**IS5002 ASSIGNMENT – 3**

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**Q1 (10%) Pick a business sector (you know more about it) and provide ideas and suggestions for digital transformation based on the five principles mentioned in the case (i.e. how the principles can be applied within the selected business sector)? Justify your answers.**

Food and Beverage Industries has undergone digital transformation extensively in the last two decades. Food and beverage (F&B) manufacturers are looking out for new strategies for smooth operations, growth in sales and generate more profit. Digital Transformation is a boon in this technology adoption era. But, it is not just adopting the technology but adopting the technology in right way is the key to successful business transformation.

For successful business transformation, the company must identify the business – critical objectives with necessary supporting data as proofs. Most of the Food and Beverage Industries have issues in tracking the raw materials, handling the local market suppliers and workers, adopting to new technology of selling the goods and not knowing what to do with the availability of huge raw data about sales. The supply and demand data should be analysed to meet the demands and to avoid wastage of food and beverages.

The main focus in this case study is to improve the business in Food and Beverage Industries operating globally. The industry can use below principles to transform digitally and eventually, improve the business.

1. ***Template Based approach***

Food and Beverage Industries can employ a template based on the business requirements. It must identify the challenges faces by the company. Few are the below challenges and the solutions it can employ to resolve the issues.

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| Challenge | Solution |
| Globalisation | With huge market comes heavy competition. A company has to prepare well to manage the competition by other local or multi national companies. |
| Tracking of raw materials | Companies can employ the robots that move throughout the store to scan shelves and alert the managers to the state of inventory/ raw materials in real time. |
| Expiry of the Products | Companies can utilize softwares to alert the expiry date of the products before few days to sell the products in discount/sale |
| Workers and Automation | As the cost of maintaining employee has increased, companies has to look out to automate few processes such as billing, security checks |
| E-commerce | With the advent of technology, consumers expect the goods to be delivered at their doorsteps. So, E-commerce has to figure out ways to deliver goods efficiently using technology. But that alone is not sufficient for successful improvement in business. Companies has to focus more on the consumer’s experience. |
| Tracking of Supply and Demand chain | There are many dimensions in supply and demand chain. Business analytics and big data can be used to understand the trends of the business. |
| Social Media | Improving the brand name is one of the key factors for successful business. The social media can be used as a platform to take feedback from customers as well. But the availability of the data is huge and companies have to have their own strategies in utilising this data efficiently. |
| IoT | IoT is the latest buzz word and it is also part of digital transformation IoT is anything that connects to the internet which is grocery scanners, inventory databases, billing machines and factory machinery. |

Based on the above challenges, companies have to prepare templates and employ it in few locations as phase 1 and can expand the transformation based on the success of the plan. The template must be followed till it achieves the expected results and the templates should be focussed with reusability capabilities. Any deviations in the template plan have to be informed to the template owner who is responsible for implementation the strategies in that location. Hierarchy of reporting will help in better governance. So, the template owner must report to global owner when there is a deviation in the plan. All the successful transformations plans must be replicable to each location. The time and resources required to implement this plan must be estimated to achieve expected results. The plan must be strategized based on the local and global impacts.

The template-based approach can resolve two main tensions in the Food and Beverage industries: standardize the existing business process and concurrently replace legacy IT systems. The newly designed systems should be centralized, and old business process is replaced with new ones in the process of digital transformation.

1. ***Business Driven***

Higher management vision is extremely important in Digital transformation of any business. Every business is different, so the transformation plan must be customized according to the challenges, requirements and target of the business. Food and Beverage Industries must focus on its traditional business and try to improve the business with advent of technology.

Higher Management should be ready to take risks with new technologies and risk mitigation techniques must be employed. Expertise from different areas will help in improving the business and the companies should be ready to take bold steps to move away from its traditional business style. Employees must be trained to adapt to the new changes at work such as usage of scanner machines to manage the inventory, billing machines to automate the billing process, automated vending machines. All the above-mentioned improvements are necessary for survival of the business but not sufficient enough to compete with other competitors in the market.

Food and Beverage industries can use Big Data Analytics to understand the trends of the market. For ex: The company can identify the most sold or least sold product in particular area. Once the trend is analysed, the companies can focus on supply and demand. Companies can take feedback from its customers to improve its own product using Social Media platforms. Companies should have open mind when receiving the feedback to improve the business in a better way. It can also use the platform to promote products.

