

A Usability-Centered Evaluation of Software Evolution: Comparing Skype and Microsoft Teams in Addressing Quality Decline and Enhancing Market Retention

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Abstract: The rapid evolution of digital communication technologies has intensified the need for software systems to maintain high usability, quality, and long-term relevance. However, many software products experience quality decline over time due to poor adaptability, increasing technical debt, and failure to align with evolving user expectations. This study examines how usability-centered software evolution influences product sustainability by comparing the contrasting trajectories of Skype and Microsoft Teams. The objective of this study is to analyze the evolution strategies that contributed to Skype's decline and to evaluate how usability-centered design and development practices supported the growth and market retention of Microsoft Teams. To achieve this, the study adopts a scoping review methodology based on the Arksey and O'Malley framework, synthesizing evidence from academic literature, industry reports, and usability evaluation models such as ISO/IEC 25010 and established usability heuristics. The findings reveal that Skype's decline was driven by usability regression, architectural limitations, and ineffective evolution strategies, while Microsoft Teams achieved sustained adoption through agile development, cloud-native architecture, and continuous user feedback integration. This study contributes to existing literature by integrating software evolution, usability, and market retention into a unified analytical perspective. The study concludes that usability-centered evolution is critical for maintaining software quality and long-term competitiveness. It recommends that software development teams should prioritize continuous usability evaluation, proactive technical debt management, and user-driven design to ensure sustainable software evolution.

Keywords: High-Quality Software Products, Market Retention, Microsoft Teams, Skype, Software Evolution, Usability Evaluation.

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I. INTRODUCTION

The rapid decline of software products is a major concern facing the digital environment today. As technology advances rapidly, developers often focus on current requirements without accounting for long-term adaptability [1]. Studies, however, have shown that for software products to thrive in this rapidly changing world, there is a need for software to evolve in order

to maintain relevance and competitiveness. As the concept of software evolution is being considered, one of the fundamental issues around it is the rate of degraded software product quality amongst others. A main driver for software evolution is ensuring that software quality is improved and well preserved [2]. As highlighted by [3] that a measure of software quality depends on the extent to which software conforms to both functional and non-functional requirements such as correctness,

consistency, dependability, usability, performance, maintainability, and security aspects. Lehman's seventh law of software evolution further references stating that the perceived quality of software tends to decline over time, especially as complexity increases unless proactively maintained [3].

Additionally, software market retainability is a growing concern as new products frequently enter the market. According to [4], it projected that the software market is estimated to grow from USD 808.42 billion in 2025 to USD 2224.23 billion by 2034, exhibiting a compound annual growth rate (CAGR) of 11.90% during the forecast period between 2025 to 2034. While the COVID-19 pandemic had a positive impact on the global economy, it has urged businesses to build up software solutions and malware protection, detection and mitigation techniques as it promotes the market's growth. Furthermore, it has been accepted that one of the goals of software testing is not just to detect bugs and fix errors but also to ensure marketability and retention of customers by ensuring they meet technical requirements to satisfy customers [5]. The rise of online communication channels like Zoom, Google Meet, and Slack challenged Skype's market share, while Teams' rapid iteration, strategic marketing and innovative potency allowed it to maintain dominance [6]. This underscores the fact that beyond technical evolution, strategic planning and marketing integration are essential to long-term software sustainability. Skype's degradation in user satisfaction and retention reflected this reality, as updates were either inconsistent or disruptive, often failing to address core user pain points. On the other hand, Teams' ability to roll out seamless, feedback-driven updates helped it evolve effectively without compromising performance or usability [6].

