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(Quarterly Double Blind Peer Reviewed Referred Journal)
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Invite for paper submission for April- June 2017 issue
Non - Thematic

The theme for the coming journal is Non- Thematic. Learning opportunity, thus is extended beyond one class. As this issue is Non Thematic the authors can choose any theme of their choice and submit the paper. To write one, you will need to think deeply about some aspects of the readings. Often the part that takes the longest is coming up with a theme and figuring out what you want to say about it. But doing this thinking and processing will make the information "stick" in ways that will help you recall it and, more importantly, use it in your own work. It doesn't matter if I agree with your position, as long as you support it with evidence.

The next issue of the Journal SURYA-THE ENERGY April - June 2017 invites papers that explore the key approaches (Non - Thematic).

Papers are invited on the above theme by 20th of May 2017. The length of the article should be between 3000 and 3500 words. It is absolutely necessary to provide the required references in the body of the text, so that the readers are informed about the sources of the data, information, views or opinions. Further, the author is solely responsible for the accuracy of all the figures, quotations and references. Please follow APA style of referencing.

Submit your papers to:

Dr. Dhananjay Awasarikar
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From the Desk of Chairman, Editorial Board...

Like previous issues, this issue of Synergy - A Quarterly Management Journal for the quarter January - March 2017 also contains an array of interesting articles A Study on the Security Problems in Mobile Banking Services Provided by Banks, Challenges of Teaching - Learning Digital Color Methodology, Empowering Power through Relevant Education, Consumer Education on Rights and Protection in Globalization, Changing Trends in Education, SWAYAM MOOCs : Initiative of Ministry of Human Resource Development of India, Success of Animation in Education Sector with Trend Visualization, Transmission and Transformation of Cloud ERP Systems to name a few

The Editorial Board takes the opportunity to thank all the contributors for whole heartedly extending their support through research papers and Book Review, consequently in bringing out this January - March 2017 Issue.

The content and standing in all the published articles are exclusive views and personal opinions of the respective authors and they do not necessarily reflect the official views and opinions of the Institute. We hope this Issue would definitely bring innovative value addition in your existing knowledge.

Happy Reading!!

Prof. (Dr.) Sanjay B. Chordiya
Founder President & Dean Academics
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A Study on the Security Problems in Mobile Banking Services Provided by Banks

SURYADATTA

Dr. Lalitha Balakrishnan
V. Sudha

Abstract

Researching the telecommunication sector has proven that the newly developed smart phones have been considered as one of the most important delivery channels for commercial applications. This innovation has indeed changed the way people lead their daily lives. The modern day's banking applications are not pre-installed on phones but have to be downloaded from the respective providers in the market. Most of the Mobile banking apps are used to designate a process or a transaction by making use of the applicable software developed by the banks for their customers' hand devices. With no regional restrictions, one can access the banks, this has helped to promote a new era of technology which provides privacy to one's sensitive financial data. Most of the banks have given specific importance to the security of data that is transmitted between the customer smart mobile phones and the bank's servers, which are carried out via unsecured networks. However, there are a few cases where the customers have lost their money due to mishaps that occurred while transacting through mobile banking. Hence, in most of the banks, significant portion of its customers cite security as their main concern and therefore show disinterest in using mobile banking services. This paper attempts to examine some of the security issues of mobile internet banking apps and at the same time to explore some security measures

Key words: Android App Security, Customer Services, Data Privacy, Delivery Channel, Mobile Banking, Mobile Smart Phones

Introduction and Background

The last decade witnessed an increased usage of mobile phones due to the spread of mobile technology to access various online services for day to day activities. It is one of the most remarkable achievements across the globe. Mobile phones have invaded our daily lives and they have

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become popular among consumers in various aspects relating to health, banking, social media, and shopping. This Advanced mobile technology has indeed changed the life style of the people across the globe and at the same time created a unique entry towards their security point with two issues being very critical: (a) Consumers personal data protection (b) Malware vulnerabilities.

In fact, in any mobile device the most critical part were the apps which are voluntarily installed by the consumers' .Most of these apps get extensive access to the operating system and the personal data, and hence were suspected ofmalpractices, in other words, no one can blindly trust these apps. These issues are critical as far as mobile banking is concerned, as it directly relates on the impact on one's life since both money and personal data assets are involved. The banking sector presently focuses on reducing the costs of operations by creating the virtual agencies.Hence the common concern in today's mobile banking environment is focused on two major aspects namely – Privacy and Insecurity.

Users of mobile apps

Users of mobile apps worldwide by region 2012-2017 according to Portio Research			
	2012	2013	2017
App users worldwide	1.2 billion	N/A	4.4 billion
Asia Pacific	30%	32%	47%
Europe	29%	28%	21%
North America	18%	17%	10%
Middle East & Africa	14%	13%	12%
Latin America	9%	10%	10%
Source: © Portio Research (March 2013)		via: © mobiThinking	

Source: http://evus.com/blog/mobile-os-market-share-q2-2015
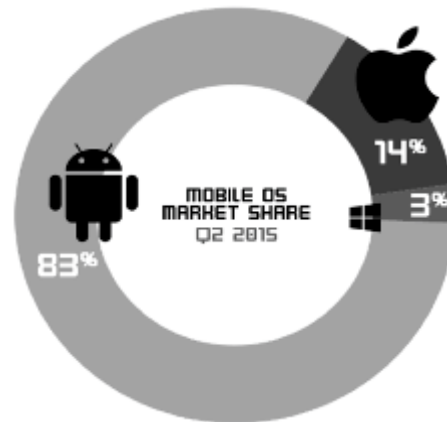
From the data mentioned above, we infer that by the year 2017 approximately 4.4 billion people will be using and that the operating system of mobiles is dominated by the Android platform. Since Android has 83% market share in quarter – 2 of the year 2015, and is still growing very strongly, it has been chosen for this particular research. Google, the manufacturers of Android have deeply modified the operating system to provide greater security. The security system adopted by this company was in terms of File system encryption, SMS encryption, Physical Access, VoIP encryption, Fake Geolocation System, etc., are some of the key features. All the apps that are available on the google play store are subject to deep security analysis and have to pass the Safety and Compliance procedure before being introduced to the market.

