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RESEARCH ARTICLE

E-BUSINESS PROCESSES IN FOOD SERVICES

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Abstract

Purpose: The core aim of this article is to study the influence of E-Business Processes of foodservice companies on increasing food security.

Objectives: To study the theoretical background of the creation of foodservice business processes; describe their function in the production cycle; evaluate foodservice predictors; to understand the framework on how the business processes grounded on digital technologies which have positive impact on food security.

Methodology: This paper is based on a variety of existing research on E-Business Processes in the Food Service Industry. The research employed secondary data from a literature analysis of journal publications.

Findings: The development and modernisation of digital business process management principle, as well as the intricate performance of all structural elements of the food business, including information and computer technological progressions, all helps in contributing to the firms' catering processes that are carried out efficaciously.

Originality: In the concept of production and management, the paper mentions the business process and its attributes. The study analyses the various forms and attributes of business processes in the sphere of food services, as well as their content and objectives. The researcher aims to investigate the role of modernization of business processes in the system and management process, as well as the influence on the key outcomes that define successful service market activity. The study contains foodservice industry information with its trends and issues.

Value: The study proposes a series of tech methods to enhance the business processes of foodservice companies, with a beneficial influence on food security.

Type of paper: Conceptual Research Paper.

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Introduction:-

Catering falls within the umbrella of the service sector. It is a trading bloc whose major activity is the creation of new consumer, their integration in product manufacturing, and the provision of maintenance services.

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One of the most important goals of every business, including catering, is to create an efficient business process. Business processes are currently being improved, with the discovery of modern technology and analytical methodologies. This has a beneficial influence on the growth of a catering operating value.

A business process is a framework process that describes the flow of work, as per the several scientists: Robson M., Mazur I.I., Ullakh F., Shapiro V.D., Champi J., and Hammer M. [5] It has its origin (input), several stages of operation, and an end version (output). A business process differs from other processes in that it has a business emphasis, which is a replication of few of economic activity that makes profit [1][2][10].

The business process concept is have following points as under:

- 1) Fundamental - business process takes into account primarily between four components of the organization's structure namely, inter-functional, Interdivisional, and inter-cooperative.
- 2) Element - business processes are expressed through the interaction and exploitation of any object. There are two types of such objects: informational and physical.
- 3) Operation - the application of various functions, including operational and managerial, is the fundamental of business processes.

International and Domestic scientists are not paying enough attention to the integration of business processes into realistic applications; therefore, these concerns must be thoroughly researched:

1. Identifying the location of the business process in the organization, as management is recognized as a result and a system based on pre-existing concepts. Based on the technology in concern, not all essential areas of operation (depending on the existing strategies and strategic targets) can be observed and enhanced. There are synchronized processes that may include management object operations and should be incorporated into more sophisticated ones. Uniqueness, for example, can be a process in a project to introduce service technologies, as well as a component in other functional domains [3][5][9].
2. The role of the business model is provided by the management policy. If a financial institution is entrusted with market expansion or attracting a share of public funds, this route can be recognised in a single business process that is investigated by the heads of all business units within their respective competencies, in-depth regulated, analysed, and supported through various form of pressure [4].
3. The degree to which individual actions can be regulated. Functional areas can be controlled to varying degrees depending on the industrial sector and the details of the activity. The beneficial effect will not be realized if the procedure in issue is difficult to codify. As a result, the organizational and production structure must be modified such that individual parts and processes are visible. The size and complexity of the activity can have a big impact on how processes are regulated [6][8].

According to several perspectives, the business process is approved out in two ways:

1. If the firm earns income from all of its operations - in these circumstances, the business process is not trailed if the product or service provided is unsuccessful for the producer;
2. The business process is only genuine while some financial and trade services are being provided. As an upshot, prices are higher and services are being transformed.

Related Works:-

Few western and Indian scholars have contributed their findings which are presented below in Table 1.

Table 1:- Exhibits the contribution by different scholars in the field of e- business processes.

Sr. No.	Contribution	Reference
1.	The application of technology to the automation of business operations enhances the efficiency of management practices and the service quality offered to the consumer.	[7]
2.	A comprehensive analysis of the economic situation in the transition to digitalization is required to improve the efficiency of a company's financial and economic activities.	[11]
3.	The key process drivers in leveraging platform capabilities and interactional governance into business value are a company's E-Business Processes.	[12]
4.	More and more organizations are using availability business standards and guidelines for modelling purposes, such as the supply chain operations reference framework generated by the supply chain council, the Roseetta-Net Standards, or software data models, to design and	[13]

