

Atmanirbhar Bharat Abhiyaan a call to the nation for self-reliance

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Abstract: The Atmanirbhar Bharat Abhiyaan (Self-reliant India campaign) declared the Special economic package of INR 20 lakh crores - equivalent to 10% of India's GDP - to fight COVID-19 pandemic in India. The central point of the concept is to make the nation self-reliant with more focus on local manufacturers and service providers. The aim is to make the country and its citizens independent and self-reliant in all senses. At a time when the world is suffering from a deadly epidemic, India plans to convert this crisis into an opportunity and reinforce its fight by becoming Aatmanirbhar or self-reliant

Keywords: Atmanirbhar Bharat Abhiyaan, self-reliant, pandemic

Introduction

The intended objective of this plan is two-fold. First, interim measures such as liquidity infusion and direct cash transfers for the poor will work as shock absorbers for those in acute stress. The second, long-term reforms in growth-critical sectors to make them globally competitive and attractive. Under this campaign, a special economic package has been released by the government, which will benefit various segments including cottage industry, Micro, Small and

Medium Enterprises (MSMEs), labourers, middle class, and industries, among others.

Objectives of the study

To examine the relevance of Atmanirbhar Bharat Abhiyaan

To identify the five pillars of India's self-reliance campaign

To expose the complete break-up of the package launched to make India 'self-reliant'

To Explore the challenges of Atmanirbhar Bharat Abhiyaan

Methodology

The present study is descriptive in nature. The data required for the present study are collected from secondary sources. The study was mainly focused on the facts and figures drawn from the Reports of the Prime minister and Finance minister of Government of India, and various articles published by experts in this field.

Various reasons for the introduction of the scheme

To drift from Globalization to Localizations: To achieve self-reliant, sectors such as pharmaceuticals, food, leather, furniture, clothing industry, electronics, plastics, toys etc. shall revamp their processes of pronouncement to a local level which were earlier dependent widely on Chinese products.

Analysing the factors influencing information security culture in an organization using DEMATEL technique

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Abstract: *The need to protect information as one of the assets in the organization and mitigate the issues is more paramount than before. Typically, management considers information security governance under the jurisdiction of information technology department, segregated from management's main business operation. This paper investigates the issues related to information security. It further identifies six key factors influencing the information security culture in an organization. The six factors are Behavioural, Change Management, Information Security Awareness, Organizational System, Security Requirements and Knowledge. The study theoretically says that Change management has high influence in developing Information Security culture.*

Keywords: *Multi criteria decision making tool (MCDM), DEMATEL, Cause and Effects digraph*

Introduction

Information security is defined as the activity to protect information from a wide range of threats in order to ensure business continuity, minimize business damage and maximize return on investments and business opportunities. Information security culture is part of the organisational culture depicted from various facets. Culture relates to the way in which things are done in organisation. It relates to the behaviour and attitude of people. Information security culture is defined as the assumptions of which types of information security behaviour are accepted and encouraged by the employees of the organization. The quality of a security culture should, however, not only be determined by the organizational beliefs, but alternatively, by how the organization evaluates and manages the basis of truth and rationality of various beliefs that end-users and managers hold upon organization's security. As information security becomes one of the challenging issues in today's organization, it is important to create a comprehensive security culture within the organization. Organization represents a unique system as it is built based on

Antiviral role of medicinal plants

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Abstract: Medicinal plants have been widely used for treating various pathological conditions for many years and some are proved to be effective against even viral and bacteriological infections. It has been accepted that medicinal plants can provide an effective source of compounds to provide antiviral therapies. Natural, plant-derived products can be considered as potential, new drugs which provide a number of advantages such as reduced side effects, less resistance and low toxicity. This review focuses on the role of some plant derived compounds against four deadly viruses such as Dengue Virus, Hepatitis B Virus, Hepatitis C Virus and Herpes Simplex Virus.

Keywords: Antiviral agents, medicinal plants, dengue virus, hepatitis b virus, hepatitis c virus, herpes simplex virus

Introduction

Virus infection and the associated pathogenesis have been creating severe complications to the world since many decades and counteracting the serious complications of the same has become a major healthcare hazard these days. The unavailability of specific drugs, effective vaccines and side effects associated with the available medications has increased the severity of viral pathogenesis. Along with that, drug resistance to various available therapeutic options also has worsened the conditions further. Traditional

plant-based therapies have become a point of consideration these days because of less or no side effects, easy availability and comparatively low cost of production. Plants, plant extracts and specific plant-derived compounds are being monitored for their efficiency to cure viral infections and many are found as effective antiviral agents both *in vitro* and *in vivo*. This review illustrates the antiviral potential of a few traditional plants, which are commonly found in India and other tropical regions of the world, against some fatal viruses.

Dengue Virus (DENV)

Dengue virus infection is a mosquito-borne infection with high mortality rate in tropical and sub-tropical areas of the world, transmitted by the *Aedes aegypti* species. The four serotypes of DENV (1, 2, 3 and 4) cause severe dengue infections ranging from Dengue fever (DF) to Dengue Hemorrhagic Fever (DHF) and Dengue Shock Syndrome (DSS), which further result in severe complications and can even lead to death. The role of medicinal plants in alleviating the effect of DENV infection has been observed by using various types of plants and plant-derived compounds and this review highlights a few of the important ones among these compounds. According to the statistics of World Health Organization, natural products are considered as the main source of basic materials in the development of antiviral drugs based on traditional medical practices and also, traditional medicinal plants have been used for antiviral treatments in animals and humans. In the Philippines, *Euphorbia hirta*, is used in folk medicine to treat dengue fever in the rural areas and

Role of mutant TP53 protein and hormones in breast cancer: A review

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Abstract: TP53, a protein with tumor suppressive activities is located at 17p13.1 of the human chromosome. The mutations that normally occur are recessive. Dominant gain-of-function (GOF) mutations lead to uncontrolled cell division and help in promoting cancer growth. Since these mutations are capable of being expressed in heterozygous conditions, they are often associated with cancers. The mutation of p53 is one of the most frequent changes seen in cancer cells. The status of p53 with respect to the gain of functions and the inhibition of the normal functioning of the transcription factors has been well studied. But its status in the presence of hormones is not studied yet. This review can be an insight for the selective targeting on the hCG signaling pathway which might turn out very useful for the treatment of mutant p53 human cancers.

Key Words: mutant p53; interaction; hCG

Introduction

TP53, a protein with tumor suppressive activities is located at 17p13.1 of the human chromosome. This protein contains 393 amino acids and mutations that occur at 175, 248, and 273 leads to the loss of function of the protein were the mutational changes at 273 is the most common. The mutations that normally occur are recessive. Dominant gain-of-function (GOF) mutations lead to uncontrolled cell division and

help in promoting cancer growth. Since these mutations are capable of being expressed in heterozygous conditions, they are often associated with cancers. The mutation of p53 is one of the most frequent changes seen in cancer cells. In addition to mutations that arise during the growth and development of individuals (sporadic mutations), there are forms of cancer associated with the inheritance of a damaged version of p53 and also of several viruses that have evolved ways of inactivating the p53 protein. The genetic function of this gene is to prevent the cell division of the cell having DNA damage. The damaged DNA might contain the genetic changes that promote uncontrolled cell division. Therefore, preventing the cell division until the damaged DNA is repaired is one mechanism for preventing the onset of cancer. The p53 protein being a transcription factor and its pivotal role in maintaining genomic integrity has earned it the nickname "guardian of the genome".

TP53 gene mutations in spontaneous breast cancer

On an average, TP53 is mutated in 31% of all tumors included in the Catalog of Somatic Mutations in Cancer (COSMIC) database (Forbes *et al.*, 2011) and is mutated ~23% of breast cancer samples, where it is the second most frequently mutated gene after PI3KCA proto-oncogene (26% in COSMIC). Mutations in TP53 occur most frequently in ovarian (50% of cases in COSMIC), large intestine (43%), and lung (36%) cancers.

Contribution of microfinance to self help groups for rural development in India

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Abstract: *To achieve the vision of a strong Indian economy, there comes the need for the growth of the rural economy. Rural development has a significant role, because it helps to strengthen and boost rural production, socio-economic equity and economic development. Thus, micro finance and Self-Help Group (SHG) plays an important role in the upliftment of the rural poor from poverty and unemployment, thus creating sustainable livelihood opportunities which are relevant for economic empowerment. The Self-Help Group Bank linkage programme (SHG-BLP) is a significant turning point for the rural development commenced by National Bank for Agriculture and Rural Development (NABARD). It acts as a Microfinance facilitator and hence provides affordable access to quality banking services, thus creating a way for rural development. It will also motivate small entrepreneurs to start a new venture which can provide employment opportunities. It plays a vital role in the functioning and regulation of regional rural banks, which promotes the development of Trade, Industry and other production activities in the rural areas. This paper attempts to highlight the contribution of microfinance in rural development by forming Self-Help Groups, thus making India Self-reliant.*

Keywords: *Microfinance, Self-Help Groups, Economic Empowerment, NABARD.*

Introduction

Microfinance in India plays a significant role in the development of the country. It focuses on

supporting communities of the economically ignored to achieve maximum levels of asset formation and income certainty at the household and community level. Therefore, majority of the people living in the rural areas need to be uplifted and thus Microfinance for rural development infer greater significance. So, this can be attained by forming Self-Help Groups which considers rural growth. India's Self-Help Group activity has come up as the world's huge and most fortunate network of women possessing Community-Based Microfinance Institutions. The SHG Bank linkage scheme initiated by NABARD in 1992 has evolved into the world's largest microfinance project. Self-Help groups (SHGs) play a significant role in poverty alleviation in rural India as it facilitates financial transactions. It provides loans to their members at a much lower rate, which helps them a lot to meet their requirements. So, it solves problems related to poverty, lack of skills, lack of formal credit etc. Economic empowerment can be achieved through SHGs, which promotes women to take decisions with confidence at the community level and also helps to develop leadership skills.

In India, many SHGs are associated with banks for the remittance of micro-credit. SHG-Bank Linkage Programme (SHG-BLP) has become more popular in India than elsewhere in the world effectively due to its widespread backing by Scheduled Commercial Banks, Cooperative Banks and Regional Rural Banks. The SHG-Bank Linkage, led by NABARD, has proved to be an

The sectoral impact of COVID-19 on Indian economy

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Abstract: *The outbreak of COVID-19 brought social and economic system down. Even the developed economies are not able to cope with this situation. COVID-19 with its effect is wiping out wealth, man power of the economies. Every economy, in this pandemic is experiencing slowdown. Indian Economy also experienced a significant slowdown over past few quarters and seems would be facing for coming few quarters as well. While lockdowns pressures on investments and consumption putting economic activity on a standstill. The current spread has posed new challenges for the government and the economy to contain the spread. Moreover, the exports to the countries highly affected by the COVID-19 could take substantial hit. This study is based on Indian Economy wherein we analyzed five core sectors of the economy and how these sectors got affected with the crisis, such as IT, Banking, Tourism, Aviation and Automobiles, which will take a major toll on the GDP growth rate. The purpose of this paper is to focus on the impact of COVID-19 to the major sectors of Indian Economy and assessing how much it got affected in this pandemic. Here, we have choose leading companies of each sector for the assessment.*

Keywords: COVID-19, Economic impact. Sectoral impact

Introduction

The economy of India is characterized as a developing market economy. It is the world's sixth-largest economy by nominal GDP and the third-largest by purchasing power parity (PPP). According to the IMF, on a per capita income basis,

India ranked 142nd by GDP (nominal) and 124th by GDP (PPP) in 2020. From independence in 1947 until 1991, successive governments promoted protectionist economic policies with extensive state intervention and regulation which is characterized as Dirigisme. Since the start of the 21st century, annual average GDP growth has been 6% to 7%, and from 2014 to 2018, India was the world's fastest growing major economy, surpassing China. Historically, India was the largest economy in the world for most of the two millennia from the 1st until 19th century.

Pandemics are large-scale flare-ups of irresistible illness that can enormously increase dreariness and mortality throughout the world and cause critical financial, social and political disturbance. Facts recommends that the probability of pandemics has expanded over the past century since of expanded worldwide travel and integration, urbanization and noteworthy misuse of the common environment. These patterns likely be proceed and escalating. Notable approach consideration has centred on to distinguish and restrain from development of flare-ups that might lead to pandemics. There is a need to grow and maintain attentiveness and well being capacity.

In spite of these changes, critical holes and challenges exist in worldwide widespread readiness. Progression toward assembling the IHR has been uneven, and numerous nations have found themselves incapable to meet essential necessities for compliance. Numerous episodes, eminently the West Africa Ebola plague have uncovered crevices related to the opportune

Make in India - A step towards excellence with respect to FDI inflows

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Abstract: India is one of the world's largest emerging economies, based on nominal GDP and the per capita income globally. Indian Business beholds great pride and legacy, in developing India standards and boundaries, both in National and International markets. The Make in India Campaign, launched in 2014, played a major role in appraising the entire economy. Make in India is a national level initiative, functions to transform India into a manufacturing hub and perceive a global design. Make in India campaign owed to guide and support rising entrepreneurs, irrespective of sectors and invest in India. One of the major aims of the Make in India campaign is to accelerate the Foreign Direct Investments (FDI) into the Indian economy. FDI boosts the manufacturing as well as the services sector and enhances our national integrity, creating direct benefits such as new investments and employment opportunities, which in turn uplifts the government tax reserves and stabilises foreign exchanges. Therefore, it is very relevant to study the FDI trends in our nation and find out the underlying benefits. This study aims to reveal the impact of the Make in India campaign with respect to the Foreign Direct Investments (FDI), within each economic sector and analyze the relationship between them. The present study is a comparative analysis between the Foreign Direct Investments (FDI) of the major economic sectors in India, before and after the launch of the Make in India campaign. The correlation between the sectors helps us analyse the impact of Make in India Campaign.

