Proceedings of ICEMGD 2024 Workshop: Decoupling Corporate Finance Implications of Firm Climate Action
DOI: 10.54254/2754-1169/102/2024ED0065

Analyzing the Successful Reasons for Microsoft Cloud Computing Service Business Transformation

Zhihuan Ye[1,a,*]

[1]*Institute of Undergraduate School, McKendree University, 701 College Road, Lebanon, USA*
a. zhihuan@stu.hebmu.edu.cn
**corresponding author*

Abstract: With the continuous development of high-tech due to the emergence of artificial intelligence services, resulting in a growing trend in enterprise transformation, Microsoft began to officially transition to cloud computing services in 2010. The purpose of this study, based on the above content, was to investigate the reasons for Microsoft's transformation into a stable period. This paper used a real-life case study to analyze the business value of Microsoft's cloud computing services and artificial intelligence in light of Microsoft's transformation. The study's results indicated that three factors—talent reserve, technological innovation and accumulation, and corporate strategic layout—are responsible for transforming Microsoft's cloud computing service into a stable period. Therefore, Microsoft needs to attract more high-quality and innovative technical talents; vigorously develop technological innovation; increase investment in research and development; and constantly promote technological innovation; strengthen the core business; increase investment in emerging areas; deepen partnerships; strengthen the global layout; and focus on corporate social responsibility and sustainable development in order to maintain its competitive advantage and create more business value. This study's value and significance lie in its analysis of Microsoft's forward-looking cloud computing transformation while still maintaining its business value, providing new ideas for Microsoft's subsequent development, and providing reference value for enterprises in the same industry in the transformation.

Keywords: Reserve of Talents, Technology Accumulation and Innovation, Enterprise Strategic Layout

1. Introduction

With the advancement of science and technology, artificial intelligence is increasingly playing an indispensable role in the high-tech industry, and many businesses have begun their transformation journey. Apple, for example, has made significant expenditures in AI research and development, but Microsoft has been the most successful. Microsoft CEO Ballmer initiated the company's transition to the "cloud" with his "We are all in" speech in March 2010. Adhering to the cloud + end strategy and with the cloud operating system at its foundation, Microsoft has been increasingly willing to transition from a software supplier to a device + service provider, which effectively stabilized in 2014 and peaked in 2018. In 2018, Microsoft's intelligent cloud Azure experienced spectacular growth, with annual revenue increasing by 89% year over year, making it the fastest-growing fiscal year in Microsoft history [1]. After transforming cloud computing, Microsoft not only led and drove the

DOI: 10.54254/2754-1169/102/2024ED0065

market but also demonstrated a comprehensive cloud service, strong technological power, a broad ecosystem, and an emphasis on security and privacy. Microsoft's cloud computing services include Windows Azure, SQL Azure, AppFabric, and Windows Live. Windows Azure is Microsoft's cloud computing operating system that falls under the platform layer services category, which includes processing, storage, and management—the three basic services. Following the transformation of cloud computing and artificial intelligence services, Microsoft has promoted enterprise digital transformation, made IT more flexible and efficient in its use of IT resources, and encouraged the innovation and application of artificial intelligence technology, providing intelligent solutions for all walks of life and promoting social productivity.

Numerous scholars in the academic realm also show a keen interest in Microsoft-related subjects. As an illustration, David previously designated "Microsoft and OpenAI" as the subject of his research. This study examines the limitations of Microsoft's artificial intelligence in addressing privacy policies through the analysis of AI chat logs [1]. Anirban Ghoshal did a study on Microsoft's Cloud for Sovereignty [2]. Grant eligible consumers access to the essential operational operations carried out by Microsoft engineers [2]. Conduct an investigation of the dependability of Microsoft's secure cloud computing framework [2]. Kang scrutinizes the influence of Microsoft's cloud computing on the progress of the Internet of Things [3]. The paper specifically focuses on the significant role Microsoft cloud computing plays in the application and overall value of the Internet of Things ecosystem [3].