	implement inter-enterprise e-business processes efficiently and effectively.	
5.	Establishing an e-commerce concept necessitates the creation of e-business processes that minimize company operators' expenses while sustaining expected profitability. This requires the use of business process design strategies that include ways for estimating expenses and advantages of an e-commerce notion. This necessitates the use of business process design methodologies that include techniques for estimating costs and benefits.	[14]
6.	The fundamental rethinking and drastic rebuilding of business processes to achieve dramatic improvements in essential modern performance measures such as budget, quality, service, and efficiency.	[15]
7.	Despite the tremendous potential benefits, automated e-business has only been applied by a few large organizations so far. Businesses are well aware of the high expense of automating transactions with trading partners. Standards and technologies for modelling web services-based e-business processes could reduce costs by automating code development, reuse, and interoperability, allowing business analysts and implementers to communicate more easily.	[16]
8.	New problems for the food production business are occurring as a result of rapidly expanding population, changing customer needs, and changing market dynamics. To meet existing and future needs effectively and reliably, novel technologies based on digitalization, smart manufacturing, and the cognitive factory, which have been declared for the transition to Industry 4.0, are necessary for food production.	[17]
9.	Digital revolution and sustainability are two of the most overused and promoted ideas in today's culture. On the one hand, the catastrophic repercussions of the global economic crisis, which began and continues to damage the world economy, as well as rising social disparities. Simultaneously, environmental issues like global warming and pollution are having a significant impact on countries' welfare and production, as well as destroying the world's biodiversity. Digitalization, on the other hand, is a mega-trend that is rapidly being embraced by businesses that are attempting to innovate to capitalize on the extraordinary potential presented by the digital era.	[18][19]

Objectives of the study:-

The study has the following objectives:

- [1] To explain the foundation of business processes on which digital technologies have a favourable impression on food security.
- [2] To study the theoretical background of the creation of foodservice business processes.
- [3] To describe their function in the production cycle.
- [4] To evaluate foodservice predictors.

Research Methodology:-

This study is conducted with a wide range of conceptual studies on E-Business Processes in Food Services. The study uses secondary data gathered from the literature review from journal papers and systemic and situational approaches were applied.

Discussion:-

The following cataloguing of types of catering is recognized:

- 1) Restaurant - offers food service (with or without leisure) to customers with a large selection of intricate dishes;
- 2) Bar - a business with a bar counter that sells a limited selection of alcoholic and non-alcoholic drinks, as well as varied meals and snacks.
- 3) Cafe - offers food services (with or without leisure) to customers, with a restricted variety of home-made and tailor items (in comparison to a restaurant);
- 4) Canteen - a business that is open to the public or appeals to a certain demographic of customers. Dishes are made in line with the menu, which is organized every day except weekends;
- 5) Snack Bar - a business that offers a restricted list of food items which are quick-to-prepare foods and items to which are quick to deliver.

The procedures of food service institutions are split into five discrete business processes. They are as follows [2][6]:

- 1) Logistical service for all enterprise structures;
- 2) Catering management;
- 3) Cuisine product production;
- 4) Service organization in the firm;
- 5) Realization of bought items

Business process is a sequence of associated operations (and sub-functions) carried out in a precise order by individuals or equipment in order to deliver value to an internally or externally user. Business processes exist at all levels of a business, although not all of them are observable to outside users. Flowcharts depicting the flow of activities may be used to portray a business process. Administering business processes efficiently increases a firm's productivity and efficiency. Various techniques in identifying the several types of business processes exist. As indicated in Figure 1, they are divided into three categories: main operations (which emphasis on supplying value), management processes (which emphasis on monitoring key processes), and supporting processes (which assist the main processes). On either side, it was noticed that there was a minor variance, therefore it was classified as operational processes (main business processes that produce value), management processes (continue to ensure operational processes are carried out appropriately), and governance processes (safeguard compliance with legal guidelines) [22][23].



Figure 1:- Categories of Business Processes [24].

The production and management processes are highlighted in particular in this organizational structure of business operations. At a catering company, tracing the creation and provision of business procedures is challenging. Below Table 2 shows exclusive forms of business processes of catering organizations.

Table 2:- Exclusive Forms Of Business Processes Of Catering Enterprises [1] [2][5][6].

Business Process category	Type of Business Process	Possibility of usage
The creation and evolution of the rudimentary concept	Managerial	Partial
Management of various products and services	By development	Partial
Proceeds of existing goods and services	Main	Partial
Distribution of existing goods and services	Providing	Partial
Customer Service Management	Managerial	Partial
Peoples Management	Managerial	Partial
Financial Management	Managerial	Partial
Construction, acquisition, and management of enterprise property	By development	Partial

The execution of business procedures in the catering industry should be linked to economic activity requirements as well as social efficiency. This may include tasks such as establishing client trust, marketing banking services to new market groups and obtaining benefits, and growing profitability over time. Below Figure 2 depicts a diagram of the role in the management, production, and financial process and their association of business processes in catering enterprises.