Keywords: Make in India, Indian Business, Economic growth, Foreign Direct Investment (FDI), Gross Domestic Product (GDP).

Introduction

The Indian economy has manifested itself globally with its fast-growing economy and massive potential. A well-built institutional infrastructure, resilient private sector, brisk technological advancement, skilled human resources, rising middle class, dynamic entrepreneurial customs, increasing productivity, etc made India, the world's fastest-growing economy. To enhance the ease of doing business and to boost procurement, investments, as well as exports of Indian goods and services, the Government of India, took several initiatives including Make in India, Government e-marketplace, Start-up India, etc.

The Make in India campaign was a part of nation-building initiatives, to transform India into a manufacturing hub, and to attract more FDI. Make in India was more than a mere slogan. It was a rallying cry to Indian business leaders as well as citizens and an invitation to prospective investors and partners across the world. As the first step, The Department for Promotion of Industry and Internal Trade worked to build the brand new infrastructure with the assistance of specialized agencies. This infrastructure included a help desk as well as a website packed with details including key facts and figures, policies, and sector-wise details. Also, this initiative has been constructed on the foundation of various collaborative efforts. These efforts established the public-private partnership which later became its hallmark.

A study on major takeover in India and its impact on business

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Abstract: *The concept of Takeover is an act or an instance of assuming control or management of or responsibility for doing something. The term Takeover, Acquisitions and mergers are related and also a common term in a business world. This term now being increasingly used the world, to improving competitiveness of companies by gaining greater market share, broadening the portfolio for reducing business risk, also for entering new markets and geographies, and also capitalising on economies of scale etc. A takeover, or acquisition, is usually the purchase of a smaller company by a larger one. It can produce the same benefits as a merger, but it doesn't have to be a mutual decision. Acquisitions or Takeovers occur between the bidding and the target company. Mergers and acquisitions have one motive in common which is to protect or improve the strength or profitability of the dominant company. In India, the term Merger has become a familiar term in Banking Industry. This study aims to understand major Takeover, Mergers and Acquisition in Five different Sectors in India, its Sector types and its impact on business. The present study is a comparative analysis between the turnover before Takeover, Mergers and Acquisition and the turnover after Takeover, Mergers and Acquisition.*

Keywords: *Takeover, Merges, Acquisition*

Introduction

Mergers and takeovers (or acquisitions) are very similar corporate actions. A merger involves the mutual decision of two companies to combine and also become one entity. This can be seen as a decision made by two "equals." A takeover, or acquisition, is mainly the purchase of a smaller company by a larger one. This may be structured in a multitude of ways. Whether both parties are in agreement or not, will often influence the structuring of a takeover. If a company owns more than 50% of the shares of a company, that is considered controlling interest. Controlling interest requires a company to account for the owned company as a subsidiary in its financial reporting, and this requires consolidated financial statements.

A takeover occurs when one company makes a successful bid to assume control of or acquire another company. Takeovers can be done by purchasing a majority stake in the target company. Takeovers are also commonly done through the merger and acquisition process. Takeovers are typically initiated by a larger company seeking to take over a smaller one. They can be voluntary, meaning they are the result of a mutual decision between the two companies. Takeovers can take many different forms. Welcome or Friendly takeover usually be structured as a merger or acquisition. These generally go smoothly because

A comparative study on digitalisation in banking, media and entertainment services

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Abstract: Digitalization is defined as use of digital or computer technology to change the business model and provide new revenue and value-producing opportunities; it is the process of moving to a digital business. In the present outline, the demand of banking is anytime, anywhere banking, this requires Contemporary robust secure optimized and ready to meet the expectations of empowered and tech sharp customers. Digital transformation is just moving from traditional banking to a digital world. It is a vital change in how banks and other financial institutions learn about, how to interact with and satisfy customers. An effective digital transformation begins with an understanding of digital customer behaviour, preferences, options, requirements and aspirations etc. This transformation leads to the major changes in the organization from product centric view to customer centric view. This paper covers the concept of Digitalization in banking, Media and entertainment services and how it will be related to self reliant India. The study also found that the digital banking is having enormous potential to change the landscape of financial inclusion. Easy use of digital banking can accelerate the integration of unbanked economy to main the integration of unbanked economy to mainstream. In last two decades, entertainment Industry has been made a name as the fastest growing industries in India. Media and entertainment industry finding itself in digital media also. The growth in this industry highly depends on the revenue generated by advertising sector. Change is constant in this industry.

Keywords: Digitization, Banking in India, Innovations, Technology, Media and Entertainment industry, Digital Media.

Introduction

Digital Transformation means adapting the digital technology to transform services or business, by replacing the non-digital or manual processes with the digital processes or replacing the older digital technology with the new.

Digitization is the transformation of data into a digital format with the adoption of technology. Digitalization is very important for the banking sector, by embracing digitalization, banks can enhance customer services.

The current world is dominated by the concept called "Digitalization". The Digitalization has become useful for Indian Banking sector, which play a major role in forwarding the financial inclusion and which is mainly providing better services to customers along with an opportunity to gain more in future. Indian banking sector is achieving an enormous growth in recent years, encouraging higher amount of capital formation, which is due to the digitalization of banking. The government of India has introduced Digital India with the aim to transform India into a digitally empowered society and knowledgeable economy.

Advantages of digitization in banking

Improved customer experience.

Reduction of costs for banks and customers as well by using ATMs, cashless transactions etc.

With more digital data available with banks, they can take data-driven dynamic decisions by using digital analytics. This benefits both customers and banks.

Growth of Indian business management and application of industry 4.0

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Abstract: India one of the fastest growing economic, offers a plethora of investment opportunities across various business sector. In this sector we are discuss different sector of Indian business growth such as Manufacturing, Telecommunication, Pharmaceutical etc. In 1990, total trade as a proportion of Indian gross domestic product (GDP) was around 13 per cent today it is 40 per cent. The industry 4.0 technology is an opportunity to change the economic rules of the industry. As we know India is in its verge of development. It is very important to understand India's thrust towards "Make in India". Thus, it is important for an India to adopt industry 4.0 technology and to get adapted to the same. This in turn contributes in the development of Indian economy. This paper addresses the growth of Indian business in different sector and its application of 4.0 industry.

Keywords: Indian business, Industry 4.0.

Introduction

In India, the sixth-largest manufacturing country, the manufacturing sector forms an integral part of the country's long-term vision as seen by the government's strong focus on the 'Make in India' campaign. The government aims

to augment the share of manufacturing in GDP to 25 per cent from the current 17 per cent, by 2022.

A number of initiatives and policy reforms, such as implementation of the GST (Goods and Services Tax) and easing FDI policy have been taken by the government. The fourth industrial revolution as it is called, is emerging globally as a powerful force and is being touted as the next industrial revolution. It is characterized by the increasing digitization and interconnection of products, value chains and business models. Industry 4.0 is driven by an amalgamation of emerging technologies like data volumes, computational power, Internet of Things (IoT), business analytics, augmented reality, artificial intelligence, elemental design, simulation, advanced robotics, additive manufacturing, sensor-based technologies and cyber-physical systems. Industry 4.0 would mean the convergence of real and virtual worlds - the next phase in bringing together conventional and modern technologies in manufacturing. This will result in the "Smart Factory", which is characterized by versatility, resource efficiency, ergonomic design and direct integration with business partners for manufacturing.

Literature Review

Though India banks heavily on its Service Sector for growth, the Manufacturing Sector needs

Future work strategy of Indian business: An analysis of pre and post COVID-19 situation

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Abstract: *The future of work is now Globalisation, digitalisation and other mega-trends are bringing radical shifts to how we live and work. It is being shaped by two powerful forces: The growing adoption of artificial intelligence in the workplace, and the expansion of the workforce to include both on- and off-balance-sheet talent. There is a lot of speculation about how the future of work will look, feel, and function. We are already experiencing dramatic shifts in the way we work, being driven and enabled by new digital-experience platforms and artificial intelligence, creating an experience that is self-directed and adaptive. Once the immediate threat of the virus has passed, companies will need to consider the impact of these changes on the way we design, communicate, build and run the experiences that people need and want. The present study focuses on analysing work strategy for pre and post COVID-19 situation in IT industry, Banking industry and health care industry.*

Keywords: *Work strategy, Future of work, Digital transformation, AI*

Introduction

The future of work is already emerging—now is the time to anticipate and design the experiences that align skills with business needs. Strategy needs to focus on empowering employees to

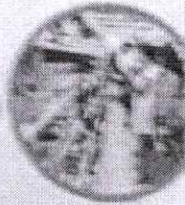
develop their skills and to stay relevant in a fast-moving digital, agile environment. A solid strategy and conviction to be proactive is needed to advance digital transformation and ensure a workforce that is prepared to solve new problems across a varied landscape of changing business services and solutions and ever-evolving customer demands. Companies proactively anticipating the 2025 or 2030 future of work dynamics and focusing on digital transformation are significantly improving their opportunities to improve both the employee and the customer experience, increase speed of innovation, increase productivity.

Today's strategic rethink provides a catalyst for accelerating operational transformation, developing new business models and connecting more closely with customers. The corona virus outbreak has forced companies to re-evaluate how contact centers are leveraged, how employees deliver relevant customer experiences, where they work, and how digital channels can be used to support business continuity through the crisis and beyond. The global COVID-19 pandemic has forever changed our experiences as customers, employees, citizens, humans and our attitudes and behaviours are changing as a result. Once the immediate threat of the virus has passed, companies will need to consider the impact of these changes on the way we design, communicate, build and run the experiences that people need and want. The six digital capability which rapidly

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A study on how E-learning drives India to be self-reliant

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Abstract: A learning system based on authorized teaching with the help of electronic resources is known as E-learning. While teaching can be based in or out of the classrooms, use of computers and the Internet forms the major component of E-learning. The concept of e-learning and self-reliant India plays a vital role in present era. E-learning was conducted mainly in developed countries. Online learning activities are important for the development of any country. The study focuses on analysing the importance e-learning, techniques and methods used for e-learning and how e-learning pay path for creation self-reliant India. The basic objective of the study is to understand the concept of online learning and to examine the type of E-learning. This paper also summarizes on several opinions regarding the differentiation between traditional learning, classroom learning and e-learning.

Key words: - E-learning, Techniques, Self-reliance, Advantages

Introduction

A learning system based on standardised teaching but with the assistance of digital sources is known as E-learning. The use of computers and the Internet create the essential element of E-learning it can also be termed as a network permit

transfer of knowledge and skills, and the delivery of education is made to a large number of beneficiaries at the same or different times. Earlier, it had been not admitted wholeheartedly because it was presumed that this system be without the human element required in learning. With the quick progress in technology and the evolution in learning systems, it is now accepted by many of us.

Atma Nirbhar Bharat, which means 'self-reliant India' or 'self-sufficient India', is the sight of making India "a bigger and more important part of the global economy", track policies that are well planned, competitive and powerful, and being self-sustaining and self-generating. Atma Nirbhar Bharat does not mean 'self-containment', 'set apart from the world' or being "protectionist". During the announcement of India's economic package associated with COVID 19 the primary mention of this came within the sort of the 'Atma Nirbhar Bharat Abhiyan' or 'Self-Reliant India Mission'. Various sectors, like agriculture, medicine, education, services, business, and government setups are adapting to the thought of E-learning which helps in the advancement of a nation. By e-learning to make India a self-sustaining economy therefore any other crisis that may emerge in future could be efficiently tackled.

According to a new study by Global Market

A conceptual framework on how FDI enables India to its desirable destination-self reliant economy

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Abstract: In the wake of an unprecedented emergency (COVID-19 pandemic), all economic activities came to a standstill and this has majorly impacted the Indian economy. Intending to make the country self-sufficient amidst the tough competition, the Government of India had launched "Atmanirbhar-Bharat" - The road ahead to self-reliance. In recent years, the government has been making various business reforms to boost the economy which helps the business environment to prosper. This paper focuses on how FDI is essential for the growth of the Indian economy. FDI is proved to be a major booster for drafting a self-reliant India, as being an independent nation is highly important. The study does not focus solely on the positive effects of FDI for development but also addresses concerns about its potential drawbacks for achieving self-reliance. This paper paves way for evaluating the year wise and sector wise inflows of FDI in India.

Keywords: Self-reliance, FDI, Indian economy, foreign investors

Introduction

India is taking rapid strides on the road to become an economic powerhouse. However, FDI is an important source of investment where India has been woefully lacking. Indian Prime Minister, under *Atmanirbhar Bharath Abhiyaan*, gave a clarion

call for the country to become self-reliant, has spurred positive vibes in domestic and overseas business circles. The Self-reliant expedition does not mean that India shuts down the doors for foreign investment and technology. India, actually eyes at drafting the "Make in India" initiative stronger by inviting foreign capital, and expertise. The concept of FDI is closely linked with the concept of Globalisation and is primarily based on the requirement of foreign capital by an enterprise that is resident in the economy of the host nation. Amending FDI policy, raising foreign investment upper limit in various sectors to increase FDI inflow, and opening sectors like defence for foreign investment are a number of positive indicators of India's intent to make the FDI policy more investor-friendly. Hence, India has taken a step in the right direction by giving high priority to FDI, by removing the bottlenecks that have been hindering the investment inflows into the country and thereby open its economy for the world. Apart from being a critical driver of economic growth, FDI is considered as an important source of non-debt finance for the economic development of India. Being self-reliant is the need of the hour for our nation and definitely through capital inflows from foreign investors would help to reach the destination.