Although there is a lot of research on Microsoft cloud computing and artificial intelligence, due to Microsoft's continuous improvement of its cloud computing services and Azure, artificial intelligence has become more and more important to the company's business value after entering a stable period, and the competition in the market is gradually fierce. Therefore, it is crucial to fill the research gap in this area and investigate the reasons behind Microsoft's transition into a stable period. The purpose of the study was to explore how important "cloud computing services and artificial intelligence" are to Microsoft's business value. Therefore, studying the business value of Microsoft's transformation of cloud computing services is helpful to understand the trend and direction of digital transformation and provide reference for enterprises to make correct strategies and decisions.

In order to solve the above research problems and make up for the academic gap, this paper will introduce the business value phenomena related to the stable period of Microsoft's transformation, analyze the reasons for its stable period of transformation, and then explain how Microsoft should continue to develop rapidly to reflect its greater business value.

2. Case Description

Founded in 1975 and headquartered in Redmond, Washington, USA, Microsoft is one of the world's largest computer software suppliers and one of the most influential technology companies. Microsoft relies on its own resources and financial advantages to promote the traditional software industry's Internet, such as Google Docs, which is a leading move in the industry. The company is known for developing, manufacturing, licensing, and providing a wide range of software products, including the Windows operating system, the Office suite of productivity software, and cloud computing services.

Microsoft began to develop a transformation to cloud computing services and artificial intelligence in 2010, adopting a "cloud first" strategy and shifting its focus from operating systems to cloud computing. Microsoft's transformation specifically encompasses the following aspects: vigorously develop cloud computing, launch the Azure cloud platform, and provide rich cloud services such as virtual machines, databases, storage, and artificial intelligence. Promote the derivatization of software products, where new features are first available in the cloud and then fall into the installed version [4]. Reposition Windows from "all devices run on Windows" to other software running on other systems (Android, iOS). Redefine Microsoft's business with artificial intelligence and popularize artificial intelligence for the whole population. The transformation phase from "device first" to

DOI: 10.54254/2754-1169/102/2024ED0065

"mobile first, cloud first," layoffs, and the sale of the Nokia business to the internal IT cloud, the entire IT can be directly offline; security and other factors cannot be cloud-based; building a more open business format that delivers cross-platform software and services to anyone, on any device. Microsoft entered a stable period of transformation after 2014. In this phase, Microsoft has made significant achievements in the fields of cloud computing and artificial intelligence. For example, the Azure cloud platform has become one of the world's leading cloud computing platforms, and Microsoft has also launched a number of popular products in the field of artificial intelligence, such as the Azure artificial intelligence platform and Cortana voice assistant. In the stable period of its development, Microsoft has a good performance in terms of revenue generation and profit; the stability of performance and future growth space make it favored by investors; its market share in cloud computing and artificial intelligence continues to grow; it competes fiercely with other tech giants; Microsoft continues to introduce innovative products and services to meet changing market needs; and it continues to invest in research and development and technological innovation.

As Microsoft successfully transitioned to cloud computing services and entered a stable period, its business value and related data information showed a significant growth trend. With its cloud services, such as Azure, Microsoft not only expands its customer base to cover more industries and sizes of enterprises but also meets the full range of needs of enterprises by providing a rich variety of services. This transformation strategy has significantly increased Microsoft's competitiveness and provided it with a stable revenue stream. According to Microsoft's financial report, the cloud computing business has become an important pillar of its revenue and continues to achieve strong growth. In the whole year 2023, Microsoft's revenue was 227.583 billion US dollars, an increase of 11.51% [5]. In the fourth quarter of 2023, Microsoft's revenue reached $62.02 billion, an increase of 18%, which is the first time Microsoft's single-quarter revenue exceeded the $60 billion mark [5]. Microsoft's intelligent cloud revenue in the fourth quarter was 25.880 billion US dollars, an increase of 20%, affected by a generative AI growth rate higher than the Microsoft market [5]. At the same time, market research data also shows that Microsoft's share in the cloud computing market continues to increase, proving its market leadership [6]. These positive trends indicate that Microsoft's transition into cloud computing services has reached a stable phase, fully realized its business value and established a robust foundation for the company's future growth.