In spite of the security measures taken by the developers (as discussed in the previous paragraph) the

present Mobile devices are facing a greater security risk in comparison to their counterparts such as the laptops or the desktops for various factors as mentioned below.

a. Focus is more on user convenience than on user security.
b. Very less user authentication such as QR Codes, data sharing, SMS, NFC, etc. are required.
c. Mobile devices have better access to data and hence are better preferred in comparison to Computers.
d. The risk of identity theft is higher due to ease with which accounts and documents can be accessed via email or cloud storage, etc.
e. The data transmission over wireless connections is unsafe and often carried from an unsecured public wi-fi.
f. Often mobile apps have unsafe data storage and sensitive data, such as banking card numbers, passwords and PINs.
g. Due to poor app coding or authentication the sensitive data can be leaked and exposed to third parties.

Objectives of the study

a) To understand the Consumers personal data protection through mobile banking
b) To examine the mobile environments in order to ensure the security of the data.
c) To find out solutions based on the research study.

Review of Literature

K. Siau, E.-P. Lim, and Z. Shen, (2001)1 Mobile commerce or banking can be defined as a transaction of e-commerce which is conducted by using e-commerce technologies via a mobile device through wireless telecommunications networks. Claessens et al., (2002)2; researched the study towards the security aspects of mobile banking as there are a lot of concerns with respect to threats, attack and loss since mobile devices are very vulnerable. U. Varshney and R. Vetter, (2002)3; Mobile banking and commerce applications can be enabled through different technologies such as database, embedded systems, networking, and security and hence can be accessed any-time and from any-where. Mallat et al., (2004)4;in their respective researches, they concluded that mobile banking is being developed as an alternate delivery channel which will be convenient and effective for the financial institutions to give different services to their respective customers. Similarly, Pousttchi and Schurig (2004)5 in their research have suggested that the security systems require data to be encrypted, data access only to authorized personnel , and at the same time the authorization process has to be simple for mobile banking.

G. Xu and J. A. Gutierrez, (2006)6; suggested that the main factors for the success of mobile banking and

commerce are its convenience of time and place, ease of use, trust and ubiquity. Edge &Sampaio,(2009)7; confirmed that mobile banking has a number of flaws and loop-holes with a weak and rigid authentication provided by signature, PIN, password and Card Security Code (CSC). Hence, to prevent these enormous flaws which are considered cyber fraud, a safe and robust mobile banking system has to be facilitated by the experts of cyber security with pertinent frameworks and methods of security solutions.These security solutions should be updated with a comprehensive research survey for existing customers in account signatures which have to be enabled with an innovative account profiling technology which can be improved to detect the fraud mechanisms. Tzong, et al (2009)8; M-banking is considered to be one of the most important mobile commerce applications with value-added services that is currently available.

Singh et al., (2010)9; the banking customers can make use of all the required financial services through Mobile banking which are made easily accessible by using a handheld device. Fatima (2011)10; the researchsuggested biometric based identification and authentication systems as new technology solutions which address the innumerous issues of security and privacy which are imposing restrictions and prevents the individual customer from accessing all types of electronic services and the physical premises spaces. Elkhodr et al., (2012)11; the main concern is the security and privacy of sensitive personal financial data in acceptance of the mobile banking applications which are offered by many banks which allow its customers to operate at any-time by using their respective mobile banking applications which are installed in their mobile devices and to access their accounts to check the balance, to transfer funds between accounts, to make online payments and to shop from any-where and at any-time. They have proposed that the Transport Layer Security (TLS) protocol has to be combined with a proposed trust negotiation method, which in turn authenticates and connects the bank customer with the mobile device and the server for accessing the various information of their banking accounts. He, (2012)12; Lee et al., (2013)13; There is an overall concern with respect to cyber security concerns with regard to mobile banking, since the security aspects are complicated because of the different varieties of operating systems and different varieties of mobile devices.. Panja et al., (2013)14; The mobile banking apps have attracted the attention of many cyber criminals since it is easy to hack the received transaction alerts given to the customers from the banks with regard to balance, overdraft alerts, large deposits, and so on. Jeong& Yoon, (2013)15; the key factor for the acceptance of mobile banking services by the customers is the ease of use. Balebako&Cranor, (2014)16; the effectiveness of mobile applications has decreased due to the fewer resources of independent developers

on cyber security protection and the limited privacy protection experience. Cuomo, (2014)17;.Heggestuen, (2014)18; the research reveals the main priority is Security for many mobile banking customers. As per the survey it was found that when it comes to mobile banking, 71% of the customers are willing to switch accounts to the banks that guaranteed to reimburse cyber losses, 63% of the customers are willing to switch accounts with better security features, and 31% of customers are willing to pay extra for the services with added security features. Ryan, (2014)19; The Cyber security experts across the world have reported that the cyber-attacks are becoming more sophisticated and very frequent against all financial services institutions. Research also has suggested a risk assessment method with four-step for mobile banking that includes the classification of communication risk, information of identify threats and vulnerabilities, and its measures. Seo et al., (2014)20; have suggested that the wider usage of smartphones will be accompanied with a maximum increase in malware which would be attacking the mobiles.

