]. This is a change at the core of the product driven by UX strategy.

The application of the integrated model in the global market is associated with significant risks, especially at stages Definition (1) and Validation (3). Standard barriers include the disregard of technical constraints (for example, text expansion by 25–30% when translating into German or Romance languages; the need for RTL layout for Arabic) and cultural nuances (color symbolism, icons, gestures). However, deeper risks are methodological in nature.

Methodological risk: The persona trap. Stage 1 (Define) of the model prescribes the creation of user personas. However, in a cross-cultural context, this seemingly standard tool carries a high level of risk. Critical studies show that cross cultural personas created by designers from one often Western oriented culture for another often reinforce existing stereotypes and reflect colonial tendencies in design [15]. Instead of fostering empathy, such an artifact codifies bias, which leads to the creation of invalid personas and, consequently, to product failure [14, 17].

Solution 1: Participatory design (Participatory Design, PD). The solution to the persona trap lies in a methodological shift from designing for to designing with (Figure 2). PD presupposes deep involvement of end users in the research and design process itself [31]. Instead of acting as passive objects of study, users become active coauthors. A vivid example [5] describes work with young people in Malaysia. Instead of creating personas for them, the researchers used PD, allowing the young participants to define their own communication needs. This led to the co creation of an application based on their authentic sign language. This approach makes it possible to create validated, stereotype free personas and products.

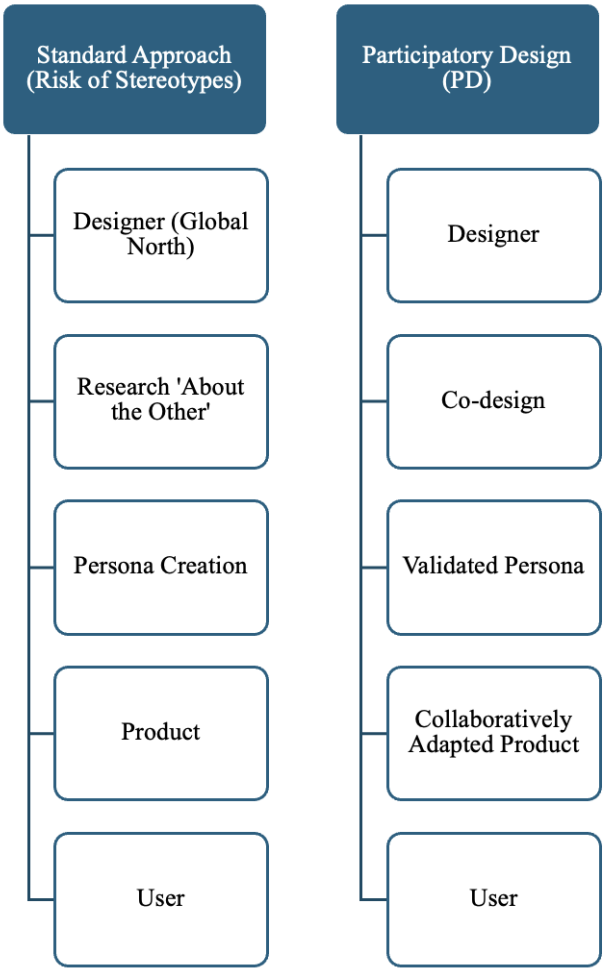

Fig.2. Comparison of approaches to creating cross-cultural personas (compiled by the author based on [5, 15, 16]).

Solution 2: Culturally adaptive A/B testing. This is a mature application of stage 3 (Validate) of the model. In the international context, A/B testing should be used not for trivial optimization (for example, button color) but for validating cultural hypotheses. Advanced research describes conducting A/B testing with 2750 participants across five distinct cultural regions. Importantly, not only quantitative metrics (task completion time, error rate) were measured, but also qualitative ones such as perception of cultural appropriateness. Other studies directly link this methodology to optimization for religious holidays (for example, Ramadan). This links the Validation stage (3) with the Alignment with business goals stage (6).

Successful implementation of a UX strategy depends not only on the correct methodology but also on supporting technologies (Stage 4: Scale) and organizational structures (Stage 5: Implement).