3. Analysis on Problems

3.1. Reasons on Reserve of Talents

Microsoft has developed a long-term strategic policy to deploy and develop a talent reserve, allowing the company to effortlessly move into a stable period of growth. Since 2008, Microsoft has actively recruited people with cloud computing and AI-related abilities and expertise, such as developers, data scientists, solution architects, and so on, to increase the technical strength of its cloud computing team. For example, in the talent competition, Microsoft pays approximately $300,000 per year for high-tech skills [4]. Provide existing personnel with cloud computing and AI-related training and education to assist them in mastering new technologies and information in order to adapt to the company's changing requirements. Microsoft has formed alliances with key colleges and research institutions to conduct collaborative research and development in the sectors of cloud computing and artificial intelligence, recruiting and fostering more excellent talent. During the change process, Microsoft improved its talent structure, focusing on introducing and fostering individuals with unique thinking and cross-border capabilities to fuel the company's inventive development in cloud computing and artificial intelligence.

Various researchers have demonstrated the importance of individual talent reserves in their papers. For example, Gao proved that in the direction of the modern education reform of "Internet + higher

DOI: 10.54254/2754-1169/102/2024ED0065

education," the excellent talent training program adapted to the Internet era has become particularly important and played an indispensable role in the technological development of the company [7]. A profile of Jack, the former chairman and CEO of General Electric, appears in the journal Seed World. Welch Intel has implemented recruitment standards to attract smart talent, providing a talent pool for an increasingly broad range of company businesses to play a role in promoting and harmonizing [8].

3.2. Reasons on Technology Accumulation and Innovation

After several transitions, Microsoft has improved and innovated its original technology, gaining technical experience that has enabled it to seamlessly migrate to cloud computing services and artificial intelligence. Microsoft has increased its investment in cloud computing and artificial intelligence research and development, enhancing its core competitiveness in these domains through ongoing technological innovation. For example, Microsoft has added many unique services and capabilities to the Azure cloud platform to fulfill the diverse needs of its users. Microsoft is aggressively collaborating with other technology businesses and academic institutions to accelerate the development of cloud computing and artificial intelligence [9]. At the same time, Microsoft is committed to creating a strong environment that will encourage more developers and businesses to adopt its cloud computing services, resulting in a virtuous ecological cycle. Microsoft integrates sustainability themes into digital technologies and aggressively fulfills corporate citizenship responsibilities. For example, Microsoft has pledged to become carbon-negative by 2030 and eliminate all direct carbon emissions from its inception in 1975 by 2050. This pledge not only addresses the company's own carbon emissions but also the carbon emissions of the entire value chain, promoting sustainable development through technical innovation. Microsoft continues to innovate and iterate in the realm of cloud computing services, constantly refining the functionalities and performance of goods and services while also increasing the user experience. For example, Microsoft is always launching new cloud computing products and services to fulfill its users' evolving needs. Microsoft focuses on talent development and introduction in the fields of cloud computing and artificial intelligence, and it strengthens its technical team by hiring and developing professionals with suitable skills and expertise. Furthermore, Microsoft provides employees with a multitude of training and education options to help them continue to improve their abilities [10].

Technology accumulation and innovation are critical to every enterprise's survival and development, as many scholars have repeatedly mentioned in their literature reports. For example, Wu et al., in the role of digital transformation in enterprise total factor driving, confirmed that technological innovation plays a promoting role in enterprise digital transformation and its mechanisms [11]. An empirical study by Morales et al. confirmed that technological innovation helps to increase intra-company innovation in mitigating the COVID-19 crisis, paving the way for future research [12].