Research Methodology

A relative new research method is employed to analyze this paper which is known as blog mining, and the internet was used to find blogs which have been discussing the aspects of mobile banking applications particularly in the field of security. Few researchers have already used this method and the following were their findings. Chau & Xu, 2012; He &Zha, (2014); one can add more currency and relevancy to the research if the active blogs are properly analysed. Rubin et al., (2011); One can get very useful information related to any research from the internet active blog.

After reviewing the active blogs, one can categorize them into three segments as mentioned below:

a. Threats & Vulnerabilities attacking the Mobile Banking App.
b. Best Practices for Counter-measures.
c. Trends emerging in security.

A. Threats & Vulnerabilities attacking the Mobile Banking App

1. Mobile malware includes Trojans, root kits, and spyware
2. Phishing
3. Third-party apps
4. Unsecured Wi-Fi networks

1. Mobile malware includes Trojans, root kits, spyware and viruses: Different types of threats specifically targeting the mobile banking users as the general security risk is very much higher, has many mobile devices that have been attacked and the severe present risks for various financial institutions across the globe.

The recent few examples were included as mentioned below:

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Trojans	
Banker	Used for stealing passwords and other sensitive information
Bankum	It replaces the legitimate versio ns of banking apps with fake ones
Perkel/Hesperbot	It uses JS injection to request mobile number, delivers via SMS and poses as a security app.
Wrob	It poses as Google Play app and replaces installed banking apps with Trojan clones
ZertSecurity	Used to impersonate bank login, steals credentials.
Zitmo	Used for stealing mTAN codes sent by banks in text messages.
Root kits	
DroidDream	Used rage against the cage exploit to root the device, steal data, install additional apps, and execute remote commands.
Spyware	
Keyloggers	It poses as third party keyboards that send keystroke and contextual information

2. Phishing: Many fake banking apps which claims to be official apps are developed by third parties and is readily available in the marketplace. Often most of the cyber-criminals also offer a downloadable update for these fake banking apps. These updates using these fake apps mostly contain the malicious codes which are in-turn used to steal customers banking information.

3. Third-party apps: Most of the third-party apps that are installed by the customers on mobile devices could be used to secretly tamper the existing official banking app and steal banking account information. Hence all the users have to be mandatorily advised to download or update apps only from trusted app stores which provide the official sources.

4. Unsecured Wi-Fi Networks: Maximum Wi-Fi networks that operate as public networks which are free are unencrypted. These public Wi-Fi networks may be in airports, coffee shops, hotels, libraries and other public places. When the customer uses his mobile banking apps in such unsecure wireless networks for banking transactions the cybercriminals use various methods to steal the sensitive information.

B. Best Practices for Counter-measures

A number of mechanisms such as second factor authentication for security measures as mentioned below can be adopted for enhancing the security of mobile banking applications. The best practices for countering are:

1. Anti-virus application
2. Apps update
3. Encryption
4. One-time password - (OTP)
5. Protocols and RCC
6. Site Key image

1. Anti-virus Application: Mobile anti-virus which provides a partial protection from malware to help eliminate the risks can be used. Hence it is advisable to install the recommended antivirus products for the mobile devices as recommended

by the leading organizations like PC Magazine who annually test these antivirus products.

2. Apps update: By updating both the operating system and the mobile banking app regularly.

Mobile OS must be updated every time, so that the hackers will not have the leverage of vulnerability of the OS to the mobile devices. Even most of the Banks regularly update their respective apps for fixing the bugs and vulnerabilities if they exist in the previous version of the apps. So it is advisable to update mobiles with the latest update of the mobile OS and the banking app as soon as the updates are available.

3. Encryption: All the sensitive data has to be protected and kept confidential, so all the data has to be encrypted and stored by the applications by using the appropriate data protection apps.

4. One-time password - (OTP): It is a token generated by the backend server and sent to the customer in the form of a SMS message that is used for verification of the user accounts. The token received has to be entered to access their mobile banking services to complete the transaction. This method provides the second-factor authentication which acts as an additional security for verification of identity of customers who have logged in for using the banking app for performing certain transactions.

5. Protocols and RCC: By securing all the transfer protocols and making sure that all connections have to make use of the secure transfer protocols. Root Certificate check is performed by securing all the communications that happen between the client-side app and the backend server. Hence by enforcing the SSL certificate validation, the bank app needs to check the SSL certificate and check if the respective signatory has signed it.

6. Site Key image: Security images and questions that are mainly used as a part of the procedure for the login process to help users identify and at the same time to deter phishing. This method acts like adding an additional layer for the process of identity verification to making the phishing much harder.

C. Trends emerging in security

There are indeed few emerging trends suggested by few security experts along with the vendors who have been proposing new ways to mediate the security risks which are associated with most of the mobile banking apps. A few of these trends which were found from the blog mining are mentioned below results.

1. Bank apps using Biometric methodology
2. Detecting frauds using big data
3. Mobile security SDK
4. Intelligent behavioral monitoring and analysis

1. Bank apps using Biometric methodology: By Integrating

biometric methods such as fingerprint scanning and voice recognition into mobile banking apps to enhance the user authentication, the Biometric authentication is offering a promising way to identity and access management. The personal biometric may also be vulnerable and so it is suggested that one combines personal biometric with a second stage authentication such as one-time password (OTP) and may be the Site-Key-Image for a stronger personal identification and verification.

2. Detecting frauds using big data: Deployment of the latest technology such as the Advanced Big Data Analytics for detecting the frauds and analyzing their behaviors. This accurate and efficient analysis helps the banks to identify the trends of malicious abnormal behavior that could be the indicative of an attack. The same can be outset by deploying advanced big data analytics by mining the enormous volumes of security data that is available.