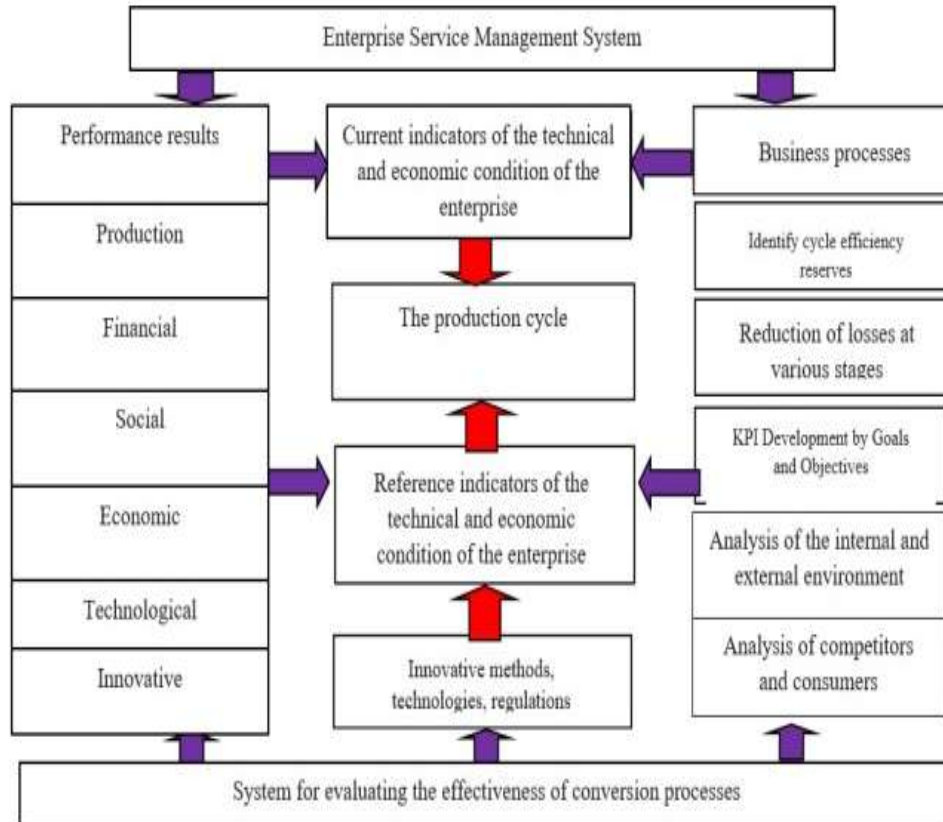


Fig.2:- Depicts the role in the management, production, and financial process as association of business processes in catering enterprises, [5].

Business processes affect all of the catering's functional structures, combining various tasks and work into a unified set with a continuous nature. The creation of a product or services are done with such procedures. The bustle of a catering enterprise is known by the integration of business processes of production and non-production types.

Accounting solutions for catering businesses have been established at this stage of computer technology development. They help to streamline, accelerate, and optimize core and auxiliary business operations.

The use of the following technologies in the automation of catering companies' operational operations raises the notch of efficiency of management adoptions [19][20], rallies the quality of services provided to customers, and entails the use of the following technologies:

1. Local automation systems, such as R-Keeper, 1C-Rarus, UNI SYSTEM Restaurant, Iiko, , and others;
2. Cloud storage - Paloma365, R-keeper7-Cloud, Quick Resto, and others;
3. Electronic menu Apps;
4. Automated information systems handle client payments promptly, enabling you to manage the order of service, and ensure that the supply of ingredients for the kitchen is accurate.
5. Smart Mobile apps to order home delivery.

The primary goal of automating business operations in catering businesses is to improve restaurant management efficiency (café, canteen) by improving customer service quality, reducing risk, and expanding the customer base. In the catering sector, automation of business operations helps to reduce capital losses due to human error, improve guest service efficiency, and efficiently apply marketing strategy.

The following are the major steps of business process automation in catering businesses:

- 1) The supplier's selection;
- 2) Selection of the individual who will be in charge of the automation;
- 3) Set up a computerized system;
- 4) Personnel training to work in this system;

5) Implement a fully automated system.

The benefits of automating business processes in the food service industry are:

- 1) Strategically implemented marketing, such as promotions, reward cards, and discounts;
- 2) An improvement in the quality of client service;
- 3) Execution of business operations under your control;
- 4) Streamlining the activities of the company's many offerings;
- 5) Inventory management and inventory control automation;
- 6) Keeping track of the effectiveness of individual catering units as well as the catering industry as a whole;
- 7) Reducing the likelihood of human mistake (including theft);
- 8) Increased profit.