3.3. Reasons on Enterprise Strategic Layout

Microsoft's efforts to construct and develop its corporate strategic layout from the early stages of transformation to the stable phase allowed it to move quickly into the stable era. Microsoft established a strategy plan with cloud computing at its core as early as 2008, recognizing cloud computing as a critical area of the company's future growth. To that end, it has developed extensive strategic planning and implementation plans, such as actively constructing a strong cloud computing ecosystem that includes delivering rich cloud computing services and forming a variety of alliances. Encourage the development and deployment of cloud computing technology [13]. To encourage more people and businesses to adopt its cloud computing services. Microsoft integrates cloud computing with other technologies, such as artificial intelligence and big data, and launches a series of innovative solutions

DOI: 10.54254/2754-1169/102/2024ED0065

and services to meet users' diverse needs and increase its competitiveness in the cloud computing field, while emphasizing data's ability to reveal patterns and make predictions to promote the company's digital transformation. Microsoft can get a deeper knowledge of data by collecting, storing, and analyzing data of all types and sizes, allowing it to identify trends and hazards that help organizations ship on time, produce quality products, reduce company expenses, and optimize internal operations [14].

Enterprise strategic planning enhances the stability of businesses and serves as the foundation for their operations during periods of transformation. Many researchers argue in favor of firms modifying their diversification strategy. For instance, Sheng et al. demonstrated that the extent of strategic variance had a notable and beneficial impact on the overall factor productivity of firms [15]. According to Andreasson et al.'s research on digital transformation, business models, and technical innovation, implementing varied methods can enhance the competitiveness of firms in the industry [16].

4. Suggestions

4.1. Suggestion on Reserve of Talents

Currently, the science and technology industry are experiencing rapid development, characterized by diversification and globalization. Microsoft has successfully transitioned from providing cloud computing services and artificial intelligence to a phase of rapid growth, and it is currently in a stable stage. This analysis of the reasons for Microsoft's talent reserve suggests that in order for Microsoft to maintain its influence and status in the future, it should focus on continuous recruitment and training, diversity and inclusion, internal promotion and incentive mechanisms, cross-departmental cooperation and exchange, and the establishment of a talent pool and reserve plan. These measures will help to build a high-quality and innovative talent team and promote the company's sustainable development and innovation.

Social groups and research centers like the China Development Research Foundation worked with Microsoft on the "Digital Skills Empowerment" project. In a joint presentation with Tsinghua University, Microsoft and the China Development Research Foundation showed that developing digital talents can continue to spur technological progress and give Microsoft long-term advantages in cloud computing, AI, and other areas [17]. When a team has high-quality, innovative technical personnel, through the continuous introduction of innovative products and services, Microsoft can meet the changing needs of the market, improve the user experience so as to win more market share, enhance the brand image and attractiveness, and promote business development and growth.

4.2. Suggestion on Technology Accumulation and Innovation

As science and technology continue to advance, the emergence of numerous artificial intelligence industries has intensified competition in the high-tech sector. Microsoft, after successfully transitioning its services to cloud computing and artificial intelligence, is now experiencing rapid growth. Hence, based on the aforementioned examination of Microsoft's technological expertise and inventive capacity, it is recommended that Microsoft persist in allocating resources towards research and development, fortify collaborations, uphold an inclusive and receptive organizational culture, remain attentive to emerging technologies and trends, enhance talent cultivation and recruitment, and reinforce intellectual property safeguarding. Implementing these strategies will allow Microsoft to maintain its dominant position in a highly competitive market while also driving advancements and growth in the technology industry as a whole.