3. Security SDK: One of the recent technological developments that have been developed by Webroot (2014) is mobile security SDK. This technology is designed to give an embedded security within the mobile banking app that runs in the background but at the same time delivers the threat intelligence in real-time data to the bank for further analysis and action.
4. Intelligent behavioral monitoring and analysis: By employing this technology the mobile banking apps can monitor the behavioral and analyze it. This approach helps the banks to detect abnormal behavior more accurately. The behaviour analysis is used to detect the behavior of the persons who are using the mobile banking apps and compare the same with their previous behavior or usage patterns. If any abnormal behavior is identified, then an alert message will be sent out to the customer.

Conclusion

With the implementation of protocols like WAP and WIG enforcing the security for transporting the data over GSM networks, most of the banks have implemented these protocols and have been benefited by the use of the security capabilities in their mobile banking apps.

The approach of two-factor authentication method clearly enhances the security systems of m-banking apps by adding extra layer of protection in the authentication mechanism. Further if the biometrics technology is added to the existing technology of two factor authentication, it would definitely be a game changer in the development of Mobile Banking Apps. Along with these if all the emerging trends that have been discussed in this research paper are implemented in development of a new era of mobile banking apps, it would make them much stronger.

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SURYADATTA

Challenges of Teaching - Learning Digital Color Methodology

Ankit Jain
Nishita Jain

Abstract

This paper gives information about different methodologies and theories of color and helps in understanding teaching and learning methods of digital color theory. This paper talks about Additive Colors (created with Light) and Subtractive Colors (created with Ink). While teaching it becomes obvious to develop interest in the minds of the students about colors and understanding the notations and terminologies of the color theory. Many often, students tries to understand the mechanism of color theory by remembering the color patterns. This paper formulates simple way of analyzing and remembering method which helps them to understand color theory forever.

Keywords

Color Theory (RGB, CMY, RYB, Primary, Secondary, Tertiary, Additive, Subtractive, Pigment, Light, Color Harmony, Hue Wheel)

Introduction

The human eye and brain together translate light into color. Light receptors within the eye transmit messages to the brain, which produces the familiar sensations of color.

As long ago as the 6th-century in China, people have tried to understand how and why we react to different colors and how the various colors work together. This ongoing study has produced many theories about the nature of color, all with a similar theme at their heart.

Color theory is based around the existence of three colors that, when mixed together, can produce all other colors. These colors, known as the primary colors, vary according to their application.

In the visual arts, color theory or colour theory is a body of

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practical guidance to color mixing and the visual effects of a specific color combination. There are also definitions (or categories) of colors based on the color wheel: primary color, secondary color and tertiary color.

Research indicates that typical end-users are baffled by the intricate behavior of color and often complain that "the colors that print do not match what is on the monitor".

In spite of astounding technological advances in color, it is readily apparent that few people understand the theory of how digital color works. This inability to fully comprehend new color technologies can lead to dissatisfaction and products that fall short of user expectations.

Challenges in Teaching

- Understanding different color theories
- Understanding the difference between print and digital colors
- Bridging the gap from Digital to Print
- Remembering and retrieval of color theory

Solution

Difference between the colors that print and colors that we see on the monitor

There is difference in the colors that we see on the monitor and the colors that we print and this difference is due to the color gamut and the way

these colors are perceived.

There are two color theories that exist and this difference in colors is due to these color theories. Having a basic knowledge of these color theories will give us a fair knowledge of the colors and how they process.
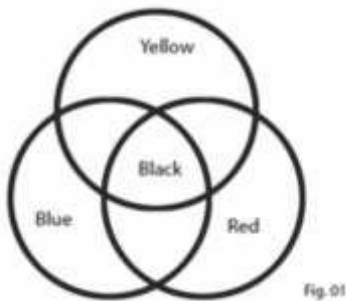
Types of color theories

The two types of color theories are namely Additive (Lights/Digital) Color theory and Subtractive (Pigments) Color theory.

Subtractive Color (Created with Ink)

A subtractive color model explains the mixing of a limited set of dyes, inks, paint pigments or natural colorants to create a wider range of colors, each the result of partially or completely subtracting (that is, absorbing) some wavelengths of light and not others. The color that a surface displays depends on which parts of the visible spectrum are not absorbed and therefore remain visible.

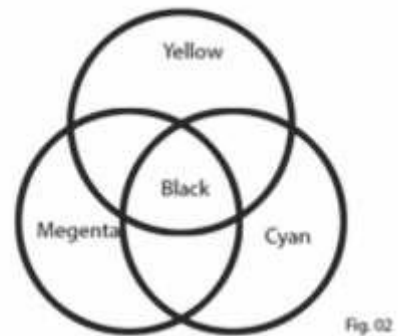Subtractive color systems start with light, presumably white light. Colored inks, paints, or filters between the watchers and the light source or reflective surface subtract wavelengths from the light, giving it color. If the incident light is other than white, our visual mechanisms are able to compensate well, but not perfectly, often giving a flawed impression of the "true" color of the surface.

Fig. 01

Fig. 02

Additive Color Theory (Created with Light)

RYB (Red, Yellow, Blue) (Fig. 01) is the formerly standard set of subtractive primary colors used for mixing pigments. It is used in art and art education, particularly in painting. It predated modern scientific color theory.

In color printing, the usual primary colors are cyan, magenta and yellow (CMY) (Fig. 02). Cyan is the complement of red, meaning that the cyan serves as a filter that absorbs red. The amount of cyan applied to a white sheet of paper controls how much of the red in white light will be reflected back from the paper.

Ideally, the cyan is completely transparent to green and blue light and has no effect on those parts of the spectrum. Magenta is the complement of green, and yellow the complement of blue. Combinations of different amounts of the three can produce a wide range of colors with good saturation.