The case of Skype and Microsoft Teams offers a compelling comparative lens to analyze software evolution and its implications on product quality and market retention. Skype, a pioneer in VoIP communication, launched into the market in 2003. However, despite Microsoft's largest acquisition in 2011, Skype struggled to evolve in alignment with modern UI/UX expectations, mobile-first access, and workplace collaboration needs [7]. Contrastingly, Microsoft Teams, launched in 2017, developed with a clear market vision, leveraging integration with Office 365, cloud infrastructure, and agile methodologies to become one of the most preferred communication platforms for enterprises and educational institutions [8]. Feasibility study and product definition play a critical role in software evolution. An initial feasibility report helps evaluate the software project success [9] and also determine whether the software concept aligns with organizational goals, technical infrastructure, market demands and also predict the longevity of the software. In the case of Skype, inadequate alignment with emerging business collaboration needs may have contributed to its stagnation. Evidently, the evolution of Microsoft Teams proves that it was born from a clear product definition, targeting enterprise communication and integrating Microsoft's existing productivity tools [9]. This early clarity not only supports a

smoother development process but also influences how well the product evolves over time.

Furthermore, the choice of software process model whether Agile, Waterfall, or Spiral can significantly affect a product's ability to adapt and evolve. Skype, developed under earlier models that emphasized linear progression, faced difficulty adapting rapidly. Teams on the other hand, leveraged Agile and DevOps principles to prioritize continuous delivery, rapid feedback loops, and scalable architecture [10]. This process model shift allowed Microsoft to better manage Teams' evolution and maintain product quality across updates. Previous Studies such as [11], [12], [13] and others have provided limited depth into software evolution and a comparison to Skype and Microsoft Teams. This study, therefore, adopts a scoping review approach to fill this gap by exploring the contrasting evolution paths of Skype and Microsoft Teams, drawing attention to how software evolution strategies when backed by placing focus on product quality, can help in retaining its market and influencing the long-term success in a competitive digital market. It also evaluates Microsoft's role in promoting Teams and the strategy adopted.

➤ *Objectives of the Study*

- To analyze the evolution strategies that contributed to the decline of Skype
- To assess how usability-centered evolution influenced the growth and adoption of Microsoft Teams
- To examine the relationship between software product quality and market retention in software evolution.

II. LITERATURE REVIEW

➤ *Software Evolution & Lehman's Laws*

The concept of software evolution generally refers to the continuous process of updating, modifying, and enhancing software after its initial development to adapt to changing requirements, technologies, and user expectations. However, software evolution is no longer limited to maintenance but has become a strategic process that encompasses functionality improvement, adaptability, and sustainability in highly competitive digital markets [14]. This evolution is considered to keep pace with dynamic user needs, emerging technology, and interoperability demands. As cited by [15], the law of software evolution refers to the E-type software. The E, which stands for evolutionary, is a kind of software that is a model of a part of the real world, and the program is part of that world. Due to the behavioral change of people and how the real-world changes, the E type of software must be changed to keep it synchronized with its environment. The principle of uncertainty in software technology by Lehman states that 'No E-type program can ever be relied upon to be correct' [15]. Hence, the E-type software is never finished, and would keep evolving in order to fix defects and also take into account new demands from users. This principle can be related to Dijkstra's quote

about software testing which emphasizes that it can show the presence of defects not the absence of it [16].

Furthermore, as software evolves, its quality and the user satisfaction tend to decline overtime unless deliberate effort is made to maintain it [17]. According to Lehman's laws, software is constantly changing throughout its life (first law), but those changes can wear down the system's architecture, making future updates harder to implement (second law). Meanwhile, users continue to expect new features and expanded functionality (sixth law), all within an environment that's growing more complex and increasingly limited in how much it can adapt (fifth law) [15]. Without a clear strategy to manage this evolution, user satisfaction will eventually drop. The law of declining quality ties all the others together as it reflects the second law from the user's perspective: not just that the code is harder to work with, but that the product feels worse to use as users will overtime perceive the system as less reliable, slower, buggy, and harder to use even though functionality appears to increase [15]. Lehman's law set the foundation for evaluating how Skype and Teams evolved, highlighting the tension between growing complexity and the need for ongoing quality control. Empirical studies reinforce the principle highlighted by [15] that the quality of the software will decline hence affects users' perspective of the software. To validate Lehman's claim of declining quality, [18] evaluated Apache Tomcat and Apache Ant and found that unless rigorous maintenance occurs, accumulated defect density increases over time.

