

## **Impact of Communication and Technology on Profitability in the Fmcg Sector**

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### **ABSTRACT**

The surge in the demand for **fmcg** products has increased the market size allowing new players to establish and grow simultaneously. The impact of Information Technology (IT) on internal communication can have a significant effect on the profitability of an organization in the Fast-Moving Consumer Goods (FMCG) sector of Pakistan. IT tools such as instant messaging, email, project management software, and collaboration platforms can improve communication speed, efficiency, and accuracy. This can lead to better decision making, faster problem solving, and increased productivity, ultimately leading to higher profitability. The purpose of this paper is to investigate the impact of communication and technology on profitability in the fmcg sector in Pakistan. The research utilizes primary and secondary sources for data collection. This research focuses on five leading organizations of Pakistan and their data on profitability and technology expense from the year 2012-2021 was gathered from their financial reports for analysis. An online questionnaire and interview were conducted to collect primary data. A total of 100 questionnaires were filled by company employees were included in the study and officials from each organizations were interviewed to develop a wholistic understanding of the variables and their impact. The findings of this research indicated that communication and technology have a significant positive impact on the profitability in the fmcg sector.

**Keywords:** Information Technology, Communication, Fmcg, Organizational Structure

### **Introduction**

Fast-moving consumer goods are products designed to be sold quickly within a specific period at a relatively low price. The products involve consumable goods having a versatile range of baked goods, meat, dairy items to canned products such as soft drinks, chips, biscuits and much more. Large product lines are common for the big players of this industry offering a vast variety of special products with a huge distribution bandwidth. Consumer goods are products that are purchased for personal or household consumption. They are classified into different categories based on their shelf life and how quickly they are consumed. The 3 major categories comprise of:

1. DURABLE GOODS
2. NON-DURABLE GOODS
3. SERVICES

Fast-moving consumer goods (FMCG) are a specific type of consumer goods that are characterized by their low cost and quick turnover. They are often found in high-traffic retail outlets and are typically consumed within a short period of time after purchase. Some common examples of FMCG include food and beverage products, household cleaning products, personal care items, and over-the-counter medications

With more than billions of dollars being an important source of revenue coming from this huge segment of this specific industry, the sector itself becomes very competitive. The capacity of the market and the way it absorbs more and more players signifies that the market itself is transitioning with time. The huge number of buyers allows the market to have a huge number of sellers with different brands coming in establishing their own set of value and delivering it to the right customer. Companies that occupy huge market shares worldwide includes:

**Johnson & Johnson.**

**Nestle AG**

**Procter & Gamble.**

**Pepsi Co.**

**JBS.**

**Unilever.**

**AB InBev.**

**Tyson Foods.**

The growth of these industries is highly related to the way they expanded their operations and installed automated engines that cracked their supply chain by improvising their communication internally and focused on large scale promotions that increased their worldwide sales.

The global light house network is a freshly formed forum which functions in collaboration with Mckinsey and company is trying to change the modern dynamics of the business world. The way to prosperity will commence from the 4<sup>th</sup> great industrial revolution by organizing the productivity large scale businesses valuing their supply chain and using digital analytics to maintain a stable yet sustainable environment. The function of lighthouse designation is to guide the new business leaders about the integrated systems which have been already adopted by the light house recipients.

It is impressive that Johnson & Johnson has received seven Lighthouse designations across its various business sectors. The Lighthouse program recognizes companies that have demonstrated excellence in implementing Industry 4.0 technologies, such as the Internet of Things (IoT), artificial intelligence (AI), and advanced analytics, to drive operational and business results. The program is run by the Manufacturing Technology Centre (MTC) in the UK, which is a leading research and technology organization that focuses on advanced manufacturing and industrial innovation. Receiving a Lighthouse designation is a significant achievement, as it demonstrates a company's commitment to innovation and continuous improvement.