Amazon has previously employed a similar approach: by enhancing the efficiency of its technical network within its innovation system, they have integrated technological innovations and

DOI: 10.54254/2754-1169/102/2024ED0065

advancements like artificial intelligence, cloud computing, the Internet of Things, and blockchain [18]. This integration has led to increased consumer preference for Amazon's products and services [18]. Therefore, as the same type of cloud computing service product, Microsoft can also vigorously develop technological innovation, increase investment in research and development, and constantly promote technological innovation. Through continuous investment of funds and resources, strengthen the construction of the research and development team and enhance the research and development capabilities, so as to ensure that we maintain a leading position in the competitive market.

4.3. Suggestion on Enterprise Strategic Layout

In the fast-paced and uncertain era of technological advancements, an organization can formulate a set of corporate strategies tailored to its own growth by ensuring a well-organized structure to retain stability and steady progress. To ensure continued rapid development and increased business value, this paper proposes that Microsoft's corporate strategic layout should prioritize the strengthening of core business, increased investment in emerging areas, deepening partnerships, expanding global presence, emphasizing corporate social responsibility and sustainable development, and enhancing talent training and recruitment. These recommendations are based on the successful integration of cloud computing and artificial intelligence, as well as an analysis of Microsoft's current corporate strategic layout. These suggestions will assist Microsoft in preserving a competitive advantage in future development and attaining sustained, strong growth.

For example, in the context of "Internet +," Apple Inc.'s innovation in corporate strategy management breaks the stereotype that software products are only incidental to hardware products. By creating its own exclusive differentiation strategy, Apple Inc. designs a brand-name image and maintains the uniqueness of technology, performance characteristics, customer service, business network, and other aspects [19]. The purchase of its products has increased. Therefore, Microsoft, with its similar products and services, can further strengthen its core business and continue to innovate. Examples of this include its Windows operating system, Office software, and cloud computing service Azure, all of which are long-term competitive advantages. Additionally, it can increase its investment in emerging areas through research, development, and innovation, thereby opening up new markets and business opportunities.

5. Conclusion

Based on the rapid development of the high-tech industry in the early 21st century and the growing market demand for artificial intelligence services, this paper studies the reasons for Microsoft's transformation of cloud computing services and artificial intelligence into a stable period and explores the commercial value of cloud computing services for Microsoft after its transformation into a stable period. The analysis of Microsoft's financial revenue, sustainable development, market demand, and prospects leads to the conclusion that its talent reserve, technological innovation and accumulation, and corporate strategic layout are key factors in its successful transformation of cloud computing services and entry into a stable phase.

This paper makes a theoretical contribution to Microsoft's successful transformation of cloud computing services and artificial intelligence, as well as how to maintain the rapid development trend after entering a stable period. It serves as a reference for enterprises in the same industry when planning their transformation or business expansion, following in the footsteps of Microsoft's cloud computing transformation. The suggestion section of this article provides Microsoft with ideas for internal policy and strategy development, which will help it maintain its unique advantages and competitiveness in the development process over the next few years. From a theoretical perspective, this paper draws upon the significant findings of numerous scholars, examines the theoretical

DOI: 10.54254/2754-1169/102/2024ED0065

understanding of enterprise transformation and business value, and affirms the crucial role of enterprise strategic planning and technological innovation in the enterprise transformation process. It also explains the reasons behind Microsoft's transformation of cloud computing services and artificial intelligence into a stable period, as well as the gaps in the business value that these services and artificial intelligence bring to the company.

In the research process of this paper, the comparative analysis between Microsoft and other enterprises in the industry after the transformation of cloud computing services is not very comprehensive, so in future studies and research, it is necessary to introduce the advantages and disadvantages of Microsoft and its competitors to reflect the unique features of Microsoft in the transformation. Furthermore, the analysis of the impact of Microsoft's business value after its transformation on subsequent developments is not comprehensive. To make up for this deficiency, future research must increase the analysis of the relationship between the future development trend and the business value.