Additive color is color created by mixing a number of different light colors, with shades of red, green, and blue being the most common primary colors used in additive color system. (Fig .03)

Fig. 03
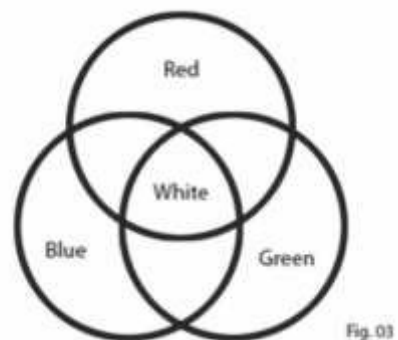
Additive color is in contrast to subtractive color, in which colors are created by subtracting (absorbing) parts of the spectrum of light present in ordinary white light, by means of colored pigments or dyes, such as those in paints, inks, and the three dye layers in typical color

photographs on film.

The combination of two of the standard three additive primary colors in equal proportions produces an additive secondary color—cyan, magenta or yellow—which, in the form of dyes or pigments, are the standard primary colors in subtractive color systems. The subtractive system using primaries that are the secondaries of the additive system can be viewed as an alternative approach to reproducing a wide range of colors by controlling the relative amounts of red, green, and blue light that reach the eye.

After understanding the basics two color theories, let's have a look at the digital color wheel and try to understand the notations on it, i.e., degrees and values below it.

In digital world, color is generally represented in the following formats

Arithmetic	(0.0-1.0,0.0-1.0, 0.0-1.0)
Percentage	(100%, 0%, 0%)
Digital 8-bit per channel	(0-255, 0-255, 0-255)
Digital 8-bit per channel	#FF0000 (hexadecimal)
Digital Hue Wheel	Hue (0o-360o)
Digital 16-bit per channel	(0-65535, 0-65535, 0-65535)

We have three digital primaries namely Red, Green and Blue. Also a circle is of 360o.

Now, 360/3 = 120. Hence we place each primary color at 120o away from each other starting clockwise, Red, Green and Blue respectively (Fig 04).
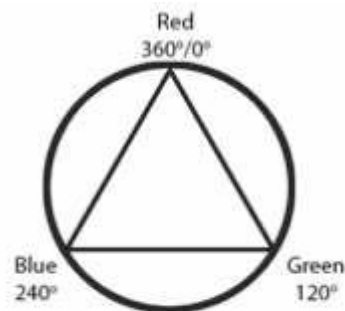

Fig. 04

Now as discussed earlier that the combination of two of the standard three additive primary colors in equal proportions produces an additive secondary color which are Cyan, Magenta and Yellow

Red + Green = Yellow
Blue + Green = Cyan
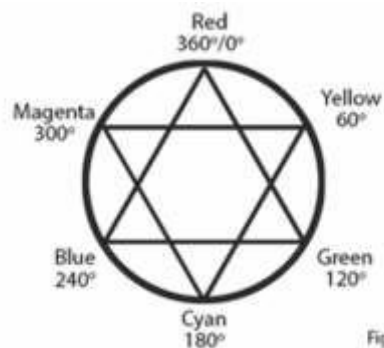Red + Blue = Magenta

Calculating for degrees (Fig. 05),

Fig. 05

Understanding Hue Wheel

Yellow   = (0 + 120)/2   = 60
Cyan   = (240 + 120)/2 = 180
Magenta = (240 + 360)/2 = 300

Further the combination of one primary and one secondary color in equal amount produces an additive tertiary color which are Orange, Spring Green, Turquoise, Ocean, Violet and Raspberry.

Red   + Yellow   = Orange
Green + Yellow   = Spring Green
Green + Cyan   = Turquoise
Blue   + Cyan   = Ocean
Blue   + Magenta = Violet
Red   + Magenta = Raspberry
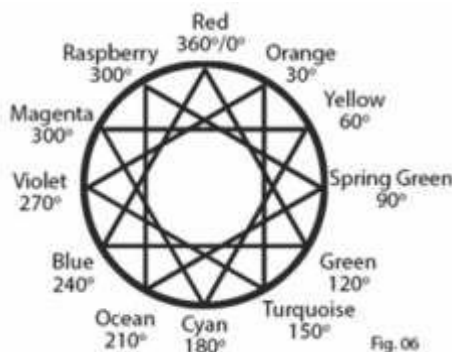
Calculating for degrees (Fig. 06),

Orange   = (0 + 60)/2   = 30
Spring Green = (60 + 120)/2   = 90
Turquoise = (120 + 180)/2 = 150
Ocean = (180 + 240)/2 = 210
Violet =   (240 + 300)/2 = 270
Raspberry = (300 + 360)/2 = 330

Conclusion

The above explained formula and methodology provides a simple and easy way of remembering the basic color theory and hue wheel to students which in turn is used in digital software and applications, making it easier for them to color correct and color grade images and videos as per the need. Also this formula is useful in converting the images and videos from black and white to color using the hue wheel in an easy manner. Understanding this formulae will act as a guide to students and they will be able to reuse the theory by simply creating the wheel and remember color theory forever.

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SURYADATTA

Empowering Power through Relevant Education

Sudha Vijay Nair

Abstract

Education is considered as a social cause and if India has to be powerful, then we need to encourage students to study in India and not leave India for foreign universities which lead to foreign outflow of funds. India has to achieve excellence and has to innovate a knowledge based economy. Even today, primary education is still not available to many Indian population mostly in rural villages and remote areas. We have to ensure higher education in the nation and for that it is mandatory that each and every child get atleast their basic education.

Keywords

Social cause, Knowledge based economy

Objectives

The main objective of the study is:
- To try and make India an international hub for education.
- To focus more on primary education i.e. 100% primary functional literacy.
- To transform India through education by imparting awareness with relevant problems being faced and solutions and action plans to be taken.
- To focus more on equity in education without gender discrimination.