In India, the catering industry is booming. The domestic catering market experiences year-on-year growth in turnover. The industry's ongoing evolution as well as efficient business process models for achieving high levels of product development. Every year, both the number of catering businesses and the overall market turnover increase.

Restaurants, cafes, and bars are among the businesses with the fastest growth rates. It also has a favourable impact on the exchange of business acumen and the development of successful business process models.

In general, the dine out trend in India has declined. This depicts there is lack of effective business procedures for the creation of proposals for diverse client groups, and, as a result, consumers hesitation to spend money in restaurants and cafés. The number of constructed businesses has likewise reduced. Currently, the industry turnover shows a favourable trend. In this digital era, every sector, it reflects the efficient management of business operations.

However, the application of business processes in catering enterprises faces several glitches:

- 1) In the execution of business operations, there is a lack of norms and rules;
- 2) Deficiency of a unified management approach and software implementation - in some businesses, the business process is only evaluated from the aspect of production automation, ignoring the foundation of the management process;
- 3) The perspective of a business process as a software package - the implementation of such processes will not yield positive results unless the management methodology is changed effectively.
- 4) A lack of a systematic approach to the development and reformation of business processes, which might harm the entire management system;
- 5) Personnel unreadiness and inadequate qualification.

The link between enhancing the performance of foodservice businesses through business procedures is shown in Figure 3.

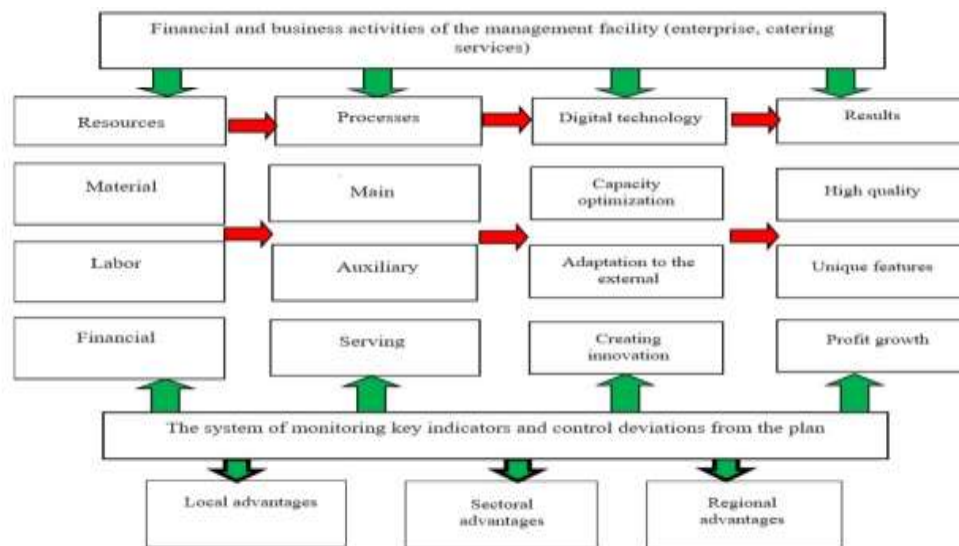


Fig. 3:- The link between enhancing the performance of foodservice businesses through business procedures [5].

In foodservice businesses, efficient business process organization can help them gain competitive advantages in critical areas such as resource management, people, and financial and economic capacity. The control of each step will allow for the identification of appropriate and weak regions, as well as the determination of quantitative and qualitative expansion capacity indicators. The automation of business processes will have a positive impact on labour productivity, technological process time, and cost reduction. This will boost the industry's profits in general while also improving the region's food security [20][21].

Conclusion:-

The business process is a management and production technique that may be used to establish and control any type of firm. Because the field of public catering services is continually advancing, improving the efficiency of regional businesses has a wide range of beneficial consequences, including increased profitability of organizational strategies, income of funds and improved customer service.

For effective implementation of the company's catering activities, the development and implementation of a business process management concept, as well as the effective implementation of the intricate of all structural components of the restaurant business, including computer technological advances and information are the contributors.

Existing issues in the use of business processes in catering businesses can be addressed using techniques such as:

- 1) Incorporation of the Universal Body of Knowledge on Business Process Management into all catering businesses, as well as following the Association of Business Processes in Professional Managements lead in establishing business process standards;
- 2) Development of rules based on digital technologies and machine-to-machine interactions that strengthen the link between the enterprises different business processes, divisions, and services;
- 3) Enhancing management personnel abilities to boost competence in the creation, implementation, and administration of business processes;
- 4) Changing business process management techniques and synchronizing digital regulation technologies at the same time as the company's numerous tasks and goals are being implemented.

With financial and economic stability, resource conservation, and increased labor productivity will indeed be assured through qualitative development of the industry business operations will help to enhance the food security of the areas.

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