Skype epitomized Lehman's Seventh Law as it consistently added new features such as video conferencing, emojis, screen sharing, and a 2017 Snapchat-style redesign throughout its lifecycle [19]. However, without a parallel focus on code refactoring or cloud-native redesign, it inherited structural debt, race conditions, lagging performance, and frequent call drops. Eventually, users perceived deteriorating quality despite added functionality, leading to frustration and declining trust [20]. In contrast, Teams followed a more disciplined evolutionary path by building as a cloud-native application that went through continuous integration, regular refactoring, and user-driven redesigns. New features arrived alongside performance and architectural improvements like microservices, containerization, and telemetry-based optimizations [21]. As a result, although features proliferated, Teams managed to sustain and elevate its quality over time by defying the expected quality decline alluded to by Lehman.

➤ *Software Quality & Market Retention*

Software quality, as described by ISO/IEC 25010 and 9126, defines six internal and external quality characteristics namely functionality, reliability, stability, efficiency, maintainability and portability. Over time, software quality metrics are no longer internal artifacts. They become frontline determinants of a product's market success. ISO/IEC 25010 provides a dual lens which are Product Quality and Quality in Use [22]. The product quality attributes include functional suitability, reliability, performance efficiency, operability,

security, compatibility, maintainability and transferability. On the other hand, the ISO 25010 quality in use attributes are effectiveness, efficiency, satisfaction, safety and usability [23]. Each of these dimension correlates strongly with user engagement and retention: a highly usable, reliable, and maintainable platform that fosters sustained customer loyalty, while deficits in any area can accelerate churn and weaken market position. As emphasized by [24], high-quality software minimizes errors and technical debt, thereby, making it more maintainable and trustworthy, contributing to long-term user retention and market sustainability. The concept of market retention on the other hand involves the ability of a product to sustain user interest [24].

➤ *Usability in Software Systems*

Usability according to ISO 9241-11 is defined as "the extent to which a product can be used by specified users to achieve specific goals with effectiveness, efficiency, and satisfaction in a specific context of use" [25]. As outlined by Nielsen's, the five usability attributes are learnability, efficiency, memorability, errors, and satisfaction [26]. Usability plays a pivotal role in driving product adoption, retention, and evolution as dated back to Jakob Nielsen's work which showed that systems designed for ease of use, efficiency, and learnability are far more likely to be accepted and continually used [26]. Nielsen emphasized that users choose software not only on functionality but on how effortlessly they can learn and use it. [27] survey of 300 e-commerce users demonstrated that factors such as trustworthiness, low cognitive load, and straightforward navigation align with Nielsen heuristics and directly increased purchase intention, which is a proxy for initial adoption.

Studies also show that retention relies on repeated satisfaction with the software experience. In a study conducted by [28] on mobile apps, findings reveal that features like intuitive navigation, appealing visuals, and consistent performance, along with responsive user feedback loops, significantly boost user engagement and loyalty. With the evolving landscape of software through new features and updates, maintaining usability is essential. Nielsen's heuristic framework covering visibility, consistency, and error prevention enables early detection of usability regressions [29]. The People At the Centre of Mobile Application Development (PACMAD) usability model, grounded in ISO standards, adds depth by assessing effectiveness, memorability, and errors, which directly reflect users' willingness to keep using evolving software [30].

In evaluating the usability of software systems in the context of online collaboration and education, the heuristic evaluation conducted by [31] offers a comprehensive perspective on Microsoft Teams. Their findings revealed that Teams was commended for its consistency and recognizability, aligning with Nielsen's principle of matching the system to real-world expectations. Users could navigate key functions such as "Raise Hand," screen sharing, and chat panels with

relative ease, owing to clearly labeled buttons and logically grouped UI elements [31]. However, the study also identified usability gaps particularly in terms of visibility of system status. Educators often encountered delays or ambiguous system feedback during operations like launching breakout rooms or initiating screen shares, which led to temporary confusion about whether commands had been successfully executed [31]. Their findings suggest that while Teams adhere to many of the ISO 9241-11 usability principles such as effectiveness and user satisfaction, it lags behind in aspects of efficiency when real-time responsiveness is critical. Importantly, Microsoft has actively addressed many of these concerns over time by providing updates in simplified navigation for meeting tools, improved visual cues for participant actions, and more accessible help documentation [32] shaped by users feedback, analytics, and telemetry. These updates reflect a commitment to continuous usability evolution in line with ISO/IEC 25010's emphasis on maintainability and user satisfaction.

