



# Navigating the Digital Divide: The Dual Impact of Technology on Business Management and Financial Outcomes

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**Abstract:** As technology advances all throughout time, it plays an important role in corporate development, having a big impact on managerial strategies and financial outcomes. However, there is a tendency for technology to have both positive and negative effects. In this paper, it has been analysed that how technology affects financial outcomes and management, substantiated evidences with data from different organizations and businesses. It is worth mentioning that giving a glance at its disadvantages one cannot rule out its use and in addition observing the advantages one cannot completely rely on it either thus it is important to discuss both aspects in depth.

**Keywords:** Technology, Management, digital, divide

## 6.1 Introduction

Undoubtedly, as organizations rely increasingly on technology to manage their businesses, it's essential to comprehend both its advantages and the corresponding difficulties. The rapid and

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effective production of papers like sales reports and annual reports has cut down on administrative work, helping firms to run more efficiently, but the digital revolution has also given rise to a new set of socioeconomic worries. The errors of handwritten work have been avoided (Gupta et al., 2022; Mittal, 2020). The integration of technology into businesses has revolutionized operations by automating repetitive tasks, allowing teams to focus on developing innovative plans and strategies instead of monotonous tasks. This optimization includes correlations and math related to the calculation of taxes such as Goods and Services Tax (GST), resulting in more accurate financial reports and potentially higher profits. In addition, technology facilitates global expansion by facilitating connections with businesses across national borders, opening up lucrative opportunities that can generate significant profits, even millions (Mittal et al., 2021; Yadav et al., 2021). Additionally, by using technology to build strong consumer trust, companies can build long-term relationships with their customer base, resulting in better customer retention and improved profitability.

As companies incorporate more and more technology into their operations, the financial implications of technology integration can present significant challenges, especially for small businesses and startups (Mehta et al., 2022). While technology has the potential to level the playing field and enable businesses to compete globally, the reality is that not all businesses have equal access to the resources needed to exploit the full potential of technological advances (Mehta et al., 2022).

For small businesses in particular, the pressure to invest in high technology to stay competitive can be daunting. The financial burden of acquiring and maintaining technology-based systems, including hardware, software and infrastructure, can strain limited budgets, leading to reduced profitability or even financial loss. In addition, rapid technological development can make certain investments obsolete in a short period of time, requiring constant renewal and improvement, which in turn further strains financial resources. In addition, the success of a new business largely depends on the appeal of its products or services to the public. Despite significant technological investments, if a company's offering does not resonate with its target audience, it may experience financial setbacks and difficulty recouping the initial investment. That's why it's important for companies, especially startups, to carefully balance technology in-

investments with thorough market research and strategic planning to ensure their offerings align with customer needs and preferences.

## 6.2 Literature Review

Information Technology (IT) is one of the key factors that help a company to penetrate new innovative markets and create new products and services that drive business and company growth. Communication is the most talked about department, which is easily accessible thanks to the expansion of the Internet, made possible by the availability of such tools as fax, telegram or mail. Simple, affordable and fun, email services with many exciting features have now become the most popular choice. The Internet is also a powerful weapon in marketing, given the increasing public consumption of the Internet. Networks also facilitate communication between employees and the board. Informal relationships are now more necessary because they are likely to have a significant impact in strengthening relationships. (Mgunda, 2019), the country advanced the position more scientific and technological innovations and its strong support for technology innovation is reflected in various innovation policies in recent years in various regions and companies. Everything excellent results in scientific and technological innovation for various companies is a contribution R&D expenses and staff. In general, corporate R&D investments can contribute positively to the results of companies. But only R&D investment is measured as a variable, which lacks proportionality.(Li Shasha, 2021).

After the pandemic, new legislation and technological revolution has caused successful development of new innovations. Further, it has improved product quality, capacity and processes. Innovative technologies has improved business analysis and forecasting processes leading to new product development, order processing, logistics, production automation, quality control and marketing. Modern technology is gradually replacing ergonomically demanding and dangerous profession by reducing the use of hazardous equipment. These innovations are playing a vital role in the transformation of troubled companies and regions, as they often have a significant impact on economic development.(Jemala, 2021) Machines have been replacing human labour for centuries. Weavers were replaced by weavers. Elevators were replaced by buttons.

Travel agencies were driven out of business by the Internet. A study found that between 1990 and 2007, roughly 400,000 manufacturing jobs were lost in the United States to automation.