Objectives of the Study

The primary objective of the study is to analyse

Technology aided supply chain- A pathway to self-reliance

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Abstract: In today's highly competitive marketplace, it's imperative for businesses to innovate new ways to streamline their supply chain and optimize productivity. With the help of recent supply chain technology applications, which can enable us to possess more control over our business and stay before the competition. Technology can help to simplify our supply chain management which can enable our business to work more efficiently, give us more visibility and control over our inventory, and help to scale back our operational costs. Additionally, through a more stable and efficient supply chain, we will greatly enhance customer satisfaction and retention. Here during this paper, there are few ways to integrate modern supply chain technology applications into our business model and improve our supply chain management.

Keywords: Technology supported Supply chain, Supply Chain Management, Inventory, Productivity, Competitive Market.

Introduction

A new generation of shopping options through ecommerce has made supply chain management an important area of concern for several businesses. Manufacturers, suppliers, retailers, shippers and distributors are the main stakeholders within

the supply chain of producing companies, which ends with product delivery to the customer. With an increasing emphasis on technological advancements, also because the changes in customer expectations, the necessity for an integrated supply management has become increasingly important. For manufacturing companies to create substantial customer bases, digitization of business processes has become more of a necessity than a value-add proposition. Supply chain management software is meant to manage and enhance the exchange of data across various key supply chain partners to achieve such outcomes as just-in-time procurement, reduction of inventory, increase of producing efficiency and to satisfy customer needs during a timely fashion. The organizations are moving towards the virtual supply chain with help of rapid changes in technology and IT applications viz; Electronic Data Exchange (EDI), frequency Identification (RFID), Bar Code, Electronic Supply Chains, Enterprises Resource Planning (ERP) etc. it's also easily applicable in curbing the e-risks.

Methodology

This is a descriptive research and mainly focuses on collecting theoretical data with regard to technology enabled supply chain. As a part of the research many journals, articles and other official websites were viewed in collecting as many information as possible.

Women Empowerment- Awakening of a New Era

Dr. Tazyn Rahman



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WOMEN EMPOWERMENT & ECONOMIC DEVELOPMENT



Prof. (Dr.) Aftab Anwar Shaikh
Dr. Ana Mateen

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WOMEN EMPOWERMENT – A PROGRESSIVE APPROACH FOR SUSTAINABLE DEVELOPMENT IN RURAL COMMUNITIES

*Dr. Sudeep B. Chandramana

**Ms. Jinu Mary Varghese

ABSTRACT

Poverty, lack of adequate education and employment are the biggest challenges faced by women population at the bottom of pyramid. To grow and regenerate as humans in a sustainable manner, we have to find out innovative and feasible solutions that empower women. It is imperative to consider the importance of a variety of social concerns such as social equity and justice, and notion of freedom, etc. along with environmental and economic factors. For achieving sustainability at all sections of society, the need of the hour is a clear focus on empowering women who constitute the foundation of a typical Indian family. Government, Non-Government Organisations (NGOs) and Corporate are looking for new concepts and methods to operate so that true development happens to the people at grass root levels of the society. International Association for Human Values (IAHV), an international humanitarian and educational Non-Governmental Organization founded in 1997 in Geneva by H.H. Sri Sri Ravi Shankar, maintains special consultative status with the Economic, Social and Cultural Council (ECOSOC) of the United Nations and works with its sister organisation, the International Art of

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TRANSITION FROM B-SCHOOLS TO L-SCHOOLS FOR A SUSTAINABLE FUTURE

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ABSTRACT

Revolutions in information and communications, globalization, environmental and community awareness and action are driving corporate and political leaders and citizens to address the future in very different ways. As a matter of fact, sustainability will be the driving force changing the way we work and live in the 21st century. Global sustainability has evolved into a complex, dynamic term interpreting environmental, social and cultural, economic and governance dimensions in analysis discussion, policy development and implementation around the world. Companies, Government and Non-Government Organisations (NGOs) are looking for new concepts and methods to operate. Here, in addition to the role played by Corporate and NGOs, there is a responsibility for B-Schools to take up the task of shaping managers and leaders of the future. The idea behind education about and for sustainability in B-Schools is to provide tomorrow's leaders with the necessary knowledge to comprehend and embrace issues of sustainability, while driving their organisations towards economic development. This paper attempts to draw-out a functional approach for Corporate and B-Schools towards Global Sustainability.

KEY WORDS: B-School, Global Sustainability, Sustainable Development, Social Entrepreneurship.

INTRODUCTION

The World Commission on Environment and Development was initiated by the General Assembly of the United Nations in 1982, and its report, 'Our Common Future', was published in 1987. It was chaired by then-Prime Minister of Norway, Gro Harlem Brundtland, thus earning the name the "Brundtland Commission." Brundtland Report (1987) defines: "Sustainable Development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs. It is not a fixed state of harmony, but rather a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are made consistent with future as well as present needs."

The United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro in 1992 (the so-called "Earth Summit") issued a declaration of principles, a detailed Agenda 21 of desired actions, international agreements on climate change and biodiversity, and a statement of principles on forests. Ten years later, in 2002, at the World Summit on Sustainable Development in Johannesburg, South Africa, the commitment to sustainable development was reaffirmed. In the meantime, sustainable development as a concept, as a goal, and as a movement spread rapidly and is now central to the mission of countless international organizations, national institutions and corporate enterprises.

It is this context that calls for a more functional approach by the Corporate and Business Schools (B-Schools) in leading towards sustainable development. The current shift in the world's collective fortunes has also underscored the need for new approaches in business classrooms. The idea behind education about sustainability at B-Schools is to provide tomorrow's managers with the necessary knowledge to comprehend and embrace issues of sustainability, as well as the capacity to manage

and drive environmental changes, while taking their organisations to economic development.

THE CHANGING ROLE OF CORPORATE

The World Business Council for sustainable development states, "Corporates' social responsibility is the continuing commitment by business to behave ethically and contribute to economic development while improving the quality of life of the workforce and their families as well as of the local community and society at large." Thus, Corporate Social Responsibility (CSR) or 'sustainability' is not just complying with the law. It implies conscientious business where organisations have to be seen as partners in their communities and not just as profit-centres that promote only the interest of their shareholders, but as businesses having obligation towards various stakeholders.

A recent survey by PricewaterhouseCoopers of 140 chief executives of U.S.-based multinational companies found that 85 per cent of them believe that sustainable development will be even more important to their business model in five years than it is today.

Auditing and reporting on CSR to demonstrate good business citizenship is gaining significance. According to the book titled, '*Sustainability Reporting*' published by the Institute of Chartered Accountants of India, "Sustainability reporting has become a common practice in a number of countries like the USA, Europe, Japan and Australia. Sustainability reporting is yet an emerging stage in Asia, Latin America, Africa and Russia." The prominent CSR reporting standards are Account Ability's AA1000 standard, based on John Elkington's triple bottom line (3BL) reporting; Global Reporting Initiative's (GRI) Sustainability Reporting Guidelines; Social Accountability International's SA8000 standard and The ISO 14000 environmental management standard.

Although in India, sustainability reporting is not obligatory, subsidiaries of multinational companies as well as local Indian companies have started reporting on CSR. SAIL (Steel Authority India Limited), Tata Chemicals and NLC (Neyveli Lignite Corporation) were the winners of the FICCI-SEDF (Federation of Indian Chambers of Commerce and Industry- South Asia Enterprise Development Facility) CSR Awards. Tata Steel had ranked among the top 100 companies in Standard and Poor's 'The Global Reporters Survey of Corporate Sustainability Reporting'. Furthermore, the Company had secured the 'Corporate Social Responsibility Crown Award for Water Practices from UNESCO and Water Digest' for its distinguished work carried out in the water sector in India. Its 'e-Choupal' initiative got recognised in 'World Development Report 2008' published by World Bank as a transformational initiative for sustainable development of society by empowering small/marginal farmers and enabling rural wealth creation in agriculture. Indian companies like Tata group, ITC, Dr Reddy's laboratories, Ford India Limited, Paharpur Business Centre, Jubilant Organosys, etc are largely using GRI guidelines while reporting.

THE CHANGING ROLE OF B-SCHOOLS

Management institutions can contribute, to a great extent, towards the creation of an inclusive and sustainable society. Dr. C.K. Prahalad says, "To be successful in bottom-of-the-pyramid markets, managers need to possess not only contextual knowledge but more importantly right mindset and sensitivity."

There is a critical need to accelerate efforts to train the next generation of sustainable development leaders. The changing world around us demands different sets of skills from professors who teach and from the students who learn. Are business schools keeping up with change? How does one rethink the MBA content, program, design, curriculum and delivery, assessment and redesign to align with or transform these

changes? Business is not about production, costing, accounting, financing and marketing problems, and business education is not about rules and algorithms to solve them. Business is a living process of human relationships that shape the lives of all its stakeholders – customers, employees, creditors and suppliers, distributors and retailers, governments and the governed, and the local and global communities. How do business schools engage their students in the rigorous intellectual, moral and emotional exercise and standards that should be the very heart of business education?

This necessitates (re-)designing degree programs that are more flexible, integrated, and experiential. It is required to cultivate a wider range of skills in teachers and students alike - including those of critical thinking, business justice and faith, good judgment, moral reasoning, personal awareness, and social entrepreneurship.

Given our discussions thus far, how can B-Schools train out students to become more conscious about sustainable development? By the time they graduate, do they know their values, discover their unique core skills and competencies, discern what is meaningful to them and what they really want to do, to be, and to become? How do these students factor in prospects like money, fame, power, personal values, and quality of life in their job career choices? Are money, fame and power the only drivers of their career choice? On the other hand, to what extents do the outgoing graduates put a high premium on doing good in the world? How do B-Schools train students to the fundamental virtues of integrity, moral courage, wisdom and justice?

Business school education should have both rigor and excellence. We should strive for and encourage new ideas, especially those that have lasting social impact. Refining the art of business management and business education is important because companies can be a powerful positive force for the greater good, and have potential to achieve more. In our world, the corporations are best equipped and most powerful to bring about change that can nurture a faith that does business justice. Management institutes need to ensure that ethics and social responsibility get seamlessly integrated in all the three phases of management education, viz., input, processes and output. They can also, more specifically, take initiatives:

- To revise core courses to address education for sustainable development
- To develop new optional courses on sustainability
- To offer new resources for sustainability including industry case studies
- To encourage the integration of international experience to promote change and research
- To participate – through tie-ups with NGOs – in sustainability projects

Hence, a revolutionary change in the way of imparting knowledge and ideas from a sustainable point of view result in B-Schools shifting its orientation to L-Schools (Leadership Schools).

CONCLUSION

Future leaders need new skills and competencies to cope with increasing social and environmental challenges across a changing competitive landscape. The business community has both the opportunity and responsibility to demonstrate that it can contribute effectively to influence the sustainability agenda. The private sector is seen as a key provider of solutions and is increasingly expected to contribute towards sustainable development. The need for ethical business practices for sustainability of enterprises was emphasized by Peter Drucker, "A good company is focused on long term survival. Profit is not the purpose of the organization but the measure of its efficiency. It gives primacy to human beings. It exists in a web of social relationships".

Management institutions can contribute towards the creation of an inclusive and sustainable society by shaping tomorrow's leaders with more responsiveness about

sustainable development and social entrepreneurship. Thus, B-School education should not only impart wisdom that discerns clearly good from evil, right from wrong, truth from falsehood, and the just from the unjust, but also empower students with moral courage to make choices that are more good than less good, more true than less true, more right than less right, more just than less just, and more challenging than less challenging. In other words, B-Schools should empower their students to integrate the mind (IQ), body (PQ), heart (EQ) and the spirit (SQ) in the balance of intellectual and moral reasoning (Covey 2004). Tomorrow's Leaders are required to provide prudent business leadership as a catalyst for change towards sustainable development and to foster the business to operate, innovate and grow.

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Socio-Economic Repercussions of Covid-19 Pandemic

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Sustainable Business Practices for the Post-Covid Age

Dr. Sudeep B. Chandramana

Abstract

The COVID-19 crisis was caused by a combination of harmful interactions between humans and wildlife, and the widespread and accelerated movement of people and goods across borders – a facet of modern globalisation. The pandemic may therefore increase socioeconomic inequality. Effective responses and recuperation plans will have to take into account the pandemic's multiple dimensions, as well as its deep roots in environmental strains and global mobility. The recovery process serves as a crucial opening to materialise much-needed transformative change towards a sustainable world. Some solutions will be necessary in the near future while others will be significant in the long run. With the aim of contributing to the creation of a resilient and sustainable world and to help minimise pandemic risks in the future, businesses will need to work with domestic and global partners and continue to lead transformative change towards a healthier planet. This paper identifies major outcomes of the pandemic through the lens of the business, environment and sustainability, and acknowledges that the COVID-19 pandemic is closely related to – and extends beyond – these issues, and proposes some of the ways in which future business need to be driven.

Keywords: Sustainability, Post-covid, Business practice, Inclusive development.

Introduction

COVID-19 is the infectious disease caused by the most newly discovered coronavirus. This new virus and disease were undetermined

before the outbreak began in Wuhan, China, in December 2019. COVID-19 is now a pandemic distressing many countries globally. This pandemic has brought fast-moving and unexpected variables, some of which existing crisis plans and teams were not prepared to handle. The pandemic continues to evolve. Thus, effective responses and recovery plans will have to take into account the pandemic's various dimensions as well as its deep roots in environmental tensions and global movements. It has again been proven that increasing globalised risks such as this pandemic can result in major socio-economic shocks, i.e. disruptions of global supply chains and the decline of global business turnover. Policies and measures, both international and domestic, are therefore considered necessary to make business systems more sustainable and resilient.