It's clear from this statement that Kathy Wengel believes that improving the customer experience is the key to success. She also notes that using advanced manufacturing technologies can help achieve this goal by improving efficiency, quality, and sustainability, as well as providing better visibility for customers. By adopting these technologies, Johnson & Johnson can better serve its patients, consumers, and customers. **(Michelle Shapiro 2021)**

The era of globalization has brought new problems yet more and more opportunities to create new market space and create access to the consumer. The significance of this external connectivity is just as important as the internal connectivity and communication of various departments across the organization. The improved connectivity of the employees streamlines the operations and will have an impact on the overall profitability of the organization.

Pakistan's fast-moving consumer goods (FMCG) industry has been growing in recent years, in part due to the increasing disposable incomes of the country's middle class. This growth has also been supported by foreign investment and the entry of international brands into the market. The size of Pakistan's population and the development of rural markets are also seen as potential drivers of further expansion in the FMCG sector. Despite some challenges, such as political instability and government interference in the economy, there are opportunities for continued growth in this industry. The retail market size was more than 152 billion dollars back in 2019 which was reported to be the boom of the FMCG sector in Pakistan.

The organizations which have established a strong market share in the Pakistani market includes:

- Engro Foods.
- Nestle Pakistan.
- Coca-Cola Pakistan. ...
- Reckitt Benckiser. ...
- EBM. ...
- National Foods. ...
- Philip Morris (Pakistan) Limited.

Engro foods being one of the most prominent and promising players in the market has established a huge segment targeting their sales towards the selected audience by providing the correct product to the right consumer. Apart from its huge distribution bandwidth, the organization uses SAP as an information system to ensure that all the departments stay intact and are in close coordination to increase its efficiency and have transparency among all the strategic business units. Engro Corporation has implemented SAP Fiori to digitize their operations and improve the performance of their sales force. Gamification, or the use of game design elements in non-game contexts, can be an effective way to encourage adoption of new technologies and processes. By giving employees incentives to use the software and providing them with direct access to real-time data on their smartphones, Engro was able to overcome resistance to digital change and empower their sales force to make more informed decisions. It's also worth noting that SAP Fiori is a customizable application platform, so Engro was able to tailor it to fit their specific needs. The implementation of this framework increased the net sales by a margin of 200% in 2021 with a PAT of 15.6 billion that is three times greater than the year 2020. (Engro corporation financial report (2020-21).

## **BACKGROUND STUDY:**

The need for a marketplace can be traced back to the remote history of humanity. Buying and selling was yet an act necessary for survival, and exchange of goods also termed as trading was a common way to survive and fulfil the basic human needs. Human needs evolved over the period and so did the whole way of buying and selling. The introduction of coins being used as a mode to classify the value of a certain commodity delivered the concept of money.

The history of currency and retail can be traced back thousands of years. In ancient civilizations, people used various forms of currency, such as gold, silver, and other precious metals, to facilitate trade and commerce. Retail stores have also been around for a long time, with evidence of ancient civilizations having marketplaces where merchants could sell their goods. Over time, the concept of retail has evolved, with the development of various types of stores and the emergence of modern retail giants like Walmart and Target.

The expansion of the United States westward in the 19th century played a significant role in the development of retail stores and consumer culture. As people moved west, they often encountered new and unfamiliar products, and general stores were established to meet their needs. These stores sold a wide range of goods, including clothing, household items, and food, and were often the only source of supplies for people living in remote areas. In addition to selling goods, these stores also played a central role in the social life of the community, serving as a gathering place for people to socialize and participate in cultural events. As the 20th century progressed, the growth of mass production and mass marketing further transformed the retail industry and the way people shopped.