Companies must have unique strategy in promoting their product. For instance, *dominos pizza promoted the change in its products “Oh Yes we did” campaign where the company accepted that their food is not good based on the feedback from the customers”.*  They highlighted the fact that they improved the food according to the preference of the consumers. Consumers can order the food in the most convenient way using web, mobile applications and even provided with an option of tracking their food which was unique when it was first time introduced. Marketing strategies included the promoting of products to improve the brand image. They also promoted their need to change and how they changed by providing a transparency to its consumers. From the strategies employed by dominos, we can conclude that the digital transformation strategy can be done in two phases. The first phase of the transformation should be based on getting the fundamentals of the business right which includes understanding their own products, competitors and the feedback from the customers. The second phase is to improve the experience of the consumers such as easy order, door step delivery, tracking of the food. The other side of the second phase should include the loyalty programs to lock – in the consumers.

1. ***Matrix Organized***

To build a strong operational backbone, collaboration between different teams and managing individuals is necessary. Having global ownership rather than IT or local ownership is the key criteria to build a strong operational backbone for the transformation.

A matrix is program for cross collaboration between different projects and teams to fill the gaps of responsibility in an organisation. The matrix must be designed to handle the uncertainties in the program. Top down approach in implementation any program is critical. Implementation of new strategies must be communicated with all local project managers and they can report back to Global Manager. Any deviation in the program must be reported back immediately with an explanation or reasoning. The top management such as CIO and CEO should believe in the program and their vision and must take responsibility of the assigned roles. Implementation plan must be properly funded.

Understanding the new technology trends and investing in those areas to resolve the challenges and improving consumer experience is key. Many organizations fail in implementing the new programs because of friction at the top level setting an example for the rest of the company. With the success of small initiatives, the companies can roll into big projects across other locations. The company has to strive to become an e-commerce company that sells food and beverages to handle competition and succeed in all the spheres of its business.

Talent acquisition and creating new opportunities for the online consumers must be prioritized. The connection between IT organization and the marketing organization must be in its best relationship possible. Organization’s structure should ensure that all teams work completely in lockstep. Other areas of development such as innovation, brand image, building public trust and pushing investors to take the plunge should be in focus.

For instance, *Dominos pizza has done a stunt in delivery process of pizza by experimenting the delivery with autonomous vehicles, drones, artificial intelligence, and mobile marketing.* These stunts helped the company to get wide recognition by media and there by promoting their product in an innovative way. With the help of big data and cloud infrastructure, Dominos stored the preferences of customer and “One Tap” feature is unique which allows customers to repeat an order without filling all the details again. Artificial assistants can be used to improve the customers experience in ordering the food.

1. ***Tight Supplier steering***

Raw material suppliers play a vital role in Food and Beverage Industry. Consumers expect fresh farm supplies to have a refreshing taste in their products. So, the suppliers cannot compromise on the quality of the product. To meet the necessary demand and maintain the quality, strict and clear contractual obligations must be specified with the suppliers. The contractual obligations should be custom made based on the locality of the suppliers. Suppliers should be clearly communicated with the estimated quality, quantity and time of deliverables. To implement this, we should assign a tight supplier steering committee which will handle deliverables and escalations.

The restricted supplying environment should also provide freedom to the suppliers to prove their capabilities to deliver on time and with good quality supplies. There should be “zero-tolerance” milestones which may lead to termination of the contracts. Zero tolerance policy may be stressful initially, but it will lead to the best results. Once the suppliers with low capabilities are terminated, onboarding of new suppliers is another task in phase two. The delivery related issues need to be escalated and resolved in closed doors from time to time. This zero-tolerance policy can be used in promoting the products to consumers as well.

For instance, well known coffee shops promote their products by advertising that they use high quality coffee beans from particular locations only. Food supply chains also promote their products by advertising the new suppliers as farm fresh or using the brand value of the suppliers. It is the responsibility of transformation leader to inform the suppliers about the priorities in the delivery of the products.