Now's the time to change focus to efforts that support a restore to work, while addressing the required modifications in the months ahead. How businesses could make that shift - from mobilising during this time, to stabilising in the new environment and maneuvering for what's next, is the question of the hour. Remote work is being increasingly instituted across the world. It is also recommended that social activities take place by the same means, leading to considerable changes in lifestyles as well as work-styles. Such practices may better not only the atmosphere but also work-life balance, and should be sustained to the extent possible, even after the crisis period finishes. It is important to take actions that build a society more proficient at managing similar emergencies in the future, i.e. "build-back better" after the crisis. Going forward, it will be important that each firm's business plans incorporate measures to build a more sustainable, resilient and inclusive society.

Shaping a Sustainable post-Covid-19 World

Businesses around the world have been putting all efforts to rapidly adapt to the pandemic. To speeden the road to recovery, leaders need to inculcate a spirit both of purpose and of hopefulness and to make the case that even an ambiguous future can, with effort, be a better one. However, it is better to accept the reality that the future isn't what it used to be and start to think about how to make it work.

Changing industry structures, attractiveness, market positions and consumer behavior

One of the vital questions facing business leaders is whether their industry will bounce back from the economic shock posed by the pandemic, or sustain lasting damage. The answer to this question possibly lies in an assessment of the degree to which industries find themselves vulnerable to the elements highlighted in this article. For example, those that have shown themselves to be less resilient might find it challenging to reclaim their pre-COVID-19 situation. In the automobile sector, for example, companies have trusted on global just-in-time-based supply chains; they will be under pressure to change so that continuity of supply is just as valued as cost and pace to market.

In addition, there could be continuing changes to consumer attitudes toward privacy, physical distance and health. For example, better health awareness and a resulting desire to live more healthily could bring long-term change to where, how, and what people eat. Some consumers and governments might change their attitudes toward the sharing and use of personal data if it can be demonstrated that the use of such data during the crisis helped safeguard lives.

For millennials and Generation Z (those born between 1980 and 2012) this crisis characterizes the biggest disruption they have encountered. Their attitudes may be switched greatly and in ways that are difficult to predict. The tourism, travel, and hospitality sectors may see their businesses modified according to long-term changes in business and individual travel preferences. Apprehension over the probability of other “black swan” occurrences could change how consumers consider financial security - saving more and spending less. Given the strength of these pressures, it is reasonable to question whether existing market policies will be retained without important effort to reposition and react to changes confronting industries as a whole. To add to this is the economic impact of stretched balance sheets and valuations leading to changes in business ownership. In this context, it is likely that institutions may find different and enduring ways to collaborate, driven by the regulatory and other changes that have facilitated corporations to work together in order to tackle the current crisis.

In a crisis, one pressing concern for most companies is a deficiency of cash. But the bigger challenge, for the duration of the crisis and beyond, is a lack of importance to their customers. With every action, companies will demonstrate whether they're vital or discretionary. Businesses to remain successful, will have to put current and future customer relevancy at the center of their new delivery and development agendas.

The pandemic has swiftly altered customers' needs and behaviors (like cashless transactions, resorting to tele-health options, etc.) and adjusting for those changes is crucial to staying relevant. Equally as notable is relevancy after the crisis ends. Across all sectors, successful organizations are already repositioning their development agendas to meet customers' newly-found needs and behaviors for the long term.

Accelerate best practices around inclusion, collaboration, flexibility, and accountability

Inclusion, collaboration, flexibility, and accountability are things organizations have been deliberating about for years, with some progress. But the massive change associated with the COVID-19 could and should accelerate changes that foster these values. There is some evidence that data-based, at-a-distance personnel assessments exhibit a closer relation to employees' contributions than do traditional ones, which tend to prefer visibility. Shift toward such systems could contribute to developing a more diverse, more proficient, and happier workforce. Remote working, for example, means no travel, which can make job more accessible for people having disabilities; the flexibility of the practice can be specifically helpful for single parents. Moreover, work-from-home means companies can draw on a much broader talent pool. A collaborative working style can also lead the transition from lines and silos to networks and teamwork.

COVID-19 has proved again that no one can prosper alone. There is such a thing as society. We are all part of it. Business has in recent years shown a greater understanding that it collectively depends on a thriving society and planet but is still far away from the scale and pace of collaboration required to create a new economic model in which particular companies can win and lose, but only if all of society and planet Earth flourishes. Business must put alliances at the heart

of what it does all the time, not just on individual issues (eg. palm oil sourcing) but also on systemic change too (eg. the global food system).

While showing the “invisible hand”- the idea that self-interest plus the network of information (such as the price signal) that helps economies work efficiently are essential to creating prosperity, Adam Smith also considered the rule of law essential and saw the goal of wealth creation is creating happiness: “What improves the circumstances of the greater part can never be regarded as an inconveniency to the whole. No society can definitely be flourishing and happy, of which the far greater part of the members are poor and miserable.” A more recent economist, Nobel laureate Amartya Sen, updated the idea for this century, asserting that the invisible hand of the market needs to be balanced by the visible hand of good governance.

Given the trillions of dollars and other backing that governments are providing, governments are going to be intensely embedded in the private sector. That is not an argument for too much regulations, protectionism, or general officiousness - things that both Smith and Sen disapproved. It is a confirmation of the fact that business needs to work more closely with governments on areas such as training, digitization, and sustainability.

Accelerate the Evolution to Agility

“Agility” is defined as the ability to reconfigure strategy, structure, processes, people, and technology quickly toward value-protecting and value-creating opportunities. Companies need to start locking in practices that speed up decision making and execution during the crisis. During and after the 2008 financial crisis, organisations that were in the top fifth in performance were almost 20 percentage points ahead of the rest. Eight years afterwards, their lead had increased to 150 percentage points. This proves that those who move earlier, faster, and more definitely do outdo others. In a 2017 McKinsey survey, agile units performed considerably better than those who weren’t agile, but only a few businesses were actually performing agile reformations. Many more would be forced to do so because of the current crisis.

Agile organisations are more decentralized and depend less on top-down, command-and-control decision making. They develop agile teams, which are authorized to make most day-to-day decisions;

senior leaders still make the big decisions that would make or break a business. Agile teams are not out-of-control teams: accountability, in the form of following and assessing specifically stated outcomes, is as much a part of their responsibilities as flexibility is. The primary idea is for the right people to be in right position to make and implement decisions.

One principle is that the flatter decision-making structures many organisations have assumed in crisis times are faster and more flexible than conventional ones. Many routine decisions that used to go up the chain of command could be decided much lower in the hierarchy, to good effect. Another is to think of ecosystems rather than separate units. Companies with robust ecosystems of suppliers, partners, vendors, and committed customers could discover approaches to work together during and after times of catastrophe since those are affiliations built on trust, not only transactions. Companies also need to create or accelerate their analytics capabilities to provide the basis for answers-and, perhaps as important, allow them to ask the right questions. This also demands reskilling employees to take advantage of those capabilities: a firm that is continuously learning is always improving.

Improvise supply chains to be just-in-time plus just-in-case

The coronavirus crisis has showed the vulnerability of the existing supply-chain model, with companies finding their operations suddenly halted because a single factory had to close down. Organisations learned the difficult way that individual transaction costs do not matter almost as much as end-to-end value optimization - an idea that incorporates resilience and efficiency, as well as cost. The reasoning for more flexible and shorter supply chains has been developing for years. Firms need to stop optimizing supply chains based on individual component cost and depending on a sole supply source for important materials and begin redesigning supply chains to optimize resilience and speed. To get faster they should adopt new digital-planning and supplier-risk-management tools to create greater visibility and capacity, capability, inventory, demand, and risk across the value chain. Doing so enables businesses to react well to variations in supply or demand conditions.

Accelerate infrastructure investment and reallocation of resources

Infrastructure meant things such as roads and pipelines, in previous economic transitions. In democratic societies, governments generally came up with the plans, established safety and other regulations, and the private sector did the actual constructions. Something like this needs to materialize now, in two areas. One is the irresistible rise of digital technologies. Those without access to reliable broadband are being left out of a sizable and expanding segment of the economy; there is a clear case for creating a robust, universal broadband infrastructure.

The second has to do with the workforce. To avoid social disturbance, like more high-wage jobs but fewer middle-class ones, displaced workers have to be retrained so that they could find and thrive in the new jobs that will emerge. The needs, therefore, are for additional midcareer job training and more effective on-the-job training. For workers, as well as businesses, agility is going to be a core skill - one that current systems, mostly designed for a different era, are not very good at.

From making trade-offs to embedding sustainability

Business should stop thinking of environmental management as a compliance issue, instead take it up as a core management and financial issue and start considering environmental strategy as a source of resilience and competitive advantage. As companies reengineer their supply chains for resilience, they also have to take into account environmental impacts. To cope with the COVID-19 pandemic, organisations have reduced their supply chains, moved to more videoconferencing, and initiated new production processes. Considering how these and other practices might be continued; they can help make companies more environmentally sustainable, as well as more efficient. Also, it makes sense to start thinking about the possible similarities between the coronavirus crisis and long-term climate change. The pandemic has caused concurrent shocks to supply chains, consumer demand, and the energy sector; it has affected the poor harder; and it has generated serious knock-on effects. The same is likely to be valid for climate change. Moreover,

increasing temperatures could also escalate the number of contagious diseases. It could be argued, therefore, that mitigating climate change is as much a global public-health issue as dealing with COVID-19 is.

It is as true for the environment as any part of the value chain that what gets appraised gets controlled. This involves designing sound, sophisticated climate-risk assessments; there is no commonly accepted standard at the moment, but there are many works in progress, such as the Sustainability Accounting Standards Board. The principle at work is to make climate management a core corporate faculty, using all the management tools, such as analytics and agile teams, that are utilized to other critical tasks. The benefits can be plentiful. One study found that companies that reduced their climate-change-related emissions gave better returns on equity- not because their emissions were lower, but because they became largely more efficient. The correlation between going green and high-quality operations is convincing, with numerous examples of organisations (including Hilton, PepsiCo, and Procter & Gamble), setting targets to lessen use of natural resources and resulting in saving substantial money.

From online commerce to a contact-free economy

The contactless economy is not something that will happen down the line; the shift to contactless operations could happen rapidly. Healthcare is the outstanding example here. For as long as there has been modern healthcare, the practice has been for patients to travel to a hospital or clinic to see a doctor or nurse. We acknowledge the value of having personal relationships with healthcare professionals. But it is possible to have the best of both worlds - staff with more time to deal with critical needs and patients receiving high-quality care.

Online banking transactions have risen to 90 percent during the crisis, from 10 percent, with no drop-off in quality and an rise in compliance while delivering a customer experience that is not just about online banking.

Accelerate the transition of automation and digitization

Call it "Industry 4.0" or the "Fourth Industrial Revolution." Whatever the term, the fact is that there is a novel and fast-improving set of digital and analytic tools that can lessen the costs of operations

while fostering flexibility. Digitization was, of course, already occurring before the COVID-19 crisis but not commonly. “Digital transformation” was a buzz phrase before the pandemic crisis. Since then, it has become an experience in many cases - and a need for all. The consumer sector in many cases, has moved rapidly. When the coronavirus struck China, Starbucks closed down 80 percent of its stores. Then it introduced the “Contactless Starbucks Experience” in those that stayed open and is now rolling it out more extensively. Car manufacturers in India have developed virtual show rooms where consumers can browse the latest models; these are now becoming part of what they see as a new beginning-to-end digital journey. Airlines and car-rental companies are also remodeling contactless consumer journeys.

The greater prospect, however, may be in B2B scenarios, especially in regard to manufacturing, where physical distancing can be challenging. In the past, there was some skepticism about employing the Internet of Things (IoT) to industry. Now, many industrial companies have welcomed IoT to create safety strategies, improve collaboration with vendors, manage inventory, optimize procurement, and maintain equipment. Such solutions, all of which can be done remotely, can aid industrial companies adjust to the next normal by decreasing costs, facilitating physical distancing, and building more flexible operations. The application of advanced analytics can help organisations get a sense of their customers’ needs without walking the factory floor; it can also support contactless delivery. Companies could design a plan that illustrates what needs to be done (and by whom) to achieve a stated goal, guarantee the resources to reach there, train employees in digital tools and cyber-security, and bring leadership to accept.

Engage with the local community at a grass roots level

There are distinct lessons in the COVID-19 crisis on how to participate to create societies that are economically, socially and environmentally healthy, stable and resilient. However, when examining the implications for sustainable business due to the pandemic, we should look further than just targeting individual goals such as reducing emissions or even bettering healthcare. The unsustainable intensity of air and maritime traffic increases human contacts (and therefore transmission vectors)

and greenhouse gas emissions that contribute to global pollution. This crisis thus, illustrates the need to reconsider production, trade and consumption models in the course of sufficiency, instead of constant growth. Supporting human security in all its diversity, working with communities and individuals to protect people and address a mosaic of issues that affect their lives, must become core facets of business models. Companies must see local communities as partners in attaining human security, sustainability and resilience. Working at a local level to identify exact needs, acquire local knowledge and make community solutions, will improve companies' standing in the eyes of common people and be central to winning the fight for a healthier environment and a happier world.

Like all big crises, this one will also reach an end. And whether we evolve into a better, more sustainable future will depend on how many business leaders have the far-sightedness—and the courage - to follow at least some of the advice these experts propose. For many organisations, the coronavirus pandemic has insensitively exposed some tough realities under the surface: unstable supply chains, fragile customer relationships, insufficient job contracts and uncertain balance sheets. One important step has been finding trigger points and defining actions to take as several events unfold. Scenario-based planning is aiding these leading-edge firms preserve cash, maintain solvency and endorse their relevance to customers. For others, now is the time to perpetually abandon the unresponsive aspects of their strategic planning and resource allocation. As businesses breathe new life into their strategic planning, they can develop lasting adaptability and resilience for the new, more volatile world that emerges from the pandemic. It all starts with reorganizing the delivery and development agendas.