This whole concept is highly related to the communication of the multiple departments across the manufacturing organization and their involvement with the suppliers. There are many articles and valuable data available to see the effect of promotions and advertisements of the profitability of the organization, yet a very few on how the automation process and its internal coordination can

improve the operations and create a very high impact on the overall profitability of the company. The creation of **bullwhip effect** and those little alterations in the demand of the product may create a boggling effect from one end of the chain to another. To ensure that the surge in demand is positively related to the profitability of the respective FMCG organization one must have smart operations and sharp technological advancements to automate their processes and manage their inventories well. Streamlined operations and strong coordination of multiple employees from different departments are essential to achieve that success. (OUYANG and LI 2009). A variability of magnitude is noted with the change in different ends of supply chain. The surge in demand from the end of one retailer might affect a lot of consumers in that area but may not be that impactful in terms of overall productivity for that specific manufacturing powerhouse. Hence this study records the value of that automation to streamline the business processes and the way it impacts the profitability specially in the fmcg sector of Pakistan.

## Hypothesis

- H1) There is a positive relationship between Communication & Technology.  
 H2) There is a negative relationship between Communication & Technology.

## Literature Review

A lot of research has expressed a diverse set of results regarding the assumption above. The literature available has favored H1 especially when it comes to the fast-moving consumer good industry. Research has claimed that internal communication and technology implemented to enhance that communication have direct relationship, yet some may disagree with the claim as well.

The history of these claims can be traced back to the late 80s and 90s when **J Yannis backos** explained the IOS technology and the application of Information systems to develop a large-scale business with a higher profitability. (**backos, p. 1987**)

However, an argument may take place about the resistance to change which has been clearly highlighted by **Eric K. Clemons** in his article of **Limits to Interfirm Coordination through Information Technology**. Dr. Eric highlights how resistance to change sometimes may end up as a catastrophe for the organization. He highlights the fact that **Improved coordination through IT** can lead to economic benefits, but in practice, it may not be fully realized. A field study in the consumer-packaged goods industry found that new coordination mechanisms driven by checkout scanner systems and IT can lead to more tightly coupled logistics operations and potential benefits such as reduced inventory and more stable manufacturing. However, retailers have shown resistance to these innovations due to concerns that their bargaining power will diminish under the brand-new framework, preventing them from sharing in the economic benefits. His open field study is a huge contribution to the field of management sciences. (**ERIC.K.CLEMONS, 1993**)

**Mr. Shashidhar P. Redi and Michael C. Rowargue** in the special section of strategic and competitive information systems that information technology (IT) can lower coordination costs while reducing the associated transactions risk, resulting in more outsourcing and less vertical integration among firms. The lower relationship-deviation of IT investments and better monitoring capabilities of IT mean that firms can more safely invest in IT for interfirm coordination than in traditional investments such as co-located facilities or specialized human resources. Great interlink and strong coordination for internal operations. FMCG organizations manage themselves globally with a vast range of exports and huge distribution centers. This is where operations toughen, and manual operations become too lengthy with greater risks and leakages. **(Rowargue, 2009)**

This allows firms to coordinate with suppliers without requiring ownership, which in turn enables them to benefit from production economies of large, specialized suppliers. Additionally, the reduced cost and risk of IT enables firms to use explicit coordination with suppliers to a greater extent. (Eric K. Clemons, 1993)

All probable opinions are found when it comes to the implementation of information technology in the fast-moving consumer good industry. Cross examining the internal communication and various other factors associated with the same variable can also be embedded in this review. The two broader perspectives include the structure of the organization and the performance of its operations. The structure of the organization, often taken as an independent variable, does affect the operations and the performance of the organization, which may be proven through different field studies. A detailed field study was conducted in 1970 which displayed positive relationship for concepts like decentralization. The vertical growth in the structure of the organization smoothening up the processes will impact the profitability of the organization by a great margin. **(Investopedia FMCG PROFITABILITY, 2021)**

Managers have compared the necessity of the information system to the air needed for humans to live. Large scale organizations exporting globally and growing exponentially, need to adopt advanced managing systems to break the internal and external coordination by optimizing its operations and smoothening the cross functional team processes. Information systems can benefit organizations by reducing human error and providing relevant, real-time information. By using automated forecasting systems, organizations can analyze raw data and make predictions about future outcomes, which can help improve decision-making and increase efficiency. These systems can also help identify patterns and trends that would be difficult for humans to detect, which can lead to more accurate predictions. Additionally, these systems can be programmed to continuously learn and adapt, making them more accurate over time. This can help organizations to make better decisions and improve their performance. **(husna, p. 2020)**

Despite the modern assumption that the information systems might enhance the information processing ability of the organization, yet the comparative studies have carried out huge contrasting studies that may disagree to the above notion.