On the contrary, Skype's 2017 redesign introduced unnecessary visual clutter, confused navigation, and inconsistent workflows ultimately undermining user trust and contributing to Skype's decline in relevance [33]. Microsoft Teams and Skype illustrate the critical role of usability-centered evolution in software sustainability. Although Teams has benefited from a disciplined, feedback-driven design philosophy that prioritizes task alignment and usability at scale, Skype's failure to adhere to usability heuristics and quality standards as those outlined in Lehman's Laws resulted in reduced market retainability despite added features. Therefore, it can be deduced that software success depends not only on feature richness but on thoughtful interface design, proactive feedback integration, and structural quality [34], [35].

III. METHODOLOGY

This study adopts the scoping review methodology based on the five-stage framework by [36]. These stages include: identifying the research question, identifying relevant studies, study selection, charting the data, and collating, summarizing, and reporting the results.

A. Rationale for Adopting the Scoping Review Framework:

The rationale for a thorough and systematic analysis of this study intersects multiple disciplines including software engineering, usability evaluation, human-computer interaction, marketing strategies and product management. As a result of this varying multiple discipline, the usability-centered evaluation between Microsoft Teams and Skype include a broad thematic exploration needed to evaluate software evolution's role in contributing to quality decline and strategies employed by both systems to ensure market retention. The study relied on the scoping review framework based on [36]. The thematic analysis from the scoping review reveals key disparities in Microsoft Teams and Skype and their evolution strategies overtime. These findings highlight the evolution strategies, organization role in ensuring user retention and

software product quality of Microsoft Team and Skype while identifying gaps in knowledge related to their decline or growth. It supports synthesis across various study types, including heuristic evaluations, and quality frameworks (e.g., ISO 25010). Ultimately, the scoping review supports the study's aim to contextualize software product performance through the lens of usability-centered evolution to uncover patterns in platform adaptation, technical debt, and user retention across diverse evidence bases.

B. Step-by-Step Implementation

➤ *Identifying the research question*

The research questions for this study are:

- What evolution strategies contributed to the decline in Skype in terms of user engagement, market relevance, architecture and usability?
- How has usability-centered evaluation influenced the growth and adoption of Microsoft Teams?
- What is the relationship between software product quality and market retention in the evolution of communication platforms?

➤ *Identifying Relevant Studies:*

A comprehensive literature search was conducted using databases including Scopus, IEEE Xplore, ACM Digital Library, and Google Scholar, covering publications about Skype and Microsoft Teams. The search keywords employed various combinations of the topic and included terms such as "Skype usability", "Microsoft Teams UX," "software evolution", "product retention", "ISO 25010", "technical debt", and "usability evaluation". In addition, grey literature such as industry reports, whitepapers, and UX blogs and references from relevant studies were also reviewed to enhance coverage and provide a holistic approach.

➤ *Study Selection Criteria:*

Inclusion criteria focus on studies related to software evolution, usability engineering, software quality and comparative Microsoft software research, particularly those examining case studies on software adoption. Research articles, industry reports, conference proceedings and references that provide empirical data, technological insights and software evolution overtime will be prioritized. The exclusion criteria include studies unrelated to usability or that did not explicitly evaluate Skype or Teams, non-English publications, and non-digital communication tools were not selected. This approach ensures a meaningful blend of literature that is aligned with the study's objective.

➤ *Charting the Data:*

Relevant information was systematically extracted to identify research themes, success factors and challenges relevant to Skype and Microsoft Teams. Data extraction focuses on software adoption overtime and evolution strategies. A comparative table is used to present the findings providing

details into the adoption of both software. This structured approach ensures a comprehensive understanding of how both Microsoft products navigate software evolution while addressing challenges and opportunities.