Conclusion: Embracing the Silver Linings

There could be some positive outcomes of the coronavirus crisis too. These are less likely to come anywhere near to compensating for the human and economic toll it is inflicting. However, given the general deficiency of optimism at the moment, it may be heartening to ponder a few encouraging possibilities. One has to give up the human imperative to communicate. In this sense, the fall of distance continues to be very real, and incredibly positive. Individuals,

communities, businesses, and governments are all learning new ways to connect - almost everybody knows a story of the elderly person who finally learned to Zoom, Skype, Google Meet or FaceTime.

For businesses, the consequences have been overwhelming. Many have discovered how to operate remotely - at a higher level and at much greater speed. These practices could well continue, making for better management and more flexible teams. Flexible work is often critical to sustain employees at different life stages such as parents with small kids, women during parts of their career, or marginalised groups such as the disabled.

Business leaders now have a superior feel of what can, and cannot, be done outside their business's traditional processes. Many are initiating to appreciate the speed with which their firms can move once they amend how they do things. In short, the coronavirus is compelling both the speed and scale of workplace innovation. Indeed, as businesses are pushed to do more with less, many are learning better, simpler, less expensive, and quicker ways to operate. The necessity of addressing COVID-19 has also led to innovations in biotech, vaccine development, and the regulatory procedures that govern drug development, so that treatments can be endorsed and tested faster.

These silver linings are narrow compared with the measure of the coronavirus calamity. Nurturing a new normal that will be better than what it replaced will be a long-term test of all our organisations, global and local, public and private. It will be vital to rebuild for the future and not solve for the troubles of the past. One probable next normal is that decisions made during and after the crisis lead to fewer prosperity, slower growth, broadening inequality and stiff borders. Or it could be that the decisions made during this crisis lead to a surge of innovation and efficiency, more resilient industries, smarter government at various levels, and the emergence of a rewired world. Neither is predictable; indeed, the outcome is probably more likely to be a blend. The point is that where the world lands is a matter of choice - of numerous decisions to be made by individuals, businesses, governments, and other institutions.

The 20th-century British explorer Sir Ernest Shackleton once said, "Optimism is true moral courage." Optimism and courage - these qualities are necessitated more than ever, as leaders formulate the decisions that will shape the new normal.

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Extending a helping hand to the rural populace in COVID times - Radio MACFAST: A true companion of the common man

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Abstract: Community radio and journalists are the primary means of mass communication to thousands of people that could not be reached otherwise to assist health workers in educating the public and work closely with local authorities and health workers in times of crises. In the wake of COVID-19 pandemic where social distancing is vital, radio enables the government authorities also to reach a wide audience with critical information that can be life saving and provide a platform for discussion on a range of topics related to resisting and overcoming the challenges posed by the virus outbreak. Community radio stations could be an important medium in helping to reduce the panic of COVID-19 gradually by broadcasting awareness programs and organising social projects. This case study illustrates the significant roles played by a community radio in Kerala, Radio MACFAST 90.4, in combating the spread of COVID-19 by (a) disseminating reliable, unbiased, authentic and timely information to the community, so that they know what they need to do and where they can get help when they need it, and (b) by undertaking several community supportive social projects which empower people to overcome the uninvited and difficult situations that they are in.

Keywords: Community radio, Radio MACFAST, COVID-19, pandemic

Introduction

It was the hilly tracts of Ranni in Pathanamthitta, Keraia that was caught unaware when five persons, three of them came from Italy and their two kin in the home village, were tested positive for COVID-19 on March 7, 2020. It was the second spell of COVID-19 crisis in Kerala. For the first time Kerala witnessed testing five persons positive for COVID-19 at a go.

The news spread like a wildfire and a shell-shocked Ranni went into a self-imposed lockdown from March 8, much before the nationwide lockdown announced by the Prime Minister Narendra Modi on March 24 evening. The scary virus literally laid siege to Ranni. Scared of infection, people restricted themselves to their homes. Shops downed their shutters and vehicles were kept off the roads, leaving a deserted look to the otherwise busy small town. The pandemic had sent shockwaves across the State, Pathanamthitta in particular.

A pail of gloom fell over these hilly tracts and an uneasy scare gripped Ranni as people there, having a good number of relatives and friends in various pandemic-hit foreign countries, were well aware of the lethal disease and its impacts. People appeared to be very much scared of venturing out of their homes for an unknown fear of contracting the disease.

India on the move: An appraisal of Indian tyre industry

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Abstract: After China, Europe, and the United States, India is the fourth largest market for tyres in the world. Tyres manufactured in Indian are being exported to more than 100 countries in the world, including the most astute regions such as US and European nations. COVID-19 has pressed a reset button for all the businesses. It began as a health emergency, but has transmuted into an existential crisis for most of the industries. There is no doubt, the formats for doing businesses would change. Being a progressive sector of Indian manufacturing, tyre industry is riding the waves of change. New concepts such as contactless services are already being implemented as a measure of safety. While the global supply chain addresses the disruptions that the pandemic has caused, Indian tyre industry has the potential to lead in manufacturing at a global level, taking into consideration of the policy changes related to Prime Minister's call to build a self-reliant India. This paper explores the current status of tyre industry, factors that contribute to higher productivity in the industry, challenges faced by it and the prospects of the industry in moving towards 'Atmanirbhar Bharat'

Keywords: Tyre industry, Atmanirbhar Bharat, Productivity, Self-reliant India.

Introduction

Tyre industry has companies that manufacture, and sell automobiles or any vehicle tyres to the consumers, retailers, dealers or industries whose primary operation is related to tyres. For two-wheelers, motorcycles, SUVs, vans, buses, trucks and trailers or any transport vehicle for heavy goods, this industry focuses primarily on either new or refurbished and used tyres. Tyres industry is a mature one after evolving and undergoing many cycles and stages in the previous century that the business has adapted and maintained the optimisation of demand and supply chain and function to the overall efficiency. As one of the biggest contributors to the world economy, the industry has had its ups and downs and many alterations in its overall organisational structures that today the business is performing excellently. In this industry, tyre retailing business does not include re-treading of motor vehicle tyres, but to carry out repairs and fixes on tyres.

Methodology

The major objectives of this study are:

To study the current status of tyre industry in India

To analyse the factors that contribute to higher productivity in tyre industry

To identify the challenges faced by tyre industry in India

Contribution of Indian handloom industry in fashion business: an Atmanirbhar Bharat perspective

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Abstract: India's textiles sector is one of the longstanding industries in the Indian economy, dating back to many centuries. Along with the skills of weavers, the Indian handloom industry exhibits the richness and diversity of Indian culture. Indian handloom products are famous for their unique designs and elegance. Government of India's 'Atmanirbhar Bharat' programme, the 'vocal for local' campaign, together with 'Make in India', presents a huge opportunity to the handloom sector to further strengthen the Indian positioning in the global textiles space. This article is about the nature and characteristics of Indian handloom industry and its opportunities to emerge as a prominent part of fashion industry, in relation to the above campaigns. The study identifies the progressive path to realise the idea of a 'Self-reliant India' is to mix old designs with new techniques and create original fashion products for the global market. It also illustrates a few success stories of Indian handloom fashion brands in the form of short caselets.

Keywords: Handloom, Fashion, Atmanirbhar Bharat, Vocal for local

Introduction

The Indian handloom industry plays a very important role in the country's economy. It is one of the oldest and biggest cottage industries in India

with a proud ancient tradition of thousands of years for their superior craftsmanship, representing the vibrant Indian culture. The significance of handloom sector in the nation's economy cannot be overstated on account of having the advantages in flexibility of small production run, inimitability, innovation and suitability to the exports requirement. Indian artisans since the Egyptian Babylonian times had such refined mastery over their fabric they were appreciated world over for their hand spinning, weaving and printing techniques that were transferred down from generations.

Traditionally, handloom industry could be seen in every state of India. Tie and Die technique from Rajasthan, Chanderi from Madhya Pradesh, Ikat from Andhra Pradesh and the Jacquard from Uttar Pradesh are some of the examples. Due to their characteristic rich variety, Indian Handloom Industry had a consistent high demand in the Indian market as well as all globally for their craftsmanship and sophistication of designs. This industry used to be a household-based one and was the largest employment sectors both directly and indirectly, providing livelihood to lakhs of weavers in India. The handloom industry because of its unique nature of requiring low capital and little or no power and flexible, environment-friendly innovative product, flourished in India for thousands of years.

A conceptual analysis on the role of FMCG sector in building a self-reliant India

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Abstract: *Atmanirbhar Bharat Abhiyaan or Self-reliant India campaign is the idea of a new India envisioned by the Prime Minister Shri Narendra Modi. Special economic and comprehensive package of INR 20 lakh crores - equivalent to 10% of India's GDP - was announced by the central government to fight COVID-19 pandemic in India. The long-term aim of this "vocal for local" is to make the country and its citizens independent and self-reliant in all facets. The government is taking several strong reforms such as Supply Chain Reforms for Agriculture, Rational Tax Systems, Simple & Clear Laws, Capable Human Resource and Strong Financial System. The call for "vocal for local", made by the Prime Minister has come as a strong support for many industries in India as this allows the Indian industries to develop and diversify after the mayhem caused by the Corona virus pandemic. The fast-moving consumer goods (FMCG) sector is an important giver to India's GDP growth. The sector has powerful presence of leading multinational companies, competition between organized and unorganized players, robust distribution network, and low operational cost. This paper studies the importance of Indian FMCG sector and its impact on the call for "vocal for local" to become Self-reliant India.*

Keywords: FMCG, Atmanirbhar Bharat, Self-reliant India, Impact, COVID-19

Introduction

On 12 May 2020, Indian Prime Minister Shri Narendra Modi pushed for the need to be 'self-reliance' or 'Aatmanirbhar', as he highlighted India's success in fighting the corona virus disease. The Indian government has solicited the local companies to focus on "Make in India", but also for the propagation of local brands, manufacturing, and supply chain.

The world today collectively stands at the threshold of an unprecedented recession. Driven by contractions in both supply and demand, the COVID pandemic continues to pose several extraordinary challenges to value chains worldwide. Contrary to this backdrop, the consumer goods sector stands apart: FMCG companies, as producers of essential goods, have been allowed to operate across the globe amid lockdown restrictions.

Rationally speaking India might not be able to close its doors to the foreign market because today Indian products have made a prominent presence in the global market where it is not just a consumer but also a seller of products such as dry-fruits, cooking oil, spices etc. Therefore, closing doors to the foreign market would also mean closing its selling business with its foreign clients which in every aspect would be an undesired deal.

Therefore, one has to understand that being "vocal for local" does not mean completely closing

Wings of wisdom: a practical model to foster entrepreneurship culture in business schools for an Atmanirbhar Bharat

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Abstract: *Entrepreneurship is about starting a new venture or initiative. It involves the willingness and capacity to manage, to organize a new business venture along with its risks to make a profit. The Atmanirbhar Bharat Abhiyan (self-reliant India) campaign announced by Prime Minister Narendra Modi in May 2020, is a launchpad to boost entrepreneurship, nurturing innovation, and development of an environment for rural-urban symbiotic development. India's call to become a self-reliant economy is not aimed at protectionism or isolationism. It is for taking up a pragmatic growth strategy that would empower the country to identify and capitalise on the inherent strengths. This study analyses the importance of entrepreneurship culture, current status of entrepreneurial spirit among students in professional institutions, especially Business Schools (B-Schools), and proposes a working model with clear strategy and actionable plans to foster entrepreneurship attitude among students to encourage setting up of start-ups and similar ventures.*

Keywords: *Atmanirbhar Bharat, Entrepreneurship, Start up, B-School, Innovation*

Introduction

Prime Minister Sri Narendra Modi had launched the Atmanirbhar Bharat Abhiyan in

May 2020, for India's economic self-reliance as a Covid-19 relief package worth Rs 20 lakh crore. Atmanirbhar Bharat Abhiyan is a framework for building a self-reliant India, which would be competitive globally. It is also aiming to strengthen local manufacturing, build local supply chains, and convert local products into global brands. The Prime Minister had also encouraged people to adopt Made in India 'products to benefit domestic businesses and that every Indian must become vocal for our local.

Supporting the creation of an environment of innovation and entrepreneurship, the individuals have been urged to adopt the Atmanirbhar Bharat campaign to transform the local 'India into global' India. This is a launching pad for nurturing entrepreneurship, fostering innovation and creating an ecosystem for rural-urban symbiotic development. It is for accepting a pragmatic development strategy that would enable the nation to recognise and capitalise on the inherent strengths. Indian start-ups and innovators would play a crucial role in the success of the mission. The Atmanirbhar Bharat Abhiyan is a chance for Indian start-ups to take charge of the innovations for which India is usually dependent on global suppliers. They can show the way by innovating and developing products and services that are world-class, yet affordable.

Entrepreneurship is the heart & soul of the rise

Strategies for Brand Management and Growth during COVID-19- an analysis

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Abstract: Brand management is a branding component that involves maintaining and bettering products, services and brand perception. Unfortunately, the year 2020 didn't get onto the most prosperous start. In the past few months, COVID-19, a human tragedy with long-term economic damages, had posed enormous impact on consumers and brands. Marketing during this period will require a lot of creativity and tact to ensure that the message of the brand is effectively communicated and organizations are now uniting in an effort to help their valuable customers during this unprecedented time. The research is study mainly focus on how organization were able to maintain their brand value and what contribution were made by them to accelerate their growth during this pandemic.