References

[1] *Molfetta, D.D. (2024). "Microsoft and OpenAI swept AI chat logs to find hackers. Expect that to become the norm". [J].Nextgov.com (Online). Volume, Issue.*

[2] *Ghoshal, A. (2023). "Microsoft puts its Cloud for Sovereignty in public preview". [J]. Network World (Online). Volume, Issue.*

[3] *Kang, X.H. (2023). "The role and value of Microsoft cloud computing in the development of the Internet of Things". [J]. China Plant Engineering. Volume, Issue.*

[4] *Wen, Q. (2023). "ChatGPT hatches AI talent war for Microsoft to open nearly $300,000 a year". [N]. National Business Daily. Volume, Issue.*

[5] *Microsoft. (n.d.). "Microsoft Fiscal Year 2024 First Quarter Earnings Conference Call". Retrieved from: https://www.microsoft.com*

[6] *Microsoft. (n.d.). "Microsoft Research: Advancing science and technology to benefit humanity". Retrieved from: https://www.microsoft.com/en-us/research/*

[7] *Gao, Y.T. (2024). "The Design of Outstanding Talents Training Program in Internet plus Higher Education". [J] Computer Informatization and Mechanical System. Volume 7 , Issue 2 . PP 23-27*

[8] *"The Fortune 500's approach to finding the best talent - the Intel and Microsoft approach to hiring". [J]. Seed World. Volume, Issue. 2012*

[9] *Ma, B.F. (2015). "Microsoft Cloud Computing: Microsoft Azure Deployment and Management Guide". [M]. Microsoft Azure Computing Services. PP54-58*

[10] *Wallis, S., Underhill, B.O., Hedley, C. (2014). "Developing High Potential Talent - Microsoft's executive Coaching practice". [J]. Human Resource Development in China. Volume, Issue 4.*

[11] *Wu, Y.B. Shi, F.A., ;Wang, Y.Y.. (2024). "Driving Impact of Digital Transformation on Total Factor Productivity of Corporations: The Mediating Effect of Green Technology Innovation". [J]. Emerging Markets Finance and Trade. Volume 60, Issue 5. PP 950-966*

[12] *Morales J.R. et al. (2024). "The role of technological innovation in the mitigation of the crisis generated by COVID-19: an empirical study of small and medium-sized businesses (SMEs) in Latin America". [J] International Studies of Management & Organization. Volume 54 , Issue 2 . PP 120-136*

[13] *Zhang, Y.Q., Shen, Y.S. (2013). "Cloud computing 360 degrees: Microsoft experts on industry change". [M]. Microsoft's strategic layout "cloud + terminal". PP10-20*

[14] *Jia, C.Y. (2023). "An analysis of the strategic impact and valuation of the AI environment for Microsoft". [J]. Financial Tribune. Volume, Issue 11.*

[15] *Sheng, M.Q., Long, H.H., Bao, Q. (2024). "Strategic variance, technological innovation and total factor productivity: Empirical evidence from A-share listed companies". [J]. Journal of Henan Normal University (Philosophy and Social Sciences Edition). Volume, Issue 2.*

[16] *Andreasen, M., Karadag, S.F., Simonson, J., (2024)."Dynamics of related and unrelated digital diversification in established firms: Strategies, programs, process, and outcomes".[J] Technological Forecasting & Social Change. Volume 202 , Issue . PP 123300-*

[17] *"For 30 years, Microsoft has promoted the training of digital innovative talents in China" Retrieved from: .https://news.microsoft.com/zh-cn/*

DOI: 10.54254/2754-1169/102/2024ED0065

[18] Cruz, P.A.M., Diniz, M.J.T., Treviño, J.O.M. (2023). "The productivity of technological networks in the Amazon innovation system: an analysis about the Triple Helix system in the state of Pará". [J] International Journal of Innovation and Learning. Volume 33 , Issue 3 . PP 366-392

[19] Duan, T. (2019). "Apple's enterprise strategy management innovation under the background of "Internet Plus". [J]. The Marketing World: Agricultural Materials and Market. Volume, Issue. PP34-35