**MARKETING AS A DRIVER OF REVENUE AND SALES; AN ANALYSIS OF MICROSOFT CORPORATION**

**Executive Summary**

This report delves into the impact of sales and marketing expenditure on key performance indicators (revenue and Microsoft Office 365 subscriptions) of Microsoft Corporation. With a decades-long legacy, Microsoft has emerged as a global technology giant, producing various software products, hardware devices, and cloud-based services. In an era of intense competition and evolving consumer expectations, effective marketing strategies are essential to capture attention and drive growth. The analysis of ten years of data from Microsoft's annual reports reveals several insights. The company’s average revenue is $131.3 billion, with sales and marketing expenditure averaging $17.9 billion and Office 365 subscribers averaging 36.17 million. Revenue trends exhibit an upward trajectory, marked by a drop in 2016 and consistent growth from 2017 to 2023. Contrarily, sales and marketing expenditure witnessed fluctuations, notably a decrease from 2014 to 2016, an increase in 2017, a decline in 2018, and steady growth from 2019 to 2023. Office 365 subscribers consistently increased from 8.9 million in 2019 to 67 million in 2023. Regression analyses were employed to ascertain the relationship between sales, marketing expenditure, revenue, and Office 365 subscribers. The results indicate a strong positive correlation between increased sales and marketing expenditure and heightened revenue and subscriber numbers. For every unit increase in sales and marketing expenditure, revenue increased by approximately $15.14 billion, and Office 365 subscribers increased by around 0.006 million.

In light of these findings, it is recommended that Microsoft continue strategic investments in sales and marketing endeavours. A data-driven approach to marketing initiatives can yield substantial returns, with a focus on innovative campaigns that capture consumer attention and stimulate interest. Moreover, Microsoft should capitalise on the growing Office 365 subscriber base by emphasising the service's value through targeted marketing efforts.

**Table of content Page number**

Executive summary

Table of content

1.0 Introduction-----------------------------------------------------------------------------------------1

1.1 Background------------------------------------------------------------------------------------------1

1.1.1 Microsoft Corporation------------------------------------------------------------------------------2

1.1.2 Brief history of marketing--------------------------------------------------------------------------3

1.1.3 Marketing theories-----------------------------------------------------------------------------------4

2.0 Data Analysis-----------------------------------------------------------------------------------------5

2.1 Descriptive statistics---------------------------------------------------------------------------------5

2.2 Regression analysis----------------------------------------------------------------------------------8

2.2.1 Regression Model for Revenue--------------------------------------------------------------------8

2.2.2 Regression model for the number of Office 365 subscribers----------------------------------9

3.0 Conclusions------------------------------------------------------------------------------------------10

3.1 Recommendation-----------------------------------------------------------------------------------10

Reference------------------------------------------------------------------------------------------------------11

Appendix

**1.0 Introduction**

Microsoft Corporation is a multinational technology company headquartered in Redmond, Washington, USA, founded by Bill Gates and Paul Allen on April 4, 1975, and has grown to become one of the world's largest and most influential technology companies (Microsoft, 2013). The company's mission is to empower every individual and organisation to achieve more, and it operates in several segments of the technology industry.

Amidst heightened competition, businesses employ innovative tactics to endure and secure a significant portion of the market (Keller, 2016). Their efforts aim to capture consumers’ attention through marketing communications (Nichols and Schumann, 2012). As competition evolves, consumers have grown more intricate and demanding, expecting higher value from companies’ products or services (Brodie et al., 2011; Osei-Frimpong et al., 2019). Consequently, it is now customary to observe companies utilising diverse marketing strategies to promote their brands, aiming to encourage customers to embrace their offerings (Osei-Frimpong et al., 2019).

Therefore, this report assesses the impact of sales and marketing expenditure on certain key performance indicators (revenue and number of Microsoft Office 365 subscriptions) of Microsoft Corporation.

**1.1 Background**

In recent decades, marketing has substantially expanded in delivering information, endorsing products, and shaping consumer behaviours (Bakshi and Gupta, 2013; Tobi et al., 2020). Conventional mass media, encompassing newspapers, brochures, radio broadcasts, television, and billboards, served as the predominant marketing avenues before the widespread adoption of the Internet (Tobi et al., 2020). Nevertheless, the Internet has surged as a prevalent marketing platform, allowing advertisers to access a wider audience (Mohammed and Alkubise, 2012). Throughout history, marketing has functioned as a societal instrument for product promotion and the influence of consumer actions spanning centuries (Bakshi and Gupta, 2013). It retains its pivotal role as an indispensable element of contemporary marketing strategies.