The design system is the technological foundation for scaling. It resolves the key paradox of a global product: how to ensure global consistency while maintaining local flexibility. Modern design systems address this challenge proactively. The SAS case study (2025) 6 shows how the company embedded localization (including RTL layout and text expansion rules) directly into its design tokens and Figma variables. This allows teams to design and test localized versions before handoff to development rather than correcting errors afterwards.

Even with a perfect process and technologies, a UX strategy may fail due to organizational misalignment in globally distributed teams.

The study [7] identified a critical mismatch of practices (mismatch of practices) in GSD teams working between India and Sweden. The Swedish team adhered to pure Agile (short iterations, less documentation, high frequency of F2F communication). The Indian team, in contrast, used a plan driven approach (sequential phases, reliance on documentation, fewer short iterations) [7].

This organizational misalignment (Figure 3) creates a direct conflict with the UX strategy cycle. A mature UX process is inherently agile (it requires fast cycles of Design -> Validation -> Iteration) [18]. If UX designers (in Sweden) work in an agile rhythm and the development team (in India) in a plan driven rhythm, the feedback cycle breaks. Designers cannot obtain rapid validation, and developers cannot integrate changes due to a rigid plan. This leads to communication and integration problems that block the implementation of the UX strategy and, consequently, hinder international competitiveness.