Today, however, the trend toward replacing human labour with machines accelerates as companies try to prevent workplace infections from spreading and keep operating costs down. The United States lost about 40 million jobs during the pandemic. While some jobs have returned, some are gone forever. A group of economists estimate that 42 percent of jobs lost during the pandemic were permanent.(Semuels, 2020) The effect of technology use varies from country to country and to lump all countries into one group to get one result may lead to ill-advised policies. In the case of low income countries, increasing the number of Internet users will help in reducing poverty levels, while broadband Internet access will have a positive impact on income inequality. Thus, low income countries are more likely to reap the benefits of policies that encourage the masses to access Internet services. The impact of improving mobile access and Internet facilities is not just about easy communication but also about telehealth services and online education, as well as remote jobs. One of the factors that can strengthen these initiatives is the growing popularity of smartphones over traditional mobile phones even in low income countries. Providing Internet services will empower the common man to generate income online.(Afzal et al., 2022) Information and communication have always opened up opportunities for the poor to generate income, reduce isolation and flexibly respond to emergencies. As the use of mobile phones explodes in developing countries, even marginalized communities are now benefiting from modern means of communication.(Laurent Elder & Alison Gillwald, 2014)

### 6.3 Main Content

One of the leading names in the pizza industry, Dominos has been making waves with an efficient and technology-driven approach. Despite a relatively limited number of locations, the company has successfully scaled its operations to handle an impressive number of orders each day, ensuring fast delivery in as little as 30 minutes. Crucial to its success is the careful maintenance of an advanced database structure made possible by the integration of state-of-the-art software technology. Notably, Domino's has strategically expanded its customer base by lever-

aging popular platforms such as Zomato and Swiggy and actively engaging its audience on social media platforms such as Facebook and Twitter. Domino's anywhere, an innovative chat platform, has revolutionized the way one interact with customers, enabling seamless interactions that cover everything from billing and ordering to delivery and feedback. The innovative side cleaning of the car, especially useful during the challenges of the pandemic, underlines Domino's commitment to ensure a smooth and customer-centric experience even in the face of adversity. The company's impressive stock price, currently at approximately \$396.96, is a testament to the profound impact of technology integration on the company's continued success and profitability. Another big progress can be observed in the education sector "Unacademy" as one of the largest learning platforms that has earned higher profits it has done association with various other coaching institutes and teachers earning huge profits as well as providing quality services to the users. Additionally delhi university has done admission through the CSAS portals where in such algorithms have been used providing an easy access for the students in checking seat allocations, pay fees and other details . The credit for this undoubtedly shall go to technology. The shopping stores such as myntra , ajio and lifestyle provide schemes on various payment modes such as credit card and HDFC thus attracting users and increasing their sales. On the other hand, Apple, known for its highly sought-after iPhones, has established itself as a global technology leader with \$247.7 billion in revenue. Behind the success of the brand lies the strategic use of artificial intelligence (AI) and various coding languages such as jQuery, CSS, lodash and Google Analytics, which enables the development of complex and user-friendly electronic products. However, recent consumer reports have highlighted concerns about overheating and slower performance in certain models due to significant technological advances in recent versions. Despite its continued success, Apple's challenge is to balance consumer needs for innovation with the practicalities of implementing new technologies smoothly and efficiently.

Renowned tire manufacturer Michelin has consistently distinguished itself from the industry through its commitment to technical development and customer engagement. As the second largest tire manufacturer in the world, Michelin has actively adopted business-to-business (B2B) communication strategies, fostered strong ties with its customer base and continuously invested

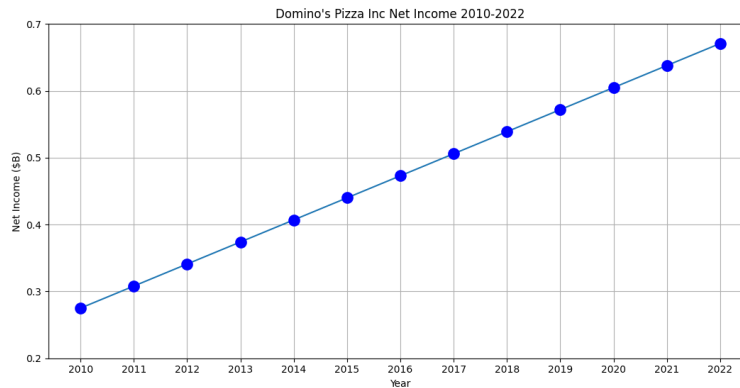


Figure 6.1: Dominos Pizza Net Income 2010-2022

in an active research and development department dedicated to technological innovation and improvement. By leveraging AI-based information across sectors and harnessing the power of business intelligence, Michelin has successfully improved its operational efficiency and overall profitability, and strengthened its position as a key player in the competitive global tire market. Walmart, the retail giant known for its commitment to customer satisfaction and operational excellence, has undergone a major digital transformation to improve its customer service and simplify administrative procedures. By significantly reducing wait times and streamlining its administrative processes, Walmart has reinforced its commitment to providing an unparalleled shopping experience. Leveraging strategic partnerships with technology leaders such as Microsoft and Google, Walmart has deployed advanced artificial intelligence tools to manage and analyse critical data, resulting in a state-of-the-art "data cafe" that strengthens its supply chains and improves profitability. . This strategic use of technology has placed Walmart at the forefront of retail innovation and set the benchmark for others in the industry.