**Thomas.W.Malone** conducted a large-scale empirical study that examined the effect of AI and information systems on internal coordination. The study found that AI and information systems can help boost operational efficiency and improve internal coordination. However, it is important to note that this is not always the case, and the success of these systems is dependent on various factors such as the quality of the data, the design of the system, and the organization's overall strategy. Additionally, it is important for the management team to have a clear understanding of the capabilities and limitations of AI and information systems to ensure that they are being used effectively. The interaction of units and subunits to avail that chunk of communication boost and impact the overall revenue stream of the organization is yet dependable upon many other variables such as the resistance to change and the level of education to operate the information system. **(Thomas.w.malone, 1986)**

Literature on the control and distribution of organizational power suggests that the accumulation of power to certain subunits or teams within an organization can affect the use of information systems. When certain teams or individuals have control over critical information, they may be more likely to use it to further their own goals or interests, rather than using it to improve the overall performance of the organization. This can lead to inefficiencies and conflicts within the organization. Additionally, teams or subunits that have a lot of power may be less likely to share information with other teams, which can limit the overall effectiveness of the information system. To mitigate these issues, it is important for organizations to have clear policies and procedures in place to ensure that information is being shared and used effectively across the entire organization. **(SALANICK, 1977)**

Similarly, the studies in terms of goal achievability, and profit generation have indicated that, the magnitude of focus an individual employee has while executing the task relevant to the organization, the structure of the organization and the cognitive level of the employees work in different ways along with the information system. Allocation of budget, administrative policies, and many other variables were kept as the power independent variables. Hence these factors highly affect the choice of the information system to be implemented in the organization.

The use of AI technologies and computer-aided machinery has the potential to greatly improve the efficiency of the FMCG industry in the upcoming years. However, the success of this implementation will depend on the effective use and integration of these technologies into the operational activities of the organization. Hence the management should be prepared to adopt advanced systems and improve their internal coordination and operational efficiency. **(Implications of AI in enhancing FMCG industry., 2020, p. rahul karan tarai)**

While there have been many studies on quality theories in recent years, there is still a lack of empirical research that examines these theories in practice. Empirical research involves collecting data through observation, experimentation, or other methods to test hypotheses or theories. The statement implies that while there is a lot of theoretical work on quality theories, there is a need for more research that looks at how these theories play out in real-world situations. The article

published in the **international journal of quality and reliability management** dictates how a statistical technique called structural equation modeling (SEM) analyzes relationships between variables in multivariate data. SEM is often used to test hypotheses about causal relationships between variables, such as the relationship between quality and business performance. The statement suggests that research using SEM generally supports the idea that improvements in quality can have a positive impact on various aspects of business performance, such as productivity, inventory, delivery, and cost. Additionally, the statement notes that these improvements in quality can also have flow-through effects on overall business performance, although the impact may not be seen in all dimensions. Overall, this statement suggests that SEM is a useful tool for understanding the relationship between quality and business performance and that research supports the idea that enhanced quality can have a favorable impact on various aspects of business performance. **(Maani.KE, 1994)**

Despite barriers like barrier to change and the lack of skillset required by employees to work in coalition with the relevant information systems, scientists have favored the fact that these systems do improve the whole operational efficiency and reduces the costs. The quality improvement approach as a system of management that is ongoing and holistic in nature. It is not a one-time program or initiative, but rather an ongoing process that is integrated into the overall management of an organization. The approach is strategic, meaning that it is aligned with the organization's overall goals and objectives. It is also open to the environment, meaning that it considers external factors that may impact the organization's performance. The approach is cyclical, meaning that it involves a continuous process of producing output and receiving feedback to improve performance. Additionally, the approach is characterized by a desire to achieve equilibrium, which refers to a state of balance or adjustment between opposing or divergent influences, and to optimize performance by seeking the best possible outcome or result. Overall, this statement suggests that the quality improvement approach is an integral and ongoing part of an organization's management system, and that it is characterized by a focus on achieving balance, optimization, and continuous improvement. **(Gupta, 2018)**