Keywords: Brand Management, Brand Strategy, Covid-19.

Introduction

Why is brand management so important? In a world where consumers make decisions on brands in the blink of an eye, companies must be prepared to wield influence over the public's view of them. In fact, many businesses will succeed or fail based solely on their ability to successfully market their brand.

Developing a strategic brand management system requires a clear and comprehensive understanding of three things: the brand itself,

its target market, and your company's overall vision and goals. Strategies are of tensest during the best of times, but they're retriuly tested

when uncertainty abounds. The COVID-19 pandemic is requiring leaders to review their strategies and quickly adjust for new market conditions. Those strategies will be tested further as the economy gradually reopens and people return to work. It's important to prepare now for what might come next. Several big strategic challenge shave emerged: rapidly changing demand patterns, majore xpenses in the face of falling revenue and massive challenges as businesses incorporate virtual ways of working. How business leaders respond during this time of great uncertainty will have long-term implications for the brand when the economy and people begin to recover. The impact of the pandemic is unprecedented and devastating, with its duration unknown. So businessse smust manage their brand and reputation with utmost care and most importantly, start preparing for post-p and emicre covery.

A people-centric, transparent approach should be adapted with a goal to create an environment for best possible recovery. It requires a pivot on strategy to maintain business as usual while adapting to the reality of life during and after the global pandemic. Like all crises, the focus for brands should not be on managing the crisis, but rather on managing through the crisis. This future-centric thinking will ensure business

20-21

Corporate social responsibility practices among Indian companies during COVID-19 pandemic period

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Abstract: *There are many stakeholders within a societal structure, one amongst them are companies or corporate houses. These companies are meaningfully contributing from their fund to support societal initiatives, which impact their internal stakeholders also. In India, corporate houses like TATA and Birla have been practicing Corporate Social Responsibility (CSR) for decades, long before CSR became a popular activity. There are many examples where corporate have played a principal role in taking up issues of health, education, environment and livelihoods by way of their CSR interventions in the country. The purpose of this study is to explore the different definitions and descriptions of Corporate Social Responsibility (CSR); elaborate upon development of CSR in India; study the theoretical concepts developed by various researchers and review the implementation of current CSR practices of top companies in India.*

Keywords: *Corporate Social Responsibility, Stakeholders, CSR in India, COVID-19*

Introduction

Corporate Social Responsibility (CSR) is an automatic plan of action that enables an organisation to be socially responsible to itself, its partners, and society. By practising corporate social duty, also called corporate citizenship, organisations can be aware of the impact they are having on all facets of society, including social, financial, and natural. To take part in CSR means that, in the conventional course of business, an organisation is working in manners that improve society and the climate, rather than contributing contrarily to them.

As per United Nations and the European Commission, CSR results in triple bottom-line: profits, protection of environment and fight for social justice. It is expected that civil society, activist groups, Government and corporate sectors should work together to create appropriate means and ways for the marginalised and bring them to the mainstream. It is imperative for the corporate sector to find, promote and execute successful policies and practices that realise triple bottom-line results (Sehgal, 2011).

Molecular Biology techniques used in the treatment of COVID-19

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Abstract: A major revolution in the molecular biology technique began with the invention of Polymerase Chain Reaction (PCR). Apart from this method, many more evolved for more accurate diagnosis of diseases which have an empirical role in the rapid detection of infections when there is no availability of drugs against the pathogen in the market. Currently, nucleic acid-based detection techniques are the primary diagnostic tools for the detection of COVID-19, which detect specific antigens or antibodies. More efficient techniques and test kits for the diagnosis are underway, that can be used on a large scale. This review aims in understanding the major techniques used in COVID-19 detection and to analyze the efficiency of each.

Keywords: Pathogenesis, Transmission, COVID-19, Molecular Techniques

Introduction

Molecular Biology is an emerging and trending field in life science that gives much understanding about life at its basic level. It is a branch of biological science providing new perspectives into the nature of genes and proteins and their relationships (Li & Zhao, 2013). Studies of life at its basic level will lend a hand to develop new vaccines, more effective medicines, plants with improved qualities, etc. Molecular biology is not only beneficial to humans but it applies to all living things (Nygren, 2000). Studies and

development in molecular biology came to light by the development of some techniques that makes a significant role in the evolution of emerging molecular science. The importance of these techniques allows the accurate diagnosis of diseases thereby enhancing the treatment (Poxton, 2005). Studies in Molecular Biology began in the 1930s by understanding life at its fundamental level. It mainly focuses on the interaction between the various systems of a cell that includes the interrelationship of DNA, RNA, and protein synthesis and how these interactions are regulated. The evolution of molecular

Driving towards sustainable development through Green Logistics

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Abstract: Green logistics is a critical function of the production system in today's world. It combines various efforts to quantify and control the environmental impact of production activities in an organisation. This research is intended to emphasize the ways by which organizations can accomplish positive ecological effects by modifying their logistics practices, thereby moving towards the goals of sustainable development. The study also appraises an account of green logistics practices in the present Indian business environment. This paper presents a study on the different dimensions of green logistics, challenges faced by companies in pursuing it and proposes strategies, by analyzing the alternatives for green practices along with organizational objectives.

Keywords: Green logistics, sustainable development, business environment

Introduction

In today's highly competitive environment, green logistics issues are earning high attention. Since it is an important part of supply chain management and plays an important role in the improvement of the transport system. Logistics enables in getting products and services as and when they are desired and required to the customer.

Ecological concerns have become essential

for organizations given the current context of globalization (Molina- Besch & Palsson 2014). Industrialization and consumerism are evergrowing bringing in a scenario where trade pursuit of humans has begun to spread unfavorable environmental impact (Ratnajeewa & Bandara, 2015). The greater focus now is on ecological pollution through logistics practices. In the recent past, interest has shifted to the effects of logistics on climate change, owing to the improved understanding of the danger being posed by global warming (McKinnon et al., 2010).

Atmanirbhar Bharat Abhiyaan: A call to the nation for self-reliance

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Abstract: The Atmanirbhar Bharat Abhiyaan (Self-reliant India campaign) declared the Special economic package of INR 20 lakh crores - equivalent to 10% of India's GDP - to fight the COVID-19 pandemic in India. The central point of the concept is to make the nation self-reliant with more focus on local manufacturers and service providers. The aim is to make the country and its citizens independent and self-reliant in all senses. At a time when the world is suffering from a deadly epidemic, India plans to convert this crisis into an opportunity and reinforce its fight by becoming Aatmanirbhar or self-reliant

Keywords: Atmanirbhar Bharat Abhiyaan, self-reliant, pandemic

Introduction

The intended objective of this plan is two-fold. First, interim measures such as liquidity infusion and direct cash transfers for the poor will work as shock absorbers for those in acute stress. The second, long-term reforms in growth-critical sectors to make them globally competitive and attractive. Under this campaign, a special economic package has been released by the government, which will benefit various segments including cottage industry, Micro, Small and Medium Enterprises (MSMEs),

labourers, middle class, and industries, among others.

Objectives of the study

- To examine the relevance of Atmanirbhar Bharat Abhiyaan
- To identify the five pillars of India's self-reliance campaign
- To expose the complete break-up of the package launched to make India 'self-reliant'
- To Explore the challenges of Atmanirbhar Bharat Abhiyaan

A comparative analysis of financing MSEME's by the private sector and public sector banks

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Abstract: MSME or Micro, Small and Medium Enterprises, primarily engaged in the production, manufacturing, processing, or preservation of goods and commodities. MSME's are an important sector for the Indian economy and have contributed immensely to the country's socio-economic development. It not only generates employment opportunities but also works hand-in-hand towards the development of the nation's backward and rural areas. According to the annual report by the Government, there are around 6.33 crore MSMEs in India. Financing of MSMEs by both, the private and public sector banks is compared and analyzed in this research. Atmanirbhar Bharat, which translates to 'self-reliant India' or 'self-sufficient India', is the vision of the Prime Minister of India of making India "a bigger and more important part of the global economy", pursuing policies that are efficient, competitive and resilient, and being self-sustaining and self-generating. Atmanirbhar Bharat doesn't mean "self-containment", "isolating away from the world" or being "protectionist". The first mention of this came in the form of the 'Atmanirbhar Bharat Abhiyan' or 'Self-Reliant India Mission' during the announcement of India's COVID-19 pandemic related economic package on 12 May 2020. The five pillars of 'Atmanirbhar Bharat' are stated as economy, infrastructure, technology-driven systems, vibrant demography and demand.

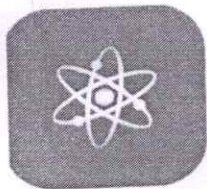
Keywords: MSME, Atmanirbhar Bharat, Self-reliant India, Banks.

Introduction

Micro, small and medium scale industries are instrumental in determining the growth of the nation. The central statistical office (CSO) has reported the 37.54 percent of the Indian GDPP is contributed through Micro Small and Medium-scale industries. The Indian government is running a separate ministry for these Micro

Small and Medium-scale industries named The Union Ministry of Micro, Small and Medium Enterprises. This ministry is continuously supporting the growth and development of MSMEs by introducing new schemes and credit policies. The financial strength of the Micro, Small and Medium-scale industries is very less when compared to the giant enterprises that run the business world. This need for funds has led

SSGP



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4E'S IN RELATION TO 5 PILLARS OF ATMANIRBHAR BHARAT ABHIYAN: THE PINNACLE PHASES IN ACHIEVING A SELF RELIANT INDIA POST COVID.



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Abstract

This paper on "4E's in relation to 5 pillars of Atmanirbhar Bharat Abhiyan: The pinnacle phases in achieving a self reliant India after post Covid" is a conceptual analysis of the base of 4 Es, Education, Employability, Employment and Entrepreneurship in building confident Atmanirbhar Bharat and ought to be interlaced appropriately to help five mainstays of Atmanirbhar Bharat, by benefiting from human resources of India with economy possessing, the crucial situation for taking a quantum move forward. The five pillars of Atmanirbhar Bharat, to be specific are, Economy, Infrastructure, Systems, Demography and Demand are legitimately identified with 4Es for their sources of info and improvement. This paper outlines the direct linkages. Improvement of foundation will encourage economy and the other way around. Likewise, improvement of framework is fundamental for encouraging the instruction at all levels, prompting employability. Appropriately outlined frameworks can make fitting instructive intercessions which lead to business and put employability to ideal use. Segment setups ought to be mulled over for making business and business venture.

Introduction

India has probably the most youthful populace in world — almost 46% under 24 years old. A considerable lot of them are presently taken a crack at instruction framework and would seek occupations and work in coming decade. A large number of them will be working in occupations that don't exist today. Today, innovation, mechanical mechanization, mechanical technology and Artificial Intelligence (AI) are changing way enterprises work — making huge numbers of the positions of today repetitive. Accordingly, part of working populace would need to re-expertise themselves to new openings arising out of innovation developments. India's employment market is going through these progressions and there is requirement for crisp intuition to address current and arising difficulties. Schooling that numerous understudies get today isn't satisfactory for a world that is being changed by logical and mechanical advances (FICCI-EY, 2016).

Advanced education framework in India has large task to carry out being developed of the economy. It is this framework that feeds need of prepared and talented labor for motors of the business. With ever-changing position market and industry, it is basic that advanced education framework adjusts to new worldview of bestowing fundamental abilities and guzzling logical speculation measure among students — to set them up for any positions they may take up in their working lives.

In 21st century, movement of progress in work market has massively quickened. Changing position situation is prompting workers exchanging occupations all the more frequently — as a rule to areas and jobs that they didn't read for. Numerous students who are at present in school would wind up working for occupations and jobs that don't

PERSPECTIVES OF
MICROFINANCE &
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EMPOWERMENT



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PERSPECTIVES OF MICROFINANCE & WOMEN EMPOWERMENT

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PERCEPTION TOWARDS FINANCIAL INCLUSIONS: A STUDY ON KUDUMBASHREE WORKERS IN MALAPPURAM

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ABSTRACT

Financial inclusion denotes the process that guarantees the ease of access, availability and usage of the financial system and coordination to all members of an economy. An inclusive financial system facilitates effective allocation of resources and this access to appropriate financial services can suggestively progress the day-to-day management of finances. Thus, an inclusive financial system helps in reducing the growth of informal sources of credit, which are often found to be exploitative. In addition, an inclusive financial system augments efficiency and welfare by providing avenues for secure and safe saving practices and by enabling a whole range of efficient financial services. The concept and practice is unavoidable for a developing country like India as our society has a majority in the lower and deprived group and the present central government has succeeded in creating more effect for the same. The current analysis reveals that the southernmost state of our country, Kerala tops the index of Financial Inclusion and this creates a necessity to analyze the societal perception of Keralites with special reference to the women folk engaged with the Kudumbasree units towards this service. The cram is limited to Kudumbasree workers in Malappuram District of Kerala and proceeds in analyzing the influence of demographic factors on the perception towards financial inclusion schemes. Amongst the numerous factors that can influence publics' perception towards inclusive financing, demographic factors like age, education, income and marital status has been analyzed. The study

Role of Start-ups in building Atmanirbhar Bharat

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Abstract: Ever since the COVID - 19 pandemic began in March 2020, the world's economy has been in dis order due to the resulting health and economic shocks. To face the pandemic, countries imposed stringent lockdowns on the movement of people, on international travel, and on the carriage of goods and services to minimise the threat to health and safety. This however resulted in many industries and firms either being shut down or operating at the lowest capacity, and the effects are evident globally. To tackle the economic challenge, on 12th May, India's Prime Minister, in his Atmanirbhar Bharat Abhiyan (Self-reliant India Campaign), announced an overall economic package worth \$20 lakh crore (US\$280 billion), 10% of India's GDP, with emphasis on making India as a self-reliant nation. This paper analyses the role of start-up initiatives and innovative projects in making a self-reliant India. The study further assesses how this mission can help micro, small and medium enterprises (MSME) in forming their business. It also illustrates a few caselets of successful start-ups from India.