Introduction

India has so much to give to the world in the shape of religion, culture and moral values, but suffers the most important part of a civilized nation i.e. education in India is in need of a system of education which is value based, which inculcates among the young students values that they need to imbibe and embalm within themselves. Education is the only means which can give to our young the right path and direction and as such we need a value

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oriented educational system. It is at the level of primary education that such lessons need to begin so that a child's intellectual, physical, emotional and psychological parts of the child's personality will be moulded and modeled. Mother is the first teacher in a value based system, then is the teacher who has to be devoted and dedicated to his job.

On 1st April 2010, the right of children for free and compulsory education act became a reality and this step became the first fundamental right that has been added to the constitution since India attained independence. The act made it obligatory on the state to guarantee right to education and ensure compulsory admission, attendance and completion of elementary education by every child of 6-14 years. Education of girls has been given top most priority by the Government of India. Sarva Shiksha Abhiyan or 'Education for All' programme recognized that girl's education requires changes not only in the education system but also in societal norms and attitudes. Education should be skill based rather than knowledge based.

Purpose of education

The purpose of education can be divided into two factors-
(a) Economic factor and (b) Social factor

Economic factors includes:-
  (1) How to survive in this world?
  (2) How to earn more?

  (3) How my family will be benefitted?
  (4) To excel in any particular field of activity.
  (5) To do things better and faster.
  (6) Need for benchmarking and improving.

Social factors includes:-
  (1) Stabilization of population growth.
  (2) To improve harmony between people.
  (3) To improve productivity.
  (4) To reduce pollution and improve environment.
  (5) To improve the security of India.

What does education mean?

- Education means not just a lavish lifestyle but it means building up of character and developing a moral sense which we find are lacking in today's scenario.
- Education must go together with basic human values-not only a broad mind but a warm heart too.
- Education is that which liberates the mind from narrowness in every form.
- Education must make one feel elevated and make us feel worthy, with a sense of fulfillment and achievement.
- To learn something novel.

Education problems and solutions

The problem of dropouts is a very major problem. As a child grows and attains 8 or 10 years, he/she is treated in the rural families as an earning supplement and education comes to a
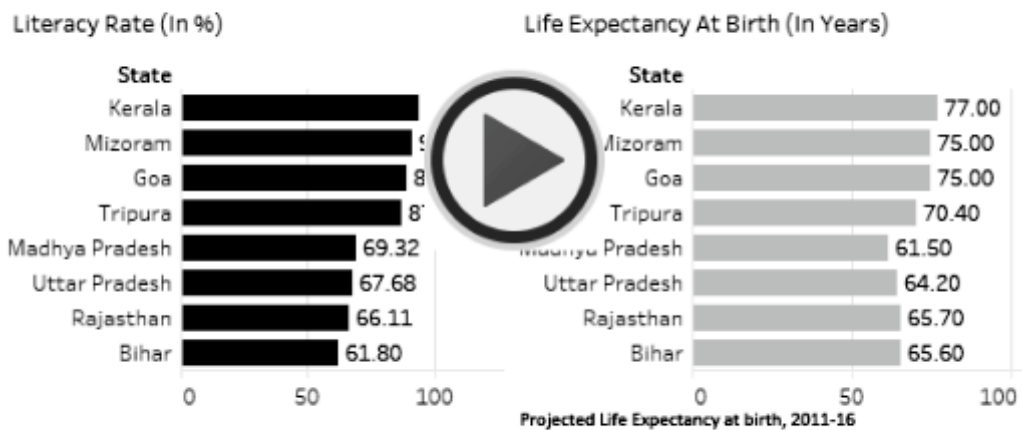
standstill.

In order to meet this situation, part time short duration classes have to be evolved as an alternative to the formal system of education which has been undertaken in states like Assam, Bihar, Orissa, Uttarpradesh and West Bengal. Kerala is the only one state which has shown the best result as far as the universalization of elementary education is concerned and has the highest literacy rate compared to other states. India's literacy rate is at 74.04%. Kerala is the most literate state in India, with 93.91% literacy. Bihar is the least literate state in India, with a literacy of 63.82%.

To know the development in a society, literacy is another proper indicator of economic development. For purpose of census, a person in age limit of seven and above, who can both write and read with understanding in any of the language is considered as a literate in India. Literacy plays a major role in the economic development of a nation. Although India has raised its current literacy rate of 75% (2016) from 12% at the time of Independence in 1947, its still lag behind the world average literacy rate of 84%.

States With Higher Life Expectancy At Birth Are More Literate

Literacy Rate (In %)	Life Expectancy At Birth (In Years)

State		State	
Kerala		Kerala	77.00
Mizoram	9	Mizoram	75.00
Goa	8	Goa	75.00
Tripura	8	Tripura	70.40
Madhya Pradesh	69.32	Madhya Pradesh	61.50
Uttar Pradesh	67.68	Uttar Pradesh	64.20
Rajasthan	66.11	Rajasthan	65.70
Bihar	61.80	Bihar	65.60

Projected Life Expectancy at birth, 2011-16

+ableau

Education Issues and Trends

Education issues can be defined as the ideas, thoughts and debates that are centered on educational policy and practices whereas trends can be something which is new and upcoming and consist of various popular educational practices. One of the main issues to be resolved and monitored is the equity in education and usage of adaptive learning in the classrooms. Fair and equal right to education has to be equal for all students regardless of socio economic background.

The basic need or requirement of today is a motivated teacher for primary education programme who can teach even under the shade of a tree but he/she must have the urge to teach, be devoted and dedicated to their job. This would directly reflect upon the students for whom the teacher has to be play-mate, a guide and an ideal companion.