The adoption of the Internet as a platform for advertising goods and services has gained significant traction within companies, propelled by the expanding user base and the Internet’s interactive and personalised capabilities (Tobi et al., 2020). In 2000, the United States allocated an estimated $8 billion for Internet marketing endeavours, underscoring its emerging importance (Bakshi and Gupta, 2013). In more recent times, this figure has surged to around $12.7 billion, primarily attributed to the ubiquitous presence of smartphones and the growing population of individuals who maintain constant online connectivity, with students being a notable demographic (Bakshi and Gupta, 2013).

**1.1.1 Microsoft Corporation**

Microsoft Corporation, a prominent creator of personal computer software systems and applications, is a multinational technology enterprise headquartered in the United States. Their scope encompasses developing and promoting software, services, and hardware devices, all of which contribute novel opportunities, heightened convenience, and increased value to individuals' lives. With a global reach, they operate across more than 100 countries, establishing their presence worldwide (Microsoft, 2013).

The company's revenue generation emanates from several sources. These encompass creating, licensing, and supporting various software products and services (Microsoft, 2013). Additionally, they design and sell hardware devices while delivering pertinent online advertising to a diverse and expansive global customer base. Beyond their discrete offerings, Microsoft provides comprehensive suites of products and services (Microsoft, 2013). These encompass operating systems for various computing devices, servers, phones, and other intelligent gadgets. Their portfolio extends to server applications tailored for distributed computing environments, productivity applications, solutions aimed at businesses, desktop and server management utilities, software development tools, video games, and online advertising initiatives (Microsoft, 2013).

Furthermore, Microsoft's engagement in the market includes the conception and vending of hardware devices. Notable among these are the Surface RT and Surface Pro, the Xbox 360 gaming and entertainment console, and associated peripherals like Kinect for Xbox 360, Xbox 360 accessories, and Microsoft PC accessories (Microsoft, 2013). The company extends its offerings to encompass cloud-based services, including but not limited to Microsoft Office 365, Microsoft Dynamics CRM Online, Windows Azure, Bing, Skype, Xbox LIVE, and Yammer. These services are designed to furnish customers with software, services, and content through the internet, utilising shared computing resources within centralised data centres (Microsoft, 2013). The revenue generated from cloud services primarily originates from usage fees, advertising, and subscription-based models (Microsoft, 2013).

Microsoft is renowned for its prominent software offerings, including the Windows series of operating systems, the Microsoft 365 suite comprising various productivity applications, and the web browsers Internet Explorer and Edge. In terms of hardware, the company's standout products encompass the Xbox video game consoles and the array of touchscreen personal computers known as the Microsoft Surface lineup. Illustrating its substantial position in the corporate landscape, Microsoft secured the 14th spot in the 2022 Fortune 500 rankings, a compilation of the largest corporations in the United States based on total revenue (Fortune, 2019). Moreover, as of 2022, Microsoft has emerged as the foremost software manufacturer globally in revenue.

**1.1.2 Brief history of marketing**

Marketing is crucial in the global economy, influencing consumer behaviours and propelling business sales. Its origins trace back to ancient civilisations, where early merchants employed word-of-mouth techniques to endorse their products (Presbrey, 2000; Sampson, 2017). From rudimentary drawings on cave walls, marketing has advanced to encompass intricate digital campaigns capable of reaching vast audiences. Its journey has been marked by substantial progress, particularly accelerated by the emergence of contemporary technologies. The rise of the internet and the development of social media have ushered in a transformative shift within the marketing landscape.

McDonald and Scott (2007) indicate that ancient Egypt witnessed the earliest form of marketing, utilising papyrus for crafting sales messages and posters. Similarly, in ancient Greece, vendors would vocally announce their product names in bustling marketplaces to capture potential buyers' attention (Sampson, 2017). In ancient Rome, marketing messages were etched onto building walls to bolster political campaigns (Hood, 2005), while in China, bamboo strips were employed to promote goods (Feng, 2009). With the advent of the printing press in the 15th century, marketing underwent a significant evolution (Oberoi et al., 2021). This technological advancement facilitated the mass production of promotional materials like posters and flyers, disseminating product and service information to a broader audience (Stöber, 2004). The trajectory of marketing's evolution continued with the introduction of technology and the internet, propelling the rise of online marketing to prominence.