The proper interrelationships among the components of a system to achieve organizational objectives. A system is composed of different parts that work together towards a common goal. The article suggests that the objectives of the system should be clearly defined and communicated for the system to function effectively. If the objectives are vague, it will be difficult for the components of the system to work together towards a common goal. However, if the objectives are clear and communicated, the system will be better able to respond and achieve its goals. The statement also highlights the importance of management principles in ensuring that the system works effectively. This emphasizes the importance of having a clear understanding of the objectives and the proper interrelationships among the components of a system to achieve organizational objectives. **(drucker, 1954)**

The importance of precise and timely information exchange among the components of a system to achieve the system's objectives. The article suggests that information and communication, which link the various elements of the system, are just as important as the elements themselves. This is



because proper and effective communication among the components is necessary for the system to function correctly and achieve its objectives. In other words, the statement highlights that the proper interrelationships among the components of the system also depend on the efficient exchange of information. Without it, the system will not be able to coordinate its actions and achieve its objectives. Overall, this statement emphasizes the importance of precise and timely information exchange among the components of a system to achieve the system's objectives.

### **RESEARCH DESIGN AND METHODOLOGY:**

#### **Problem statement:**

The rising demand for FMCG products in Pakistan is attracting hundreds of millions of dollars of new investments. The expanding middle class and growing millennials are demanding branded packaged goods ranging from baby care, personal items to food and beverages. Rapid growth in the FMCG sector drives sales in other sectors including e-commerce, paper-packaging, advertisement, media, sports and entertainment. The current retail size is at \$152 billions and its forecasted to increase 8.2% a year.

The increase in buying power of the expanding middle class in Pakistan drove the media advertising revenue up 14% to a record Rs.76.2 billion making the nation's market amongst the fastest growing. According to Magna research half of this spending went to t.v advertisement while the rest was divided amongst radio, digital, print and outdoor advertisement. `

Therefore, this study attempts to analyse the impact of these two independent variables **(technology which directly impacts various other variables. Internal communication and operational efficiency which may have a impact)** on the profitability in the FMCG sector on Pakistan.

The most significant factor to create is the supremacy of the blended gross and net margins, especially in the fast-moving consumer good section, no matter wherever is the organization located geographically. Defending those gross margins and creating room for more marketing expenses is crucial to any organization that operates in the FMCG sector of Pakistan. To ensure smart and increased surge of demand large information systems are installed and implemented to ensure that the operational efficiency increases by lifting the barrier of internal communication and integrating multiple departments across the organization to improve the understanding and coordination of each individual employee with the other to create maximum impact on the strategic goal of the organization. The growing FMCG sector in Pakistan has proved its worth internally and is growing on a global scale. Connecting the dots of supply chain and mapping them on a single platform to improve the global coordination is crucial to optimum business performance.

Managing those products with multiple vendors and distributors who are the external stakeholders of the organization and connecting them with the employees to avoid wastage, inventory holdings, and stock residuals. The cost of holding that inventory and the burn rate is highly connected to the coordination and communication of the different stake holders of the organization. The fact that the fast-moving consumer good section has daily procurements and daily basis of distribution on multiple locations which accounts for their offline revenue stream is just a single section and yet very complex to manage. Handling global operations without the use of large scale information systems and technology to enhance the operations and diminish the complexity of this task will create massive problems for the organization. Hence the need identified is creating an impact on the profitability of the company by enhancing the internal communication is yet to be discovered.