➤ *Collating, Summarizing and Reporting Results:*

The findings follow an organized thematic analysis approach into Usability evaluation methods (heuristics, ISO standards), Software evolution patterns (refactoring, feature addition, architecture) and the impact on market retention (user loyalty, reputation, engagement). Results are presented using visual representations such as table to compare both software

products. It also outlines lesson learned, best practices, and implications for policy and practice leading to recommended strategies for future implementation. The study also suggests direction for further research, ensuring continuous improvement in software evolution that sustains product quality and drives market adoption.

C. *Comparative Analysis of Microsoft Teams and Skype*

Table 1 below shows a comparative analysis of Microsoft Team and Skype in terms of its user adoption, challenges, opportunities and evolution strategy.

Table 1: Comparative Analysis of Microsoft Teams and Skype

Characteristics	Skype	Microsoft Teams
User adoption	Peaked at 300 million monthly active users in 2016 and declined to 23 million monthly active users by 2025 after failing to keep pace with market needs [37], [38].	Launched in 2017 and grew from 2 million daily active users in 2017 to over 320 million monthly active users by 2025 due to its strong integration with Office 365 and remote work surge during the COVID-19 pandemic [39], [37].
Challenges	It suffered from technical debt, poor redesign choices (e.g., 2017 Snapchat-like UI), laggy performance, and inconsistent cloud integration which led to decline in user satisfaction [40], [41].	Faced early resistance from users unfamiliar with collaborative hubs. Teams initial limitations were in feature parity, however, rapid updates mitigated this [31].
Opportunities	It had strong brand recognition post-acquisition. It was a pioneer in VoIP and video calling but failed to transition to enterprise-grade collaboration [42].	It leveraged pandemic era remote work shift, Office 365 integration, and a modular platform designed to scale as an enterprise solution. It largely capitalized on Skype's decline [39], [43].
Evolution Strategy	It adopted a feature-based evolution with limited refactoring. Added functionalities (e.g., screen sharing, emojis) without improving architecture which violated Lehman's 7th Law [44].	It adopted an agile-driven, cloud-native evolution that focused on continuous integration, user feedback loops, and ISO 25010 quality goals like usability and maintainability [25], [31].

IV. FINDINGS AND DISCUSSIONS

➤ *RQ1: What Evolution Strategies Contributed to the Decline in Skype in Terms of User Engagement, Market Relevance, Architecture and Usability?*

Skype, an internet-based voice and video calling application, revolutionized how people communicated across the globe. With its launch in 2003 by Niklas Zennstrom and Janus Friis, Skype capitalized on a peer-to-peer (P2P) architecture that allowed users to make high-quality voice calls over the internet for free which overtime positioned Skype as a global leader in digital communication [45]. Skype evolution was rooted in a freemium business model with revenue generated from calls to landlines and mobile phones. This model coupled with wide cross-platform support from desktop operating systems to mobile devices enabled rapid growth and brand ubiquity [46]. Over time, Skype introduced more advanced features, such as video calling, group chat, file sharing, and even real-time translation through Skype Translator. Its acquisition by eBay in 2005, and later by Microsoft in 2011 for \$8.5 billion, marked pivotal points in its strategic evolution [47]. Under Microsoft, Skype was integrated into products like Outlook, Windows OS, and Xbox. Microsoft

even replaced its Windows Live Messenger with Skype, attempting to consolidate its communication services under one brand [47].