1. ***Program Management Practices***

The schedule of the new program planning should include the stability and flexibility and should be able to reveal the risks. The program should be designed in such a way to reduce the business complexity and should focus more on how to improve based on the local market competition. Acquiring companies at the right movement may reduce risks in the competition. Dominos Pizza also acquired and merged with many small companies in local market and expanded its business. When the risks are identified, they should be assessed before taking necessary actions. Program Leaders should be trained to handle and mitigate the risks. For instance, *Dominos Pizza has taken a bold step by accepting that their traditional Pizza quality is not up to the mark from the customer’s feedback.* They worked to improve the pizza quality and it worked very well for the company and improved the sales by 90%. But, the company’s bold step has many risks. Consumers may not receive it in the way they wanted to promote it. But in the background, the company used intensive data analytics techniques to monitor the feedback on these bold steps. It used extensive feedback on many social platforms and incentivised the loyal with free coupons when they send the feedback. The risks at every moment were handled by discussing with top management at right moment.

Planning can be done quarterly to observe the transformational changes and to analyze the progress in the approach. A goal has to be set for every team and the lessons learnt during and after rollouts of the plans need to be discussed when implementing agile methodology. Meetings and discussions with all the involved teams in the deliverables will help in understanding the business practices and all the teams together can work on the improvements.

**Q2 (10%) Once you list down the ideas for the above question; propose a process model where you need to explain at which stage(s) of the digital transformation each of these ideas can be applied?**

Experimenting with new tastes and preferences may be a bold step, but is necessary in Food and Beverage industry. Matching the tastes of the products with local cuisines/ delicacies may attract more customers. So, the digital transformation approach should be properly defined.

1. **Strategy**

Identifying the current position in the market is the first baby foot step towards digital transformation. In the template-based approach, we can identify the challenges and design solutions to resolve the issues. The new business model must try to resolve the challenges and should integrate all the teams to form a strong operational backbone. The strategy should include the efficient functioning with minimum usage of the resources. The templates have to be repeatedly used till we achieve the necessary results. The new strategy plan must incorporate the culture and must align with the strategic plan of the organisation by giving value to its core business.

1. **Design**

In design phase, the requirements must be analysed and the plan has to be designed. The template-based approach defines the responsible roles and responsibilities in the designing of the plan. In the design stage, it is highly recommended to take advice from all the expertise to use the principles of business driven.

The first task involves in establishing a network of all the experts to create a design. The second task should involve in slowly moving IT ownership towards business ownership for a better design.

1. **Construction**

The principles in Matrix organisation provides a program to work collaboratively between the internal teams and between teams of different projects. During the construction phase, the uncertainties and dependencies of the program must be identified. Once the uncertainties and dependencies are resolved, quality assurance check can be done on the deliverables.

As we develop the new digital business platform, the governance of the program must be introduced. The construction phase should identify the skill sets and the responsible process owners to manage the program.

1. **Implementation**

In the implementation phase, the old business model will be rolled out and the new business model practices are initiated. The risks will be identified in this phase and process owners should assess and mitigate the risks. In this phase, tight supplier steering should also be included as we have to identify the suppliers who are capable of delivering quality raw materials in expected delivery time. The quality assurance must be done starting from raw materials to end products.

Employees must be trained to be accountable for the deliverables in the new business process like collaborating in cross teams, working in agile environment. Proper communication of the new design plan will help in easy implementation of the design. It can be planned to implement the business model in sandbox environment. Based on the budget of the company, it can acquire small companies and try to implement the new strategies. The resulted outcomes can be analysed to improve and implement in the organisation.

1. **Operation**

In the fifth stage of Digital Transformation approach, cascaded principles can be applied as operations involve the program scheduling and tracking methodologies which will provide better governance capabilities to the organisation. The schedule adherence of the overall program must be monitored which in turn should reduce the program management complexity. Any deviation the program must be strictly reported to provide transparency in making informed decisions. Reporting will assist in identifying the challenges in operational phase and will help to resolve the issues. Delegation of tasks to different program teams will reduce the complexity of each re-planning effort. To handle the operations, company may acquire, merge and expand with small companies in the local market.

1. **Review**

In the review phase, the overall performance of the program must be reviewed. Review phase will help to optimize the resources utilised and release new versions of the plan with the amendments to address the challenges. The new version will be an enhance version of the business development model. With a strong methodology, successful digital transformation is possible.

All the above stages can be done in iterative model till the expected outcome is achieved. The initial stages of transformation may be difficult to handle by the company and employees, but intensive planning and strict implementation will improve the quality of products and will overall benefit the company. Strong methodologies used in the above stages will help us to handle the digital transformation even if they are outside the scope of the project.

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