## **RESEARCH OBJECTIVE**

- **To determine the relationship of information technology implementation on the internal coordination and communication and the long run impact on the profitability of the company in the competitive fmcg sector of Pakistan.**
- The study aims to categorize this development based on the scale of the company that is a part of the fmcg sector of Pakistan. It will highlight the challenges while implementing the information system, through the qualitative analysis and the final impact on profitability of the company.

To test this concept, it was vital to have 2 major hypotheses which will aid in directly identifying the relationship between these 2 variables.

**H1) There is a positive relationship between Communication & Technology.**

**H2) There is a negative relationship between Communication & Technology**

## **QUALITATIVE DATA FROM SHAN FOODS (organization #1)**

Shan Foods is a Pakistani food company that uses information technology (IT) in various ways to improve its operations and reach customers. Some examples of how the company uses IT include:

- **Website and online ordering:** Shan Foods have a website where customers can learn about the company and its products, as well as place orders for delivery or pickup.
- **Social media:** The company uses social media platforms such as Facebook, Twitter, and Instagram to connect with customers and promote its products.
- **Marketing:** Shan Foods uses IT to analyze customer data and create targeted marketing campaigns to reach potential customers.
- **Supply chain management:** The company uses IT systems to manage its supply chain, including inventory management and logistics.
- **Sales and distribution:** IT systems are used to track sales and distribution of the products, to optimize the supply chain and reach the customers effectively.

- Overall, Shan Foods uses IT to improve efficiency and reach more customers, allowing the company to grow and thrive in the competitive food industry.

Apart from the general information listed above the employees of both groups ML1 and ML2 agreed to the notion that integrating all departments of the company enhances the internal communication and creates value for organization by improving operational efficiency.

The focus group of ML1 indicated that in large scale manufacturing companies it is important to be channelized and create a smooth operating process. Similarly, production schedules vary with the sales and demand of the consumer thus affecting procurement, marketing, and the finance department. The way a product is just placed on a shelf has a huge, automated story behind it.

The conversion of raw materials to the product itself requires interaction of multiple departments since an organization is completely interlinked internally. The value that automation brings to the operations is costly but creates a major significance solving major issues such as inventory management, dead stock and reducing burn rate.

The upper management stated how shan foods used in house solutions before signing a contract with SAP PAKISTAN. In 2020 SAP's S/4HANA Private Cloud edition is a software solution was installed that allows businesses to manage their operations and processes more efficiently. By implementing this solution, Shan Foods will be able to use the advanced capabilities of S/4 HANA, such as integrated business planning tools (IBP), strategic HR (SuccessFactors) and business analytics tools (SAC).

These tools will help Shan Foods to optimize their business operations and gain insights for making better decisions by improving internal coordination. Sikandar Tiwana, CEO of Shan Foods, recognizes the importance of using digital solutions to innovate business operations and improve customer relations. He believes that digitization is now essential for businesses to stay competitive and meet the needs of their customers. The implementation of SAP's S/4HANA Private Cloud edition will not only streamline operations and improve efficiency, but it will also ensure consistency and enhance the overall quality of work.

### **QUALITATIVE DATA FROM NATIONAL FOODS:**

The employees from national foods were in favor of H1 which shows their tendency to be adopters of the new information system. The employees displayed a high rate of conviction, especially the employees in ML1 as they credited it as a strong pillar for the future of large and small scale industries. The way it was regarded as a necessity by one of the supply chain's analysts showed the determination of the organization as a single unit. Since national is a much older player in the market and used other in house solutions to improve the export it showed great numbers in terms of revenue projection and increasing your scale became very easy as the efficiency was not a barrier to worry about.

National Foods Limited (NFL) has implemented SAP S/4 HANA to further support its focus on innovation and customer satisfaction. By investing in this cutting-edge software, National Foods will be able to enhance its systems, and continue providing high-quality, globally loved food products. The implementation of S/4HANA will enable the company to drive business operations more efficiently and make data-driven decisions, helping to stay competitive in the market. The revenue stream has largely increased as said by the general manager of sales since globalized sale and exporting products is much automated and efficient rather being manual and slow.