**1.1.3 Marketing theories**

The study of marketing has constituted an ongoing pursuit since the late 19th century. The trajectory of marketing theories has been moulded by the dynamic shifts in marketing's nature and sociological, psychological, and economic determinants. In its nascent stages, early theories of marketing prominently underscored its persuasive power, accentuating the significance of eliciting emotional responses within consumers (Bartels, 1976; Jones and Shaw, 2002). However, this viewpoint encountered subsequent challenges from the cognitive perspective, highlighting the pivotal role of information processing and logical assessment in marketing (Alden and Hoyer, 1993). Expanding upon the cognitive paradigm, the behavioural school of thought delved into the intricate interactions between marketing strategies and consumer conduct, encompassing facets such as brand loyalty and purchase choices (Segijn and Van Ooijen, 2022). The 1960s witnessed the emergence of the sociocultural school of thought, focusing on the cultural and social dynamics that mould consumer behaviour and advocating for marketing strategies that align with these underlying values (Weinberger et al., 2015). As time unfolded, marketing theories transitioned from a predominant emphasis on persuasion to a more profound understanding of consumer behaviour and the intricate interplay between marketing endeavours and the configuration of such behaviour.

Marketing serves as a vital conduit through which businesses establish connections with customers and propel the exposure of their products and services. The overarching marketing theories furnish a structured lens for comprehending the intricate mechanisms inherent in marketing dynamics. A notable theory in the realm of marketing is the Hierarchy of Effects model, originating from the collaborative efforts of Robert J. Lavidge and Gary in 1961. This model delineates a sequential impact on consumers, commencing with cultivating awareness and culminating in decisive action (Hunt, 1983). The model encapsulates the idea that effective marketing demands the capture of consumer attention, the evocation of interest, the stimulation of desire, and ultimately the translation of these elements into concrete actions.

Another paradigm, the Information Processing model, asserts that marketing information undergoes linear and methodical processing within consumers' minds (Hunt, 1983). This theory accentuates the significance of the message itself and its proficiency in effectively conveying information to the consumer. Additionally, the Social Learning Theory accentuates the weight of social influence and the profound imprint of marketing on consumer behaviour (Hunt, 1983; Bruner and Kumar, 2000). This framework underscores the role of social norms, alongside the pervasive influence wielded by peers and media, in moulding consumers’ decision-making process.

**2.0 Data Analysis**

This report utilised secondary data from the annual report of Microsoft Corporation for ten years (2014 - 2023) (Appendix 1). The data used were; total revenue, expenditure for sales and marketing and the number of subscribers of Office 365.

**2.1 Descriptive statistics**

The descriptive statistics of the data collected are presented in Table 1, showing that the average revenue, expenditure for sale and marketing and the number of Office 365 subscribers is 131,317.40, 17.899.80 and 36.17. Also, the lowest revenue was $85,320 in 2016 and a maximum value of $211,915 in 2023 (Figure 1). Similarly, the expenditure for sales and development was also lowest in 2016 and highest in 2023 (Figure 2). From Figure 1, it was observed that there was an upward trend (increase) in revenue, but it dropped in 2016 and increased from 2017 to 2023. Conversely, the expenditure for sales and marketing decreased from 2014 to 2016, increased in 2017 but further decreased in 2018 and continued upward from 2019 to 2023 (Figure 2). The revenue with 0.73 skewness is positively skewed, showing that it is not normally distributed.

The trend of subscribers to Office 365 is shown in Figure 3, indicating a continuous increase in subscribers from 2014 to 2023, with a minimum of 8.9 million in 2019 and a maximum of 67 million in 2023 (Table 1). The Office 365 subscribers and sales and marketing variables are nearly symmetrical, with 0.28 and 0.47 skewness, respectively (Table 1).

**Table 1:** Descriptive statistics

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Variables** | **N** | **Mean (In millions)** | **Standard Error** | **Standard Deviation** | **Minimum (In millions)** | **Maximum (In millions)** | **Skewness** |
| **Revenue** | 10 | $131,317.40 | 14969.12 | 47336.52 | $85,320 | $211,915 | 0.73 |
| **Sales and Marketing** | 10 | $17,899.80 | 954.33 | 3017.84 | $14,697 | $22,759 | 0.47 |
| **Office 365 Subscribers** | 10 | 36.17 | 6.02 | 19.02 | 8.9 | 67 | 0.28 |

**Figure 1:** Trend of revenue for Microsoft from 2014 - 2023

**Figure 2:** Trend of sales and marketing expenditure for Microsoft from 2014 - 2023

**Figure 3:** Trend of the number of Office 365 subscribers for Microsoft from 2014 - 2023

**2.2 Regression analysis**

Two regression models were developed to assess the impact of sales and marketing expenditure (independent variable) on revenue and Office 365 subscribers (dependent variables).

