Impact Of Information Systems On Online Businesses

Posted on October 30, 2019

Information Systems and the Growth of Online Business

The world of information technology has transformed the means of doing business in a competitive market and has provided companies with customized systems according to their needs to get the maximum output of their routine operations. The information systems have helped a number of startups to create a name for themselves by eliminating the dependency on a physical footprint, shifting towards an online presence, and doing business accordingly.

Investing in technology has become a significant part of the development of a successful business and of gaining an edge over competitors. Integration of information systems with routine operations provides several advantages to organizations; this change is revolutionizing the entire production process and how things were managed before the inclusion of these systems. For instance, management information systems (MIS) have changed the overlook of data collection, storage, and processing (McLeod & Schell, 2007). With the help of MIS, the managers of these firms can aggregate the data more efficiently through the detailed analysis provided by these systems; they can take actions to cover up the shortcomings and prepare themselves for the challenges ahead of MIS (McLeod & Schell, 2007). Hence giving them the ultimate advantage over other companies that don't use it. The applications of these systems vary according to the needs of a particular firm. A car manufacturer can keep track of its inventory can ensure it maintains enough stock to satisfy customer's preferences, or a retail store can find its bestselling items with the data provided by these systems and can restock that in advance to avoid any mismanagement (McLeod & Schell, 2007).

These information systems can help in the strategic planning of an organization and cater to the diverse needs of business regarding analysis, modeling, and decision-making processes. A company can also benefit from these systems by monitoring all the achievements and identifying the shortfalls and can seamlessly address these issues beforehand without any interruption to the ongoing business. These information systems are the actual cause of the revolution in the online market. They have made it almost inevitable for the companies to rely on conventional ways to carry out their operations and forced them to move towards the online territories by providing all the tools for guaranteed success and enabling them to capture the customer market in a way never done before (Rubino, 2014).

Digital Infrastructure, Customer Service, and Competitive Advantage

Adaptation of these information systems made it extremely comfortable for businesses, either old or new, to stamp their online authority and become successful by genuinely utilizing these systems. Even the companies that had a vast physical network and were prospering as per their targets felt compelled to create their online profiles to accommodate the needs of modern society, which is inclined towards online shopping rather than going to market (Pozzi, 2013). The brick-and-click story of Staples, a renowned office supplies retailer, will shed some light on this claim and the transition of their business from just physical presence to the dot-com era. The tale of Staples started in 1986 when its first store was opened in a Massachusetts town (Hohler, Ranganathan, & Goode, 2001). The first outlet opening stirred the office product industry, with staples being the instant success, and they generated revenue of $8 million in 1987, which grew to $120 million in 2000 (Hohler et al., 2001). However, with the passage of time, new competitors emerged and divided the market accordingly by providing better deals and products as compared to staples. By 1992, a company name Office Depot became the most significant organization for office products, generating double revenue as compared to staples (Hohler et al., 2001). After struggling for many years for their mere survival, Staples decided to embrace online marketing strategies and shift their focus toward the untapped world of infinite possibilities.

Staples formally introduced its website in 1997. At that time, it was just an informational platform cataloging their products (Hohler et al., 2001). The managing authorities at Staples fancied their chances of targeting the majority of the customer base through the Internet and believed that this transition to online retailing would prove more beneficial in the future. Thomas Stemberg, CEO of Staple, himself was a firm believer and worked tiresomely to induce IT thinking on the managerial level. Combining that attitude with the enormous investments in the digital world, he became successful in launching Staples.com as a site for selling office products (Hohler et al., 2001).

All the efforts made by Staples yielded great rewards for their business, and they became a massive e-business success. Staple’s online revenue grew from $35000 in 1996 to $94 million in 1999 and increased to over $512 million by 2000 (Hohler et al., 2001). E-business combined with physical stores shined Staple’s fortune by being enlisted by InfoWorld among its most successful e-businesses in 2000 (Hohler et al., 2001). Even facing intense criticism in the initial years, Staples went on to become a giant in the online world by believing in themselves and continuously improving their IT infrastructure along with the inclusion and up gradation of intelligent information systems.

Cybersecurity, Data Management, and Business

Performance

As these IT systems gave Staples a platform to conquer the e-business world, however, the organization faced multiple security challenges during its course and planned respectively to overcome them (“Staples Identifies Top Security Threats,” 2008). The main security threats identified by Staples were identity theft, data loss, junk email security, and web threats (“Staples Identifies Top Security Threats,” 2008). To address these issues, the organization came up with several efficient solutions as the ratio of identity theft was greater among all these security threats because of the excessive digital footprints of the customers while opting the e-shopping. So Staples implemented various algorithms to encrypt all the user traffic visiting their website and added additional security checks for the user verification procedure to strengthen the overall process. For data loss prevention, the company allocated resources to protect the user information from being captured by outside attacks. Furthermore, they increased the storage capabilities of their IT infrastructure and upgraded the system to prevent all of it from being hacked (“Staples Identifies Top Security Threats,” 2008).

The company faced another severe issue related to its customer information privacy and was investigated in 2004-2008 by the Office of the Privacy Commissioner (“Staple’s Audit Report,” 2011). The customers accused that the staples failed to protect the customer information being regulated under its control. The nature of the complaints was related to the purchase of storage devices from Staples, and upon return of those devices, because of some issue, the company resold those devices without properly formatting the previous user’s personal information residing on them. In the process of investigation, random checks were conducted by the OPC to assess the IT security control implemented to safeguard user information (“Staple’s Audit Report,” 2011). The complaints were resolved when the organization agreed to use the full wipe and restore policy for all the returned devices before reselling them in compliance with the Personal Information Protection and Electronic Documents Act (“Staple’s Audit Report,” 2011).

References

Hohler, D., Ranganathan, C., & Goode, V. (2001). *The Transition from Bricks to Clicks at Staples, Inc.* Retrieved from https://kudriashov.com/wp-content/uploads/2017/02/staplespaper.pdf

McLeod, R., & Schell, G. P. (2007). *Management information systems*. Pearson/Prentice Hall USA.

Pozzi, A. (2013). The effect of Internet distribution on brick-and-mortar sales. *The RAND Journal of Economics*, *44*(3), 569–583.

Rubino, J. (2014, August). THE E-COMMERCE REVOLUTION IS JUST GETTING STARTED. Retrieved April 22, 2018, from https://www.cfapubs.org/doi/pdf/10.2469/cfm.v25.n4.9

Staple’s Audit Report. (2011). Retrieved April 23, 2018, from https://www.priv.gc.ca/media/1150/ar-vr_staples_2011_e.pdf

Staples Identifies Top Security Threats. (2008, February 13). Retrieved April 22, 2018, from https://news.staples.com/press-release/staples-identifies-top-risk-behaviors-security-threats