TSMC (Taiwan Semiconductor Manufacturing Co. Ltd.), a pivotal player in the semiconductor industry, has earned significant acclaim for its cutting-edge technology solutions and commitment to delivering high-quality products. With an impressive revenue of \$ 71.66 billion, TSMC specializes in the production of semiconductors for electronic devices, showcasing its expertise in a wide range of technologies such as CMOS sensors, MS/RF, e-Flash, mems

technology, and BCDs. By consistently embracing innovation and leveraging its technological prowess, TSMC has solidified its reputation as a reliable and pioneering provider of semiconductor solutions, catering to a diverse clientele and contributing significantly to the ever-evolving landscape of the global electronics industry.

Nike, a world pioneer in sports apparel and sports accessories, has made significant strides in its business strategy by leveraging cutting-edge technology and innovative customer engagements. By introducing popular programs such as "Nike Run Club" and "Nike Training Club", the company effectively bridged the gap between its brand and its global customer base, promoting a more personalized and engaging brand. In particular, the strategic decision to stop wholesale sales in 2018 allowed Nike to foster more direct and meaningful relationships with its customers, resulting in a significant 50 percent increase in financial gains. With a strong emphasis on direct customer interaction and engagement, Nike has successfully positioned itself as a leading brand in the sports industry, responding to the changing needs and demands of a diverse and global customer base. Additionally, the unfortunate events surrounding Code Spaces and Med Star Health are stark reminders of the vulnerability of today's digital landscape. A major code hosting service, Code Spaces, fell victim to a devastating Distributed Denial of Service (DDoS) attack, resulting in the irreversible destruction of critical data, backup resources and machine configurations. The incident caused the sudden termination of the service, affecting not only code farms but also many companies dependent on its infrastructure, including Telefonica. Similarly, Med Star Health, a large hospital chain with operations in Baltimore, Maryland and Washington, D.C., experienced a severe network outage caused by an unidentified virus that completely shut down the company's patient database and email system. This unprecedented cyberattack underscored the critical importance of strong cyber security measures in the healthcare industry. It emphasized the need for comprehensive and proactive data security protocols to protect sensitive patient data and ensure the smooth delivery of critical healthcare services. Recently, Aadhar card of 815 million citizens have been breached through technology advancements. The poverty in itself is becoming a major cause of concern as the less educated and unskilled workers are not getting employment opportunities the job opportunities indeed have been minimised for them.

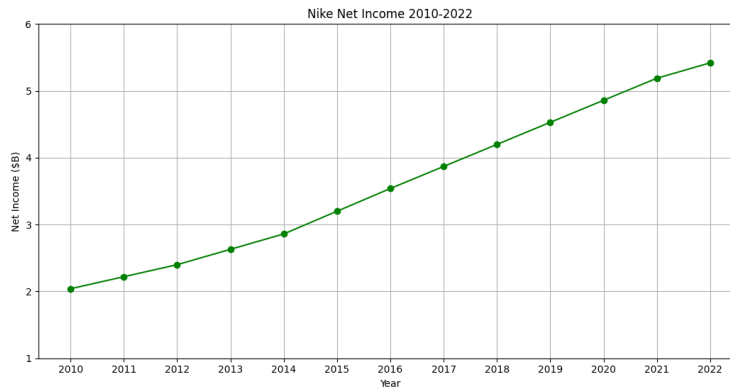


Figure 6.2: Nike Net Income 2010-2022

## 6.4 Discussions and Conclusions

To conclude in today’s fast-paced and dynamic business environment, technology integration has become a cornerstone for achieving and maintaining competitiveness. Companies in various industries rely more and more on technological development to make operations more efficient, increase productivity and promote innovation. The use of technology gives companies the opportunity to automate processes, improve efficiency and deliver products and services more quickly and accurately. However, to achieve these benefits, it is important for companies to be aware of the potential pitfalls associated with too much technology.

Maintaining a balance between technology integration and people-centric strategies requires aligning technology investments with core business values and goals. By emphasizing the human touch in customer service, promoting employee engagement and fostering a culture of innovation, companies can effectively navigate the complex environment of the modern business environment and harness the full potential of technology for sustainable growth and long-term success.



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