Despite these integrations, Skype began to experience a steady decline. A major turning point came in 2017 when Microsoft launched a heavily redesigned version of the platform aimed at a younger demographic. The update introduced features similar to Snapchat, including status updates, colorful emojis, and a stories-like interface [48]. These changes strayed from Skype's original value proposition of simple, reliable communication, making users gradually criticize the redesign for cluttered navigation, performance issues, and a lack of focus on core features. App store ratings plummeted, and users began migrating to more streamlined alternatives [48]. Technological limitations also played a significant role in Skype's downfall. The original P2P architecture, while innovative at launch, became increasingly difficult to modernize in an age where cloud-native solutions like Zoom and Google Meet offered faster and more scalable performance. Skype struggled with technical debt, leading to frequent call drops, lag, and inconsistencies across platforms. As competitors improved, Skype's reliability issues became

more apparent [49]. Additionally, Microsoft's shifting strategic focus was also a problem. In 2017, Microsoft launched Teams as part of its Office 365 suite, targeting professional and enterprise users. Unlike Skype, Teams was designed from the ground up as a collaboration hub, integrating chat, video, file sharing, and third-party apps in one seamless experience [38]. Overtime, Microsoft began redirecting resources and user bases toward Teams. By 2021, Skype for Business had been retired, and in 2025, Microsoft officially announced the discontinuation of the consumer version of Skype, urging users to migrate to Teams [38].

Skype also failed to capitalize on critical market shifts. During the COVID-19 pandemic, while platforms like Zoom and Microsoft Teams experienced exponential growth due to remote work and virtual learning, Skype lagged behind. Despite a brief uptick in daily users, reaching 40 million in March 2020, Zoom surged to over 300 million daily participants by April, and Teams reached over 75 million. Skype's interface and performance simply could not compete with the simplicity and scalability offered by its rivals [50], [51]. Skype struggled to retain its relevance in this rapidly evolving landscape. In 2023, Skype's user base dwindled to roughly 36 million, a stark contrast to its peak years [50], [51]. Microsoft's eventual decision to sunset Skype in 2025 signified the end of an era but also highlighted the company's clear direction toward unified communication through Teams. Overall, Skype's early success was built on technological innovation and a strong understanding of global communication needs. However, strategic missteps including poorly received redesigns, failure to modernize its infrastructure, and an inability to adapt to changing market conditions led to its decline [50], [51].

➤ *RQ2: How has Usability-Centered Evaluation Influenced the Growth and Adoption of Microsoft Teams?*

Microsoft evolution strategy for Teams has hinged on deeply integrating it into the Microsoft 365 ecosystem, enabling seamless workflows with Outlook, SharePoint, and other productivity tools, positioning Teams as a central collaboration hub [52]. Since its introduction in March 2017, Microsoft has consistently enhanced Teams with significant feature updates such as pop-out chat windows, "raise hand" in meetings, noise suppression, AI transcription, and the storyline social feed while actively promoting these advancements through developer conferences, enterprise webinars, and digital campaigns [53]. During the COVID-19 pandemic, Microsoft aggressively pushed Teams as a solution for remote work, with daily active users skyrocketing from 20 million in November 2019 to 75 million by April 2020 [54] fueled by both feature updates and branding initiatives emphasizing continuity in uncertain times [54]. Microsoft also rounded out its strategy by embedding Teams into corporate culture thereby, driving adoption through executive sponsorship, employee training initiatives, and segmented internal messaging ensuring that Teams was not just deployed, but championed across organizations.

Organizations implement user retention strategies through multilayered onboarding, proactive engagement, and ongoing support. Personalized onboarding tailored to user segments helps align initial experiences with individual needs and productivity-focused interactive tutorials and walkthroughs can still drive engagement while reducing friction [55]. There are significant insights to improve the understanding of retention by obtaining user-oriented cues that contribute to UI design, comprehend navigability, and harness personalization. According to [56], the moment when an interface or navigation is not observable, users usually give up on the application. In this endeavour, [57] highlights that they streamline the pathway of designing users and create opportunities for cognitive load reduction. Analyzing user behavior and usage signals allows identification of at-risk users, enabling timely interventions such as re-engagement emails, in-app prompts, or promotional offers to prevent churn [58]. Educational resources that include tutorials, webinars, and searchable knowledge bases can be used to empower users with deeper product understanding while reducing common support issues and fostering long-term satisfaction [59]

Furthermore, [57] emphasizes that intuitive navigation, appealing visuals, performance optimization, and integration of user feedback are critical to enhancing user satisfaction, engagement, and loyalty in mobile applications. The study also highlights that applications prioritizing performance improvements such as faster loading times and smoother transitions could increase retention rates by up to 30%, while seamless responsiveness and real-time feedback are also key drivers of engagement [57].