Further, comes the secondary stage or education wherein bifurcation of the educational programme into vocational and general is required. Students who are inclined to learn and excel to be engineers, doctors etc. should be adopting the general stream and students who want to be designers, technicians, draftsmen etc should be undergoing vocational educational and training programmes (VET). As we all know the most important capital is human capital and we have to give more importance and emphasize on the development of human capital in terms of literacy, secondary, vocational and higher education. The neglect of human capital is the main causes of problems like population growth, poverty, unemployment, terrorism, low productivity and even corruption and poor governance.

The trend of education is changing. Today students have been gaining by connecting with the Virtual world of learning, Global connect, Social networking, Vocational training, Collective learning etc.

Virtual world of learning- Those days are gone when students learn something in a very hard way. Today schools and colleges and other educational institutions have adapted to a more scientific and smart way of learning their subjects. Being in the age of information, kids today are learning how to make the best way of using technology to their advantage which includes Audio-visual learning which helps them for practical learning and gaining updated information.

Global Connect- Technology bridges the gap as students have access to a global classroom where they can learn about things that are empirical all around the globe. This helps them in understanding and thinking on a global scale. Modern education system sprouts in different forms and depends on the way you look at it.

Social networking- This networking has been growing each day and we find blogs using social networking to teach any subject which has indirectly blended the traditional education with modern one.

Vocational training – Vocational training has become important for students who are seeking a specialized higher education or a specific skill in order to enhance their career.

Collective learning- Students form groups and study and blend with each other effectively than study alone.

Career Oriented approach- Many institutes and colleges cater to the demand of the selected field and

students are guided for their career.
Activity based learning- Learning process through activity participation in different activities like role play, case studies, projects, presentations and many more tools are utilized to make education more interactive and productive.

Online learning & Distance learning- This sort of learning has gained importance from mid career professionals to housewives. This sort of learning is mostly preferred due to its accessibility ad expediency. People can study at their own convenient time without hampering their other commitments. Online learning is cost effective and it carries importance to job seekers as well. Sitting at home one can prepare for any degree program from any online institute. Also multimedia techniques are involved in online learning. Online exams are also a part of online learning. Students can access online educational material at any time.

Smart learning- This is a new vision in education by using computer, internet and multimedia in classroom teaching. This sort of learning introduces worldwide approach in the classroom. Today during the internet era, you can get any of your questions answered through Google etc.

Education field is the field where drastic changes are taking place due to the advancement of IT and communication resulting in modern trends in education. Today

innovation and accessibility is more important for students and they are more career minded than earlier days. Education is now all about innovation and suitability.

Research Methodology

- The research done has been through various text books of secondary school and websites on education trend. Both primary and secondary information were used. Interaction with primary and secondary school children also helped to do the research.
- The traditional method and modern concept of learning was taken into consideration during research.
- Interaction with teachers and faculty members regarding their concept of modern educational techniques has been considered during the research work.

Observations

It has been observed that India is behind as compared to other countries due to the various technologies that are not being

updated as far as education is concerned and this is one of the main reason why Indian students are migrating abroad for their future career and studies.

Indian Government has to take and implement all necessary steps to develop Indian educational system with par with foreign universities.

Conclusion

As a nation, India as well as other countries have to advance ahead, but education is the field which prepares the youth of the nation to take the nation forward. Education at all levels needs a closer look and should be taken as much with a priority as the defence of our frontiers. The demand for quality education is becoming intense and students and parents should go to great lengths to access it.

Suggestions

Education should cater to the pool of professional development opportunities. Teachers have to acquire new skills and models for their studies. Various training programmes on updated technology and its importance to be imparted to teachers in order to enhance student's development and overall personality. India has to follow the philosophy of Mahatma Gandhi:-

Educate one man, you educate one person, but educate a woman and you educate a whole civilization

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SURYADATTA

Consumer Education on Rights and Protection in Globalization

Vanashree Trivedi

Abstract

The aim of this paper is to empirically evaluate whether the process of globalization, through which countries become increasingly interconnected, is related to pro-environmental intentions. The fact that countries are able to more freely trade with each other, has created an abundance of products and services that can be offered to the consumer. Many of these available products and services would have been unimaginable before the many free trade agreements were signed and international unions were formed. Globalization has changed consumer buying behavior in ways that could never have been anticipated. The benefits of globalization have been an increase in product variety for consumers, lower prices and improved quality of products, although some might debate the last benefit. Communications and transport links flourished by the globalization created a new way of accessing to the new markets through e-commerce.

Keywords

Globalization, Consumer attitudes, Consumer education, Consumer protection, Consumers Rights-commerce

Introduction

Consumer Education is a way to balance the power between producers and consumers. Consumer Education aims to encourage individuals to analyze and make value-based decisions at a personal level in terms of needs and wants. It can also help individuals to make decisions which may be concerned with the wider community. It is the transferability of skills conferred by consumer education which sets it apart from consumer information-enabling people to use

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consumer information, so they ultimately make informed decisions. The crucial question is how important consumer education is?

Objectives

Consumers education objectives are as follows

- To educate consumers, balance consumer needs and degree of protection and to provide relevant consumer rights and entitlements.

Advice individual consumers and protect their rights.

- To ensure prices of goods are fair and appropriate with relevance to its quality and value.
- To work with the existing laws in order to protect consumer's interest and general health.
- To encourage the involvement of society and citizens (consumers) in the consideration, standardization and basic provision of their rights.
- To work towards ensuring production of high quality products.
- To study the fluctuations in the market with regards to the factors affecting it, and to advice or make suggestions to the ministry and organizations involved in the business and commercial sectors.
- To carry out activities such as the publication of bulletins and ceiling price lists, as well as forming market organizations

and consumer clubs.

Some Important Definitions

1) Consumers:
A consumer is a person or organization that uses economic services or commodities. A n individual who buys products or services for personal use and not for manufacture or resale. A consumer is someone who can make the decision whether or not to purchase an item at the store, and someone who can be influenced by marketing and advertisements.