Keywords: Atmanirbhar Bharat, Start-up, Innovation, Self-reliant India, COVID - 19

Introduction

A start-up is a company or project under taken by an entrepreneur to seek, develop, and validate a scalable economic model. While entrepreneurship refers to all new businesses, including self-employment and businesses that never intend to become registered, start-ups refer to new businesses that intend to grow large beyond the solo founder. Start-ups face high uncertainty and have high rates of failure, but a minority of them do go on to be successful and influential.

Start-ups typically begin with a founder (solo-founder) or co-founders who have a way to solve a problem. The founder of a start-up will begin market validation by problem interview, solution interview, and building a minimum viable product (MVP), i.e. a prototype, to develop and validate their business models. The start-up process can take a long period of time (by some estimates, three years or longer), and hence sustaining effort is required. Over the long term, sustaining effort is especially challenging because of the high failure rates and uncertain outcomes.

The COVID - 19 pandemic is a global shock 'like no other', causing simultaneous interruptions to both supply and demand in an interconnected

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ROLE OF FINANCIAL INCLUSION AND MICRO FINANCE IN RE-VITALISING RURAL ECONOMY: EVIDENCE FROM INDIA

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ABSTRACT

The co-relation between micro finance and financial inclusion for a new, focus on rural economy is extremely strong and significant in India. Financial inclusion is the process of ensuring access to financial services especially in rural economy. Especially in the area of women empowerment, micro finance is playing an admirable role and Kerala is the model state for achieving growth in rural finance through various forms of financial services like micro finance, micro credit is to name but a few. The present study deal with contribution of financial inclusion and micro finance in development of rural economy in various interventions such as micro credit, self-help group and micro and small-scale industries.

KEY WORDS

Financial inclusion, micro-finance, rural economy, women empowerment

INTRODUCTION

Financial Inclusion is the process of ensuring access to appropriate financial products and services needed by vulnerable groups such as weaker sections and low-income groups at an affordable. Microfinance is a category of financial services targeted at individuals and small businesses who lack access to conventional banking and related services. Microfinance includes micro credit, the provision of small loans to poor clients; banking and accounts, micro insurance; and payment system Microfinance services are designed to be more affordable to poor and socially marginalized customers and to help them become self-sufficient. Self-help group is a holistic programme of micro enterprises covering all aspects of self-employment, organisation of the rural poor into self-help groups and their

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Import and export trend of the Indian economy during COVID-19 pandemic period

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Abstract : This article is about the imports and exports' sway in India during the COVID-19 pandemic period. The authors have explored the Exports and imports of India- at a glance, trends in the industrial sector, Industry and Infrastructure of India at a glance, Economic inflation, foreign trade and national income present scenario, Inflation forecast, Union budget 2020-21 and controversies during COVID-19 circumstances, logistics performances in India during COVID 19, Exports and Imports impacts. The authors have proposed to the public authority of India, for example, sales inventory cost will go up, so all organizations will have to look into new strategies to dispose of their inventories. In India, we should construct capacities of territorial coordination's organizations to change with the adjustment of interest at a short time frame. The public authority ought to think about modern creations and development for empowering trade from India. All are foreordained as the purchaser value list will be drifted between from 3.5 % to 4.2 %. However, the Coronavirus will change the assurance to expand the buyer value file because of the Coronavirus cataclysmic event. These will help the policymaker to equivalent the financial conditions to inspire the product from the effect.

Keywords: Import and Export, Indian Economy, Import and Export of India, COVID-19

Introduction

In an export from one country to another, the receiving country is known as an import. The financial transactions that define international trade are importation and exportation. Import quotas and mandates from the customs department restrict the importing and exportation of products in international trade. Tariffs (taxes) on products may be imposed by importing and exporting authorities. Furthermore, trade agreements between the importing and exporting states govern products importation and exportation.

An export in international trade may be a good produced in one country that's sold into another country or a service provided in one country for a national or resident of another country. The vendor of such goods or the service provider is an exporter; the foreign buyer is an importer. Services that

figure in international trade include financial, accounting and other professional services, tourism, education likewise as material possession rights. The exportation of goods often requires the involvement of customs authorities.

A part of the financial set-up is in its EXIM policies. Basically, the balance of payment in international trade determines the money value, and it creates the demand for exchange. The surplus of domestic productions to be exported and deficiencies of domestic productions to be imported under the priority and essential requirements, depending upon the central and authorities' restrictions and relaxations on the circumstances prevailing within the national and international EXIM environments. During the COVID-19, the export and import of international trade are abstruse of the movement of products from one country to a dif

Dominance of social media in liveable community

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Abstract : Social media refers to a computer based technology that facilitates the sharing of ideas thoughts and information through virtual networks and communities. The Internet has expanded rapidly and shifted from being solely an information access tool to being an interactive tool used by individuals to discover and share content opinions and information. To develop information connections individuals are using a variety of techniques to access content and join a virtual communication on various social networking sites, therefore social media plays an integral role in everyone's life and has a huge bearing on society. There are beneficial consequences on business, politics, and society, as well as negative effects including cyberbullying, privacy, and fake news. This research paper assesses the dominance of social media in liveable communities, its positive and negative impact on society during the COVID-19 pandemic. This paper studies the usage of various social media platforms such as Facebook, WhatsApp, YouTube, Instagram, and Twitter. The findings suggest that algorithmic and social corrections are equally successful in limiting misperceptions, and that correction happens for persons with both strong and low conspiracy beliefs. Recommendations for social media initiatives to correct global health misinformation, such as encouraging people to refute erroneous or misleading health information and providing them with suitable sources to support their repudiation are discussed.

Keywords: Social media, COVID-19, Global health,

Introduction

Social media platform has become a forum where users can share content and interact with one another. Despite the fact that the word "social" implies that people play a significant part in sharing their social lives on these digital platforms, they are increasingly becoming corporate networks or media. They're reshaping business paradigms and repositioning the market. Social media have also shaped the existence of online communication that shares common interests and tendencies.

In the previous decade, organizations have been working by cutting edge levels of data and correspondence. Technology innovations define new methods of communication and socializing. Technology is primarily adopted as a means of decreasing communication barriers. Innovative tech

nology has ushered in a new era of communication with far-reaching implications for business, opening up new channels of contact and introducing us to a whole new world of possibilities new socializing median called social media.

A social media is an online platform that people use to build social networks or social relations with other people who share similar personal or career interests, activities, backgrounds, or real-life connections. Due to the advancement in technology, people are pressured to accept different lifestyles. Social networking sites can assist young people to become more socially capable. Social media is a web-based form of data communication. Social media platforms allow users to have conversations, share information and create web content. Social media has different forms, together with blogs, micro-blogs, wikis, social net

Dragon Fruit: nutritive value, therapeutic uses, processing, and waste utilization

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Abstract: Dragon fruit is a delicious and healthy exotic fruit that is grown in arid locations around the world, mainly in Asian countries. The fruit, which has a beautiful shape, a stunning colour, and has a delectable flavour. It is high in carotene, calcium, fiber, vitamin B, vitamin C, and phosphorus, all of which are essential nutrients. Antioxidants are also present in it. It has several health benefits such as cancer prevention, heals cuts and wounds and increases eyes sharpness. It contains bioactive compounds which increase immunity in humans. A new natural product can be obtained from dragon fruit 'albedo' which can be used to colour other food products. Although only at small-scale processing firms, the fruit is processed into a variety of value-added products. In addition to pulp processing, the utilisation of by-products (peel, seed) helps to reduce waste disposal difficulties while also increasing the product's value for food and other industrial applications. Furthermore, extracting and using bioactive components from fruit waste for food fortification can enhance the overall efficiency of the process.

Keywords: Dragon fruit, Antioxidants, vitamin C, Albedo, Bioactive compounds.

Introduction

Dragon fruit, also known as Pitaya or Pitahaya, is found in the Cactaceae family and is divided into two genera: *Hylocereus* and *Selenicereus*. The *Hylocereus* genus, which includes roughly 16 different species, has the most commercially grown variants. Climbing cacti with a 6-meter long stem are used to cultivate the fruits, and places with less yearly rainfall are better for growth. Pitaya species are generally found in Mesoamerica, where they can be found in a variety of landscapes with elevations ranging from a few meters to 1700 meters above sea level with rainfall ranging from 500 to 2000 mm. Thailand, Indonesia, Taiwan, Vietnam, Sri Lanka,

Bangladesh, Japan, Malaysia, Philippines, Australia, United States, and China are among the countries where cultivation is popular. Despite the fact that India is a net importer of dragon fruit, the cultivation area is expanding. *Hylocereus undatus* (white dragon fruit), *Hylocereus polyrhizus* (red dragon fruit), and *Selenicereus megalanthus* (yellow dragon fruit) are the three commercially produced kinds of dragon fruits. Because of the black, gritty seeds, the feel of the fruit is sometimes compared to that of a kiwi fruit. The flesh is moderately pleasant and minimal in calories when eaten uncooked. The seeds are eaten with the flesh and have a nutty flavour. They are high in lipids (Ariffin et al., 2008).

Neutrophil immunity: The role played by vitamin C

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Abstract : To maintain a healthy life and active immune system we have to have food with appropriate nutrients. Vitamin C, a micronutrient with antioxidant and immunomodulatory property is highly recommended to prevent infections, to lower risks of inflammation and stress-related disease conditions. Though vitamin C is competent in influencing various aspects of the immune system this review mainly focuses on the impact of vitamin C on neutrophils.

Keywords: Vitamin, anti-oxidant, neutrophil, free radicle, inflammation, oxidative stress

Introduction

A diet that we take, should be rich in nutrients to sustain growth and health. Antioxidants in food have a lot more to do with our immunity. The term antioxidant is attributed to those molecules which scavenge free radicals from cells and tissues (Kurutas, 2015). Natural fruits and vegetables (Jideani et al., 2021), herbs and spices (Alok et al., 2014), whole grains (Jideani et al., 2014), and medicinal plants (Xu et al., 2017) are indispensable sources of antioxidants. Phenolics, steroids, flavonoids, and other bioactive compounds (Jideani et al., 2021; Alok et al., 2014; Xu et al., 2017) present in them are responsible for these antioxidant properties. Another group of antioxidants includes vitamins (Kurutas, 2015; Dal-Pizzol et al., 2001; Niki, 2013; Chow, 2001; Palace et al., 1999) and they play a pivotal in maintaining a healthy metabolism (Huskisson et al., 2007).

Vitamins and their antioxidant property

Vitamins are dietary supplements that necessitate normal growth and development. They include vitamin A, B, C, D, E, and K, and depending on their solubility they are categorized into fat-soluble (A, D, E, K) and water-soluble vitamins (B and C). These micronutrients are involved in metabolism (Huskisson et al., 2007) as well as protect from different oxidative stress conditions (Zaidi and Banu, 2004). Some vitamins directly act as antioxidants while others indirectly act on free radicals thus reducing oxidative stress (Kurutas, 2015). Vitamin A is capable of instigating antioxidant gene expression (shi et al., 2016; Gad et al., 2018; Ahlemeyer et al., 2001) and antioxidant enzyme activity (Dal-Pizzol et al., 2001). The hydrophobic chain of polyene units in vitamin A is also capable of quenching singlet oxygen, stabilization of peroxy radicals, and also in neutralizing thiol

Antimicrobial peptides: Small, promising biomolecule with a bright future

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Abstract: Antimicrobial peptides (AMP) belong to a large class of small peptides. In many organisms, they are contemplated as a part of the innate immune response. AMP belongs to all classes of life and is regarded as premeditated compounds. This helps to deal with antimicrobial resistances which have advantages over standard antibiotics. They have a great outlook to control microbial infections by directly eliminating or blocking bacterial activity and/or by regulating the immune response of the host. The present review represents a broad analysis of studies on antimicrobial peptides and their approach in different fields. It also includes analysis of various AMP databases representing the work and importance of AMPs in specific fields. The importance of AMP has been expanding to a dimension and is surging further in its application in the forth coming generation.

Keywords: Antimicrobial peptides, Antibiotic resistance, Multidrug resistance, AMP databases

Introduction

Antimicrobial peptides (AMPs) are low molecular weight polypeptides. They act as weapons in the fight against bacteria, yeasts, fungi, viruses and even cancer cells with multimodal functionalities, and least resistance generation. AMPs are also described as host defense peptides (HDPs) which have vast importance. Many reviews considering AMPs and their prospective as drug candidates and their importance have been published in the last couple of years (Mookherjee, et al., 2020; Raheem, et al., 2018; Brogden, et al., 2016). AMPs are polypeptide sequences (typically 12–50 residues in length) including cationic and hydrophobic amino acids and they can work in a variety of ways and are considered as an impressive substitution to antibiotics (Haney, et al., 2019; Kumar, et al., 2018; Hancock, et al., 2006). They act against infectious microorganisms, such as bacteria, viruses, fungi, parasites (Travkova, et al., 2017) and can

display anti-cancer activity (Chernysh, et al., 2013; Felício, et al., 2017) or activate the immune responses (Haney, et al., 2013; Bowdish, et al., 2005). AMPs on straight contact with bacteria can kill Gram-positive or Gram-negative bacteria in the planktonic (free-swimming) or biofilm form (De la Fuente-Núñez, et al., 2016; Yasir, et al., 2018; Raheem, et al., 2018). AMPs can perform one or more functions at a time (Raheem, et al., 2020; Haney, et al., 2019). AMPs are an important part of the immune system, and they are isolated and purified from bacteria, fungi, algae, insects, frogs, and mammals (Brogden, et al., 2016). The activity of AMPs generates a disruption in the plasma membrane which causes cell lysis (Peravali, et al., 2013). Therefore, these peptides with broad-spectrum can be assigned as a new prospective therapeutic agent which has broad application (Brogden, et al., 2016).