➤ *RQ3: What is the Relationship Between Software Product Quality and Market Retention in the Evolution of Communication Platforms?*

In a study by [60], they examine the three quality dimensions which influence the success of Microsoft Teams in e-learning environments namely; system, information, and service quality. Through a survey of 261 university students, the research shows that; information quality (accuracy, relevance, and timeliness) had the strongest positive effect on user satisfaction and perceived benefits while system quality (reliability, usability, responsiveness) significantly influenced actual platform use. On another hand, service quality (support, responsiveness) also contributed positively to system adoption and continued use [60]. While their findings align closely with the DeLone & McLean IS Success Model (2003) demonstrating that robust software quality in use is directly correlated with engagement, effectiveness, and sustained adoption which are the key components of market retention in communication platforms like Teams. Skype on the other hand is one of the platforms lacking in system or information quality and as such suffer lower user satisfaction and faster decline.

Software quality directly influences both user satisfaction and the trajectory of product evolution [61]. Codebases rife with technical debt often experience higher defect rates,

sometimes fifteen times greater, slowing down development and delaying feature deployment, which in turn hinders the product's ability to keep pace with market needs [62]. When software suffers frequent crashes or performance issues, users are more likely to churn, and acquiring new customers becomes more difficult as market reputation falters. Modern quality frameworks such as ISO 25010 emphasize characteristics like reliability and maintainability, both critical for ensuring long-term market competitiveness. Consequently, successful software evolution frameworks blend agile development with continuous integration and testing, ensuring new features enhance rather than degrade the user experience [62]. In practice, high-quality products foster trust and long-term engagement, creating a stable foundation for iterative updates and helping software remain relevant and adaptive in competitive markets [61].

V. CONCLUSION

The comparative analysis of Skype and Microsoft Teams demonstrates that software evolution, when centered on usability and guided by clear strategic intent, significantly influences long-term product quality and market retention. Despite Skype's early dominance in VoIP communication, it failed to align with modern UX expectations and enterprise needs. With Skype's inability to modernize its infrastructure, manage technical debt, and evolve with user feedback, this contributed to its decline. Microsoft Teams on the other hand, exemplified disciplined evolution, leveraging agile methodologies, cloud-native architecture, and continuous usability enhancement. By consistently integrating with Microsoft 365 and adopting its rapid feature iteration, Teams successfully addressed user needs, minimized quality decline, and sustained engagement. This study, therefore affirms that usability, adaptability, and proactive user retention are not just supportive elements but they are fundamental to sustainable software success.

➤ Contribution to Knowledge

This research study contributes to the existing body of knowledge by providing insights into the challenges, opportunities, and evolution strategies of Microsoft Teams and Skype. Through a comparative analysis, the study sheds light on the disparities in user adoption, software design and usability metrics highlighting the need to enhance software quality while prioritizing customer satisfaction

RECOMMENDATION

Based on the findings of this study, several future actions are recommended:

- The need to integrate usability heuristics throughout the evolution process: To preempt design flaws and sustain user satisfaction as technology evolves, Teams should continuously apply usability evaluation frameworks like Nielsen's heuristics and ISO 9241-11.

- Adoption of Agile and Cloud-native software architectures: Agile development models coupled with microservice architecture and continuous integration pipelines if adopted will enable quicker adaptation to user needs while maintaining quality.
- Implement feedback-driven product redesigns: For software systems to remain relevant, it is important that they continuously collect and act on user feedback using analytics, telemetry, and usability testing. They should be institutionalized to support iterative improvement and retention.
- Proactively Manage Technical Debt: Structural quality must be preserved through consistent code refactoring, modularization, and investment in performance optimization to prevent usability regression.
- Align Evolution Strategy with Market Retainability Goals: Beyond feature delivery, software teams should consider how each evolution decision impacts perceived value, user loyalty, and competitive differentiation.

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