**2.2.1 Regression Model for Revenue**

The regression analysis results show a statistically significant variance in revenue, such that *F*(1, 8)=109.23, *R2*= 0.93, *R2adjusted*= 0.92 (**Table 2**). The *R2* value indicates that about 93% of the variability of the dependent variable (revenue) can be explained by the independent variables (sales and marketing expenditure).

**Table 2:** ANOVA output and Regression model Summary for Revenue

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Degree of freedom | F | R Square | Adjusted R Square |
| Regression | 1 | 109.23 | 0.93 | 0.92 |
| Residual | 8 |

The sales and marketing expenditure variable was a significant predictor of revenue, *β*= 15.14, t(8)=10.45, *p*= <0.0001, indicating that an increase in sales and marketing expenditure by a unit means a 15.14 increase in revenue 95%CI[11.80, 18.48] (**Table 3**).

**Table 3:** Regression Coefficients for the revenue model

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Coefficients** | **Standard Error** | **t** | **P value** | **95.0% Confidence Interval** | |
| **Lower Bound** | **Upper Bound** |
| Intercept | -139,704 | 26,256.95 | -5.32 | 0.0007 | -200,253 | -79,155.8 |
| Sales and marketing | 15.14 | 1.45 | 10.45 | <0.0001 | 11.80 | 18.48 |

P value <0.05 was considered statistically significant

Hence, the regression model equation is Y= -139,704 + 15.14 X

Where Y is the Revenue

X is the expenditure for sales and marketing

**2.2.2 Regression model for the number of Office 365 subscribers**

The regression analysis results show a statistically significant variance in the number of Office 365 subscribers, such that *F*(1, 8)=37.58, *R2*= 0.82, *R2adjusted*= 0.80 (**Table 4**). The *R2* value indicates that about 82% of the variability of the dependent variable (the number of Office 365 subscribers) can be explained by the independent variables (sales and marketing expenditure).

**Table 4:** ANOVA output and Regression model Summary for Office 365 subscribers

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Model | Degree of freedom | F | R Square | Adjusted R Square |
| Regression | 1 | 37.58 | 0.82 | 0.80 |
| Residual | 8 |

The sales and marketing expenditure variable was a significant predictor of revenue, *β*= 0.006, t(8)=6.13, *p*= <0.0001, indicating that an increase in sales and marketing expenditure by a unit means a 0.006 increase in the number of Office 365 subscribers 95%CI[0.004, 0.008] (**Table 5**).

**Table 5:** Regression Coefficients for the Office 365 Subscribers model

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Variable** | **Coefficients** | **Standard Error** | **t** | **P value** | **95.0% Confidence Interval** | |
| **Lower Bound** | **Upper Bound** |
| Intercept | -66.29 | 16.93 | -3.92 | 0.004 | -105.32 | -27.26 |
| Sales and marketing | 0.006 | 0.0009 | 6.13 | <0.0001 | 0.004 | 0.008 |

P value< 0.05 was considered statistically significant

Hence the regression model equation is

Y= -66.29 + 0.006 X

Where Y is the Number of 365 subscribers

X is the expenditure for sales and marketing

**3.0 Conclusions**

In the rapidly evolving technology industry landscape, Microsoft Corporation is a formidable multinational technology company with a profound impact on global markets. Microsoft has maintained a significant worldwide presence with its comprehensive software products, hardware devices, and cloud-based services. The company's commitment to innovation, evident in its offerings and mission to empower individuals and organisations, underscores its strategic positioning in the industry. Based on the data analysis conducted in this report, it is evident that there exists a strong relationship between Microsoft's sales and marketing expenditure and its revenue and the number of Office 365 subscribers. The regression analysis indicates that increased sales and marketing expenditure is positively associated with increased revenue and Office 365 subscribers.

**3.1 Recommendation**

In light of these findings, it is recommended that Microsoft continues to invest strategically in its sales and marketing efforts. Given the significant impact of these expenditures on both revenue and the subscription base of Office 365, a well-calibrated and data-driven approach to sales and marketing initiatives can potentially yield substantial returns. Microsoft should consider allocating resources to innovative marketing campaigns that capture consumer attention, stimulate interest, and drive desire, ultimately leading to higher conversion rates and increased revenue. Moreover, given the substantial growth in the number of Office 365 subscribers, Microsoft should further emphasise marketing efforts that promote the value and benefits of this service to potential customers.

Further research should be conducted to enhance decision-making to understand the channels of strategies that yield the most significant impact on revenue and Office 365 subscriptions. By analysing the effectiveness of different marketing channels and refining their strategies accordingly, Microsoft can optimise its resource allocation and further amplify its success in the market.