Alexander Fleming discovered lysozyme in 1922, and his discovery opened the world of an

The Life of Plants in a Changing Environment

Edited by

Rishikesh Upadhyay

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CHAPTER EIGHT

BIOTIC STRESS IN PLANTS: A METABOLOMICS PERSPECTIVE

S VIJAYAN, M THAMPI AND MS JISHA

Biotic stress covers an array of negative influences on plants caused by living organisms, such as bacteria, fungi, viruses, nematodes, and protozoans. Biotic stress impairs crop health and reduces yields. Biotic stress initiates a cascade of events in plants, leading to metabolic changes and thus to plants activating immune responses towards the stress. Metabolomics is an area of advanced scientific study, which focuses on a broad, quantitative evaluation of metabolites produced in biological systems. This advanced field of research can be used effectively to address biotic stress. The plant metabolome consists of a huge array of primary and secondary metabolites, hormones, and signaling molecules with low molecular weights. Metabolites play an indispensable role in the health system, biomass production, and total architecture of plants. When subjected to biotic stress, plants produce certain stress-response metabolites to adapt to the new condition. For this reason, accurate metabolite profiling is a breakthrough in the investigation of biotic stress tolerance in plants. Moreover, this method has a lot of potential for future development and is budget-friendly. This advanced field of study will allow us to select superior quality plants and breeding materials. In the present review, an attempt is made to discuss the techniques and significant advancements obtained in the metabolomics study of plants to improve disease resistance and yield.

Introduction

The global annual crop yield is massively affected by both abiotic and biotic stresses. Abiotic stresses are environmental stresses faced by plants during growth. They include drought, salinity, heat, waterlogging, cold,

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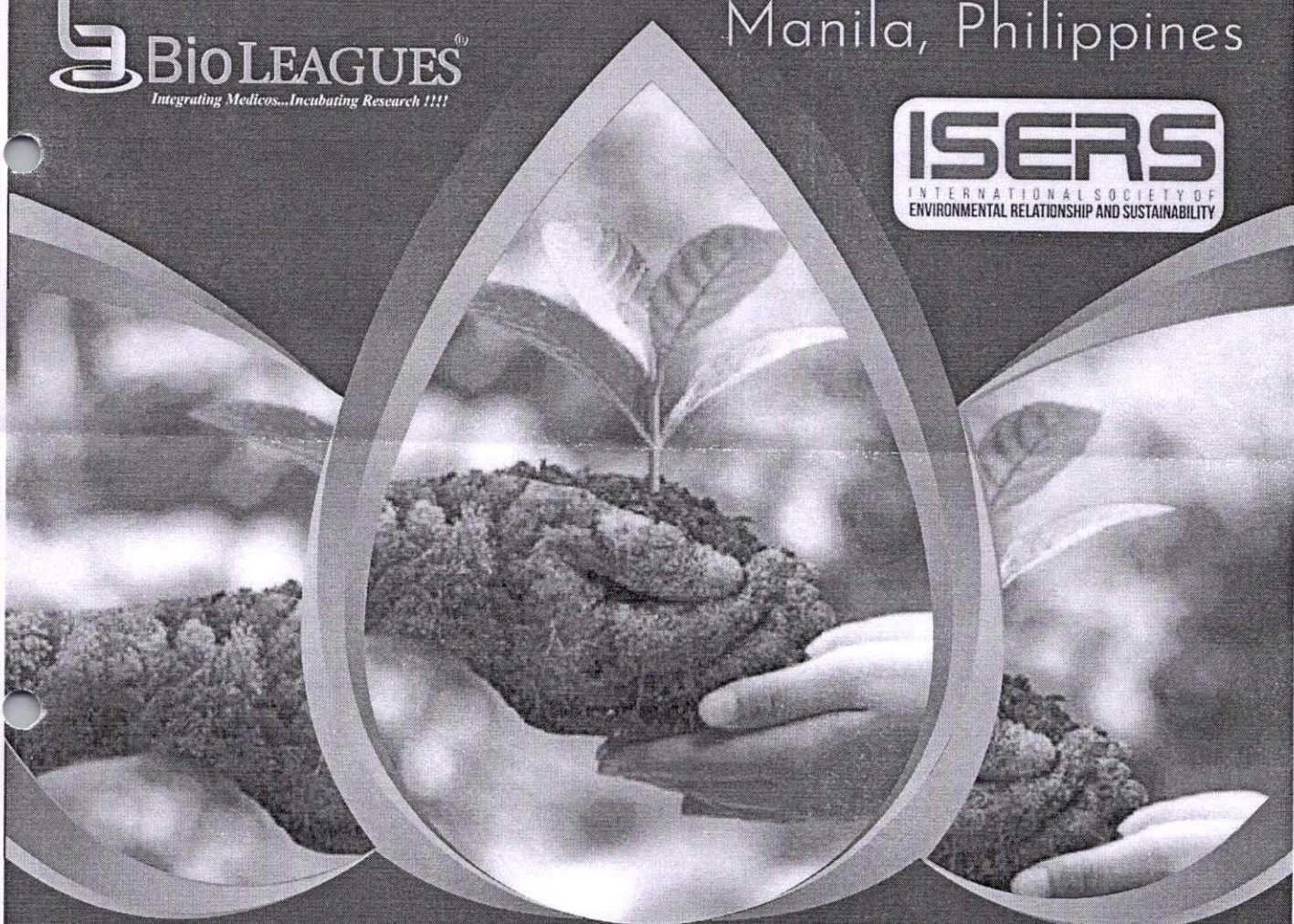
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Anticancer Efficacy of Chitosan/Biogenic silver nanoparticle conjugate: An *in vitro* analysis on MDA MB cell lines



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Mar Athanasios College For Advanced Studies, India

Abstract

T Cancer nanomedicine is an emerging area with an innovative approach towards cancer therapy. In this study, the anticancer efficacies of chitosan-stabilized biogenic silver nanoparticles (Ch/Bio-AgNPs) were evaluated by *in vitro* studies on MDA MB (human adenocarcinoma) cells. The IC 50 for Biogenic silver nanoparticles (BioAgNP) and Ch/Bio-AgNPs were studied by MTT assay, antiproliferative and cell apoptosis assay, ethidium bromide/acridine orange double staining assay, RO analysis, DNA fragmentation study, Caspase 7 and 9 assays and flow cytometry. The housekeeping gene β -actin was used in the gene expression analysis by real-time PCR. On MDA MB cell lines the IC 50 values calculated towards Bio-AgNP and Ch/Bio-AgNP was 4.346 ± 0.6381 μ g/ml and 0.9851 ± 0.0065 μ g/ml, respectively. The results clearly depicted the efficacy of Ch/Bio-AgNPs as an anticancer agent with characteristic apoptosis and up-regulation of p53 and p38 genes.

Keywords

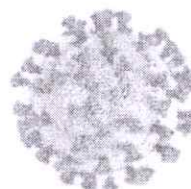
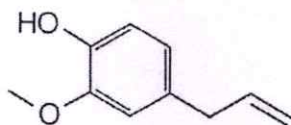
Chitosan/Bio-AgNP conjugate; MDA MB cells; Antitumor activity; RT PCR

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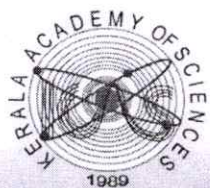


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An *in silico* approach to study the anti-inflammatory potential of an ayurvedic herbal decoction Kokilakasham kashayam

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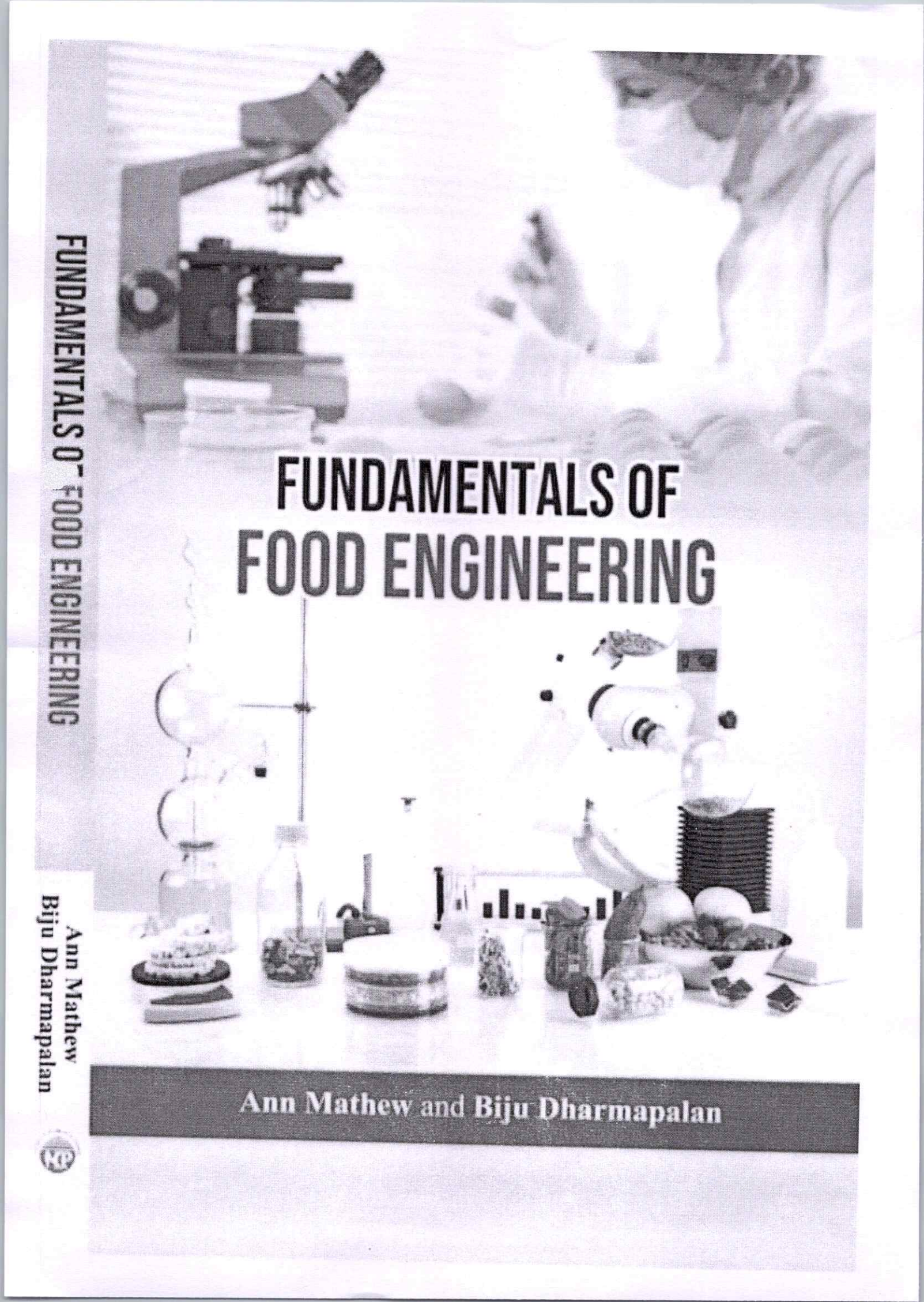
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Abstract

In the present developing field of bioinformatics, ayurveda research has experienced a transition from the conventional *in vivo* to *in silico* experimentation. Kokilakasham kashayam, referred in the classical text Ashtangahridayam - the quintessence of the eight branches of Ayurveda is widely recommended for the treatment of chronic inflammatory conditions. Since, there is lack of scientific evidence to verify its ethnomedical claims, the present work aims at identifying the bioactive molecules, evaluating their therapeutic potential by *in silico* methods thereby validating the traditional use of the herbal decoction. The fractions of the ayurvedic decoction were subjected to HRLC-MS and *in silico* analysis. HRLC-MS allowed identification of the bioactive molecules, followed by ADME studies and target prediction. Autodock 4 software was used for docking analysis of the identified molecules. The HRLC-MS chromatogram identified the presence of anti-inflammatory compounds, ADME studies showed their pharmacokinetic properties whereas swiss target prediction tool predicted the inflammatory targets of the identified molecules. Docking studies revealed that the identified molecules were found to be better inhibitors to NOS isoenzymes as compared to the positive controls. These findings are a step towards understanding the molecular mechanism underlying the bioactivity and probably will allow identifying bioactive molecules to be used as leads for the development of therapeutic agents.



FUNDAMENTALS OF FOOD ENGINEERING

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Ann Mathew
Biju Dharmapalan

Ann Mathew and Biju Dharmapalan



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FUNDAMENTALS OF FOOD ENGINEERING

About the Book

The book '**Fundamentals of Food Engineering**' provides the most basic concepts of Food Engineering for students who are a novice to the field of food science and technology. It focuses on the elementary principles and ideas essential for understanding the subject in deep. It covers the core concepts and theory on which the food industry functions, in a simple and easy-to-grasp pattern. The book will be useful for B.Sc., B.Tech, M.Sc. and M.Tech courses in food science and technology. It will be useful for competitive examinations like UGC -NET and ICAR-NET.

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