National Foods is working with PwC as its implementation partner to implement a transformational program that involves upgrading to the latest version of SAP's S/4 HANA Enterprise Suite and adding additional cloud-based applications from SAP to provide an all-in-one solution for customers. The CEO of National Foods, Abrar Hasan, claims that this new program will improve the company's business processes and provide an improved customer experience. However the ML2 indicated an important cost benefit analysis that determines the output on the profitability of the company. "The margins might be reduced for a certain period, but the long run impact will create a huge difference as said by the Chief manager of the productions

#### **QUALITATIVE DATA FROM COCACOLA PAKISTAN:**

Having a direct connection with the SAP team of Coca cola Pakistan, a large access to quality information was provided. Consumer brands that belong to the beverage sector are all about important large scale distributions managed along with the mindset and behavior of their consumer. This is where internal coordination becomes just as crucial as the marketing and promotion of the product.

According to our participants the system plays a huge role in enhancing the internal communication and amalgamates multiple departments which in turn improves the communication by bringing everyone on a single database and ensures achievability of the strategic goal of the organization.

ERP is a software system that helps organizations manage and automate their business processes. It brings together various functional areas such as finance, HR, manufacturing, and supply chain management into a single integrated system. This allows for better communication and collaboration between departments and helps to improve the overall efficiency and effectiveness of an organization. Additionally, ERP systems provide a central repository of data that can be used for decision-making and strategic planning. Overall, ERP is a crucial tool for companies looking to improve their performance and drive growth.

The Coca-Cola Company has adopted the SAP ERP system to manage and automate its business processes across various functional areas. The implementation of SAP ERP in 2003 has allowed the company to gain 15,000 users across 45 countries and 175 legal entities, supporting 18 languages. The company uses SAP ERP for a wide range of services including sales and marketing, accounting services, production and supply chain management, human resources, and customer relationship management. The integration of different departments through the ERP system enables smooth transactions and data sharing, which is particularly important for the

finance and accounting departments. The use of SAP ERP has helped the Coca-Cola Company to streamline its operations, improve efficiency and support decision-making for the company.

## **QUALITATIVE DATA FROM NESTLE**

Being one of the biggest players in the market, nestle has captured a huge market share and has been one of the most early adopters of the innovative automation model. As said by the regional sales manager from the **ML2 group** “**it was difficult to adjust at that particular time**”. The excellence in customer acquisition, internal coordination, cross coordination of multiple teams throughout the business operations are commendable feats acquired by the organization as a single entity.

Various departments used several pieces of software prior to the installation of SAP, but none of them were interconnected. They failed to predict demand. Better software was required because they had to manually enter the data into their old software. Head office was not connected to the data base. The problem of inefficient departmental organization occurred.

The crucial stage is Nestle Pakistan's migration to SAP (System Application Products), one of the most globally linked business application platforms for ERP (Enterprise Resource Planning). On February 7, 2005, Nestle Pakistan completed this final migration. On that date, the new application became live across all Nestle facilities, including the corporate office, all factories, distribution hubs, and three zonal offices.

Nestle intended to combine all of its businesses, so the successful rollout of GLOBE (Global business excellence) in 2005 certainly still ranks as Nestle Pakistan's most notable accomplishment. It was acknowledged as the most effective GLOBE deployment both locally and within Nestle. GLOBE is a global initiative that connects Nestle firms all over the world so they may share knowledge and experience and learn from one another. The project is guided by three tenets. Creation and adoption of standard business procedures throughout all of the nations where Nestle conducts business. Standardization of data and information technology systems promotes improved cross-functional communication and knowledge management, as well as aids in product standardization.