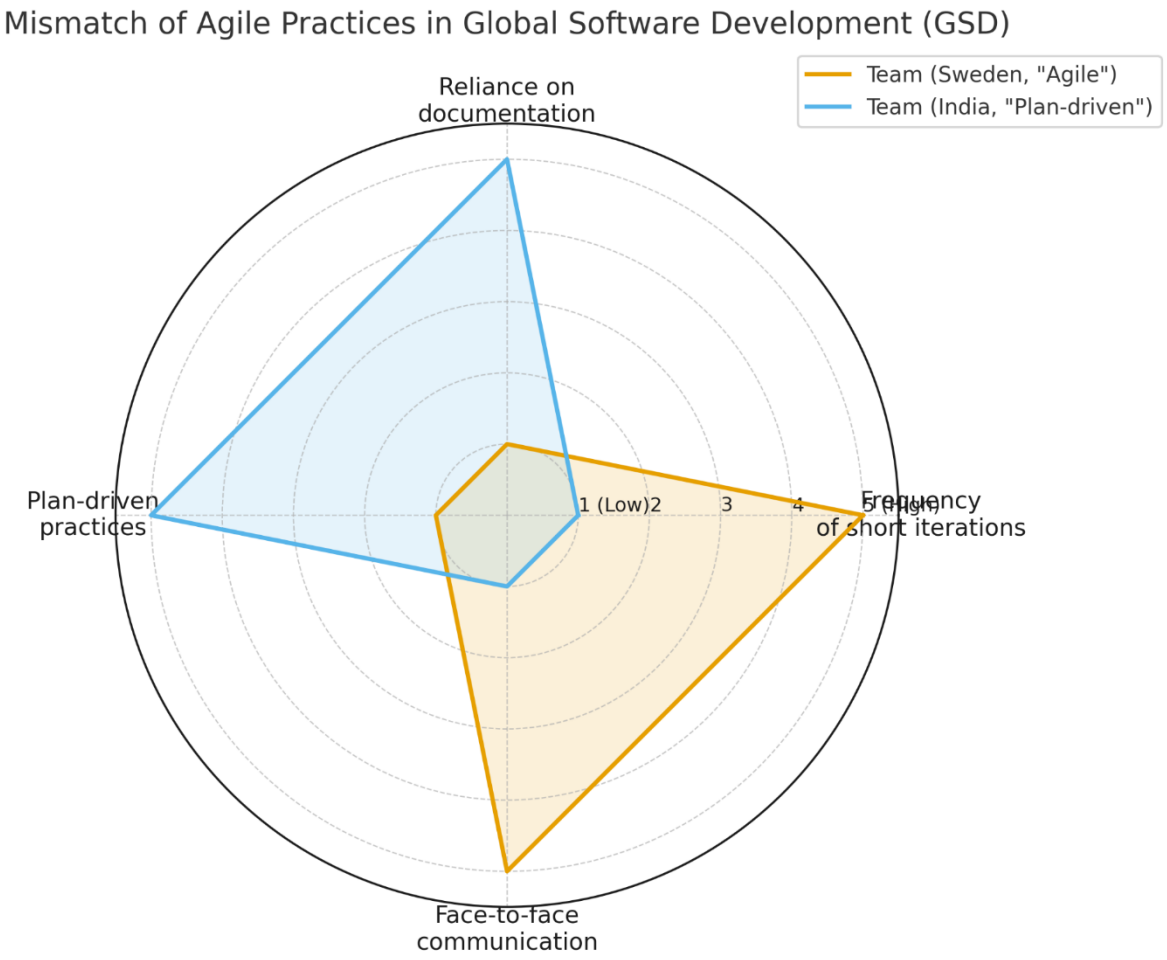

Fig. 3. Conflict of Agile practices in global teams (GSD) (compiled by the author based on [7, 18]).

Based on the conducted analysis, it can be concluded that UX strategy in the digital economy functions not as an auxiliary function but as a key driver of financial growth and international competitiveness: only companies with high design maturity achieve a disproportionately high increase in revenue and shareholder returns, whereas an average level of UX is essentially equivalent to strategic failure. It has been shown that investments in UX are translated into fundamental product metrics (multiple growth in conversion and a substantial increase in profit through retention), but the achievement of these effects is possible only in the presence of an integrated, reproducible, and scalable process model that includes cycles of definition, design, validation, scaling, implementation, and strategic alignment with business goals. When entering global markets, the decisive factor is the rejection of the reduction of UX to reactive localization in favor of deep cultural adaptation, as confirmed by the cases of Spotify, Netflix, Airbnb, and digital health interventions, where not only the content but also the product core itself is modified (mechanisms of trust, therapeutic logic, usage scenarios) [7, 9, 11].

At the same time, significant methodological and organizational risks are identified: the persona trap in cross cultural user modelling requires a shift toward participatory design and culturally adaptive A/B testing, while the successful scaling of UX solutions relies on design systems capable of combining global consistency with local flexibility already at the level of design tokens and tools. Finally, it is shown that even in the presence of correct methodology and technologies, the implementation of a UX strategy may be blocked by

organizational misalignment of practices in distributed teams: a mature UX process is agile by its nature and requires synchronization of rhythms and approaches (design, development, product management, and marketing) in the international framework. Taken together, this allows UX strategy to be interpreted as a system-forming element of international business strategy, where financial success directly depends on the level of design maturity, the depth of cultural adaptation, and the organizational and technological readiness of the company.

Conclusion

The conducted study confirms that in the conditions of a hypercompetitive global market, UX strategy functions as one of the key factors in increasing the international competitiveness of digital products.

The aim of the study was achieved: UX strategy was analyzed and conceptualized as an integrated system. The author's hypothesis was confirmed: it was demonstrated that proactive cultural adaptation is a direct driver of growth.

This confirmation is based on two levels of evidence:

Quantitative: There is a direct, measurable relationship between design maturity and superior financial performance. Companies in the upper MDI quartile demonstrate revenue and TRS growth significantly outpacing the market (Table 1). This correlation is realized through operational metrics such as conversion and retention (Table 2) and is confirmed by Spotify's direct revenue growth of 16.5 % following large-scale UX localization.

Qualitative and methodological: Achieving these results is impossible without a shift from reactive localization to deep cultural adaptation. This shift requires changing the very core of the product (the Airbnb and health-tech cases), as well as the implementation of mature methodologies such as Participatory Design to overcome the persona trap and culturally adaptive A/B testing.

The practical significance of the work lies in the fact that it provides decision-makers with a dual tool:

Financial justification for investments in UX maturity.

An operational and strategic map that identifies the key methodological, technological, and organizational factors necessary for success in the global market.

Success on the international stage requires not merely a UX team but a homogeneous organizational structure (GSD) that supports the agile cycle, and a proactive technological foundation (design systems) that treats localization not as a problem but as a built-in function.

The findings presented in the article will be of interest to digital product leaders, UX leaders, and HCI researchers seeking to optimize design processes for global markets.

A promising direction for future research is the study of the impact of GenAI technologies on the automation and scaling of deep cultural adaptation, for example, the use of AI for dynamic generation of culturally adaptive UIs or for conducting A/B testing of cultural appropriateness in real time.

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