**Reference**

Alden, D.L. and Hoyer, W.D., 1993. An examination of cognitive factors related to humorousness in television advertising. Journal of Advertising, 22(2), pp.29-37.

Bakshi, G. and Gupta, S.K., 2013. Online advertising and its impact on consumer buying behavior. *International Journal of Research in Finance and Marketing*, *3*(1), pp.21-30.

Bartels, R., 1976. *The history of marketing thought*. Columbus, OH: Grid.

Brodie, R.J., Hollebeek, L.D., Jurić, B. and Ilić, A., 2011. Customer engagement: Conceptual domain, fundamental propositions, and implications for research. *Journal of service research*, *14*(3), pp.252-271.

Bruner, G.C. and Kumar, A., 2000. Web commercials and advertising hierarchy-of-effects. Journal of advertising research, 40(1-2), pp.35-42.

Feng, S., 2009. Talking about Ancient Chinese Commercial Advertising Styles. Asian Social Science.

Fortune, 2019. Fortune 500 companies 2019. <https://fortune.com/ranking/fortune500/2022/search/>. [Accessed on August 04, 2023].

Hood, J.M., 2005. Selling the dream: why advertising is good business. Greenwood Publishing Group.

Hunt, S.D., 1983. General theories and the fundamental explananda of marketing. Journal of marketing, 47(4), pp.9-17.

Jones, D.B. and Shaw, E.H., 2002. A history of marketing thought. Handbook of marketing, pp.39-65.

Keller, K.L., 2016. Unlocking the power of integrated marketing communications: How integrated is your IMC program?. *Journal of Advertising*, *45*(3), pp.286-301.

McDonald, C. and Scott, J., 2007. A brief history of advertising. The Sage Handbook of Advertising, London: Sage, pp.17-34.

Microsoft, 2013. Annual Report Available at: <https://www.microsoft.com/investor/reports/ar13/financial-review/business-description/index.html>. [Accessed on August 04, 2023].

Mohammed, A.B. and Alkubise, M., 2012. How do online advertisements affects consumer purchasing intention: Empirical evidence from a developing country. *European journal of business and management*, *4*(7), pp.208-218.

Nichols, B.S. and Schumann, D.W., 2012. Consumer preferences for assimilative versus aspirational models in marketing communications: The role of product class, individual difference, and mood state. *Journal of Marketing Theory and Practice*, *20*(4), pp.359-376.

Oberoi, G.K., Chowdhury, K. and Singh, R., 2021. Advertising And Its Development Of Graphic Design In Indian Print Media. Ilkogretim Online, 20(1), pp.6698-6709.

Osei-Frimpong, K., Donkor, G. and Owusu-Frimpong, N., 2019. The impact of celebrity endorsement on consumer purchase intention: An emerging market perspective. *Journal of marketing theory and practice*, *27*(1), pp.103-121.

Presbrey, F., 2000. The history and development of advertising. Advertising & Society Review, 1(1).

Sampson, H., 2017. A History of Advertising-From the Earliest Times. anboco.

Segijn, C.M. and Van Ooijen, I., 2022. Differences in consumer knowledge and perceptions of personalized advertising: Comparing online behavioural advertising and synced advertising. Journal of Marketing Communications, 28(2), pp.207-226.

Stöber, R., 2004. What media evolution is: A theoretical approach to the history of new media. European journal of communication, 19(4), pp.483-505.

Tobi, O.T., Ayodele, M.D. and Akindele, A.A., 2020. Effect of online advertising on consumer buying behaviour of internet users in Lagos State. *Ilorin journal of human resource management*, *4*(1), pp.171-181.

Weinberger, M.G., Gulas, C.S. and Weinberger, M.F., 2015. Looking in through outdoor: a socio-cultural and historical perspective on the evolution of advertising humour. International Journal of Advertising, 34(3), pp.447-472.

**Appendix**

**Appendix 1-** Secondary data from Microsoft corporation annual report from 2014 – 2023

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **Revenue** | **Sales and Marketing** | **Office 365 Subscribers** |
| 2014 | 86833 | 15811 | 8.9 |
| 2015 | 93580 | 15713 | 15.2 |
| 2016 | 85320 | 14697 | 23.1 |
| 2017 | 89950 | 15539 | 27 |
| 2018 | 110360 | 14726 | 31.4 |
| 2019 | 125843 | 18213 | 34.8 |
| 2020 | 143015 | 19598 | 42.7 |
| 2021 | 168088 | 20117 | 51.9 |
| 2022 | 198270 | 21825 | 59.7 |
| 2023 | 211915 | 22759 | 67 |