**RESPONSE TABLE**

QUESTIONS	VALID RESPONSES	MISSING
Internal processes are more efficient when tasks are performed more efficiently	105	2
Short term targets are more achievable when technology is implemented for internal cross functioning	106	1
Communication within the organization has improved due to the implementation of information technology	106	1
The Employee IT skills are too low, especially in Pakistan	106	1
There is a high amount of Resistance to change within the organization	106	1
Implementation of information technology reduces data leakage and security risks.	106	1
Quality of Service has improved due to IT implementation.	106	1
There is a huge Lack of awareness regarding the benefits of IT	106	1
There is a vast perceived critical barrier in the adoption of information technology inside the organization.	106	1

**Descriptive Statistics And Results**

	N	Minim um	Maxim um	Mean	Std. Deviation	Varia nce
Internal processes are more efficient, when tasks are performed more efficiently	105	1	5	3.96	1.192	1.422
Short term targets are more achievable, when technology is implemented for internal cross functioning	106	1	5	3.72	1.058	1.119
Operational cost has decreased since the adoption of advanced tools relating information technology	106	1	5	3.53	1.228	1.509
Communication within the organization has improved due to the implementation of information technology	106	1	5	4.10	1.171	1.370
Quality of Service has improved due to IT implementation	106	1	5	4.05	1.150	1.322

There is a vast perceived critical barrier in the adoption of information technology inside the organization	106	1	5	3.15	1.136	1.291
There is a huge Lack of awareness regarding the benefits of IT	106	1	5	3.62	1.291	1.666
Implementation of information technology reduces data leakage and security risks	106	1	5	3.25	1.172	1.373
The Employee IT skills are too low, specially in Pakistan	106	1	5	3.45	1.318	1.736
There is a high amount of Resistance to change within the organization	105	1	5	3.40	1.015	1.031
Valid N (listwise)	104					

The results show that the mean for the statement "Communication within the organization has improved due to the implementation of information technology" is the highest at 4.10, followed by "Quality of Service has improved due to IT implementation" at 4.05. On the other hand, the statement with the lowest mean is "There is a vast perceived critical barrier in the adoption of information technology inside the organization" at 3.15. The standard deviation ranges

from 1.015 (for "There is a high amount of Resistance to change within the organization") to 1.291 (for "There is a huge Lack of awareness regarding the benefits of IT").

The correlation between "Short term targets are more achievable, when technology is implemented for internal cross functioning" and "Internal processes are more efficient, when tasks are performed more efficiently" is .443 and is significant



## RECCOMENNDATIONS AND CONCLUSION

The results have supported the claim that:

**There is a positive relationship between IT and internal communication.**

The data being mean centric has collected most responses (both qualitative and quantitative) as people agree to the notion of IT being one of the most critical sources to establish operational efficiency. Today Nestle has established a growing percentage of more than 200% in terms of revenue and is only possible because of the level of barrier they crossed from 2005 since the beginning of implementation of such large systems.

To improve the impact on the profitability of the company it is important to consider the following recommendations.

**Adoption of cloud-based communication tools:** By using cloud-based communication tools like Google Workspace or Microsoft 365, organizations can provide a centralized platform for internal communication, file sharing, and collaboration.

**Implementation of instant messaging:** Instant messaging tools like Slack or Microsoft Teams can be used to improve real-time communication between employees, enabling them to quickly ask questions, share information, and get feedback. **Integration of project management software:** Integrating project management software like Asana, Trello, or Jira can help in tracking the progress of tasks and projects, ensuring everyone is on the same page. **Automation of repetitive tasks is essential.** Automating repetitive tasks such as sending regular reports, reminders, or updates can save time and improve efficiency. **The use of video conferencing is vital to enhance internal communication.** Video conferencing tools like Zoom, Skype, or Google Meet can be used to conduct virtual meetings, reducing the need for physical meetings and improving remote collaboration. **Encouraging employee feedback is good for evaluative purposes.** Encouraging employees to provide feedback on the communication tools and processes used in the organization can help in identifying areas for improvement and making necessary changes.

By implementing these recommendations, organizations can improve the automation of their internal communication processes and enhance the speed, efficiency, and accuracy of communication, leading to increased productivity and profitability.

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