2) Consumer Protection:
It is a group of laws and organizations designed to ensure the rights of consumers, as well as fair trade, competition, and accurate information in the marketplace. The laws are designed to prevent the businesses that engage in fraud or specified unfair practices from gaining an advantage over competitors. They may also provide additional protection for those most vulnerable in society. Consumer protection laws are a form of government regulation that aim to protect the rights of consumers.

3) Consumer Education:
Consumer education is basically an education which brings about behavioral changes in a person who goes to market to buy anything. Consumer education is the process of gaining the knowledge and skills

needed in managing consumer resources and taking actions to influence the factors which affect consumer decisions. Consumer education addresses four issues i.e. consumer decision making economics, personal finance, rights and responsibilities.

What are the rights guaranteed under the act?

The Consumer Protection Act guarantees the following six Consumers Rights:

- Right to Safety-The right to be protected against the marketing of goods and services, which are hazardous to life and property?
- Right to be informed-The right to be informed about the quality, quantity, potency, purity, standard and price of goods or services, as the case may be so as to protect the consumer against unfair trade practices.
- Right to Choose-The right to be assured, wherever possible, access to a variety of goods and services at competitive prices
- Right to be heard-The right to be heard and to be assured that consumer's interests will receive due consideration at appropriate form.
- Right to Redressal-The right to seek redressal against unfair trade practices or restrictive trade practices or unscrupulous exploitation of consumers.
- Right to Consumer Education-It is the right to consumer

education in this globalization. But there is huge change in mode of purchases by consumer. Like traditional purchases, online purchases-purchases and other mode of it.

Based on that now a day as there is change in pattern of purchases by consumer they have to update their knowledge regarding protection and right in this globalization. Marketers have shown increasing interest in the use of corporate societal marketing (CSM) programs.

(1) Building brand awareness,
(2) Enhancing brand image,
(3) Establishing brand credibility,
(4) Evoking brand feelings,
(5) Creating a sense of brand community, and
(6) Eliciting brand engagement.

Advantages of Consumer Education

Consumer education helps the consumer in many ways in protecting himself from the malpractices of the seller and in making judicious purchases. Let us see what the advantages of consumer education are

1. Consumer education helps a person in making proper purchase. It enables the consumer in making right selection.
2. Consumer education familiarizes the consumer with the problems which he faces

while making purchases. This education inculcates the logical viewpoint in him.

3. Consumer education provides the consumer full information of marketing conditions like various sources of purchasing a particular commodity, from where to get cheap and best goods, the shops providing additional facilities, and to latest products. All these information enables him in taking right decision regarding shopping.

4. Consumer education familiarizes the consumer with various standards of standardization and their markings.

5. One of the most important uses of consumer education is that it familiarizes the consumer about the various acts enacted by the Government from time to time. Consumer education helps the consumer in getting maximum satisfaction by proper utilization of his money and leads a better living standard

Current Consumer Education Methodology Adopted In India

1. Consumer Protection Act, 1986

The Act enshrines all consumer rights which are internationally accepted. Under the Act, a separate three-tier quasi judicial consumer dispute Redressal machinery popularly known as consumer courts or consumer forums has been set up at the national, state and district level to provide simple, speedy and inexpensive Redressal to the consumer grievances against any defective goods, deficiency in services including the restrictive/unfair trade practices.

2. Networking of Consumer

In order to establish complete interlinking of computer networking of consumer court, namely, National Commission, 35 State Commissions and 607 District Forums for its monitoring and accessing various kinds of data, the Department is moving forward to introduce computerization and networking of all consumer forums.

3. Multi Media Publicity Campaign

Multi-media publicity campaign are being undertaken through print and electronic media on the issues that are directly relevant to the role of the Department such as ISI, Hallmark, Labeling, MRP, Weights and Measures etc,. Each advertisement is released through a network of national as well as regional newspapers throughout the country. Simultaneously, major initiative are being launched wherein issues that have come into focus on account of new emerging areas such as telecom, real estate, credit cards, financial products, pharmaceuticals, Insurance, travel services, medicines etc. are

undertaken either through joint campaigns or joint consultations with the concerned Departments.

4. Meghdoot Postcards

Consumer awareness messages are also being disseminated through Meghdoot Post cards in consultation with Department of Post to reach far-flung rural areas including North-East States. Posters carrying messages pertaining to consumer.

5. Core Centre

The Department has launched on March 15, 2005 Consumer on Line Resources and Empowerment (CORE) Centre on the website www.core.nic.in for consumer advocacy and online redressal of consumer grievances. Through the various advertisements relating to consumer awareness, adequate publicity is being given to the activities of CORE and its website so that consumers can take the help of online counseling/guidance being provided through it.

6. National Consumer Helpline

The Department has launched a National Help Line. The toll free number 1800-11-4000 facility is available to consumers from 9.30 A.M. to 5.30 P.M. on all the working days.

7. Participation in India

International Trade-Fair-2010

Exhibitions and Trade Fairs are also used as a tool for showcasing the consumer awareness initiatives of the Department. The Department participated in the India-International Trade Fair Organized in New Delhi from 14th to 27th November, 2010. Thousands of visitors visited the 'Jago Grahak Jago' stall during the Trade Fair.

8. Joint Publicity Campaign

As part of joint publicity campaign, various advertisements have been released on specific consumer issues like real estate, credit cards, pharmaceuticals, insurance, food safety etc. To educate consumers.

9. Use of Sports Events

In order to reach maximum number of consumers, the Department telecasted video spots containing consumer related information during the popular sports events where the audience interest is maximum.

10. Use of Internet to generate Consumer Awareness

Realizing that more than 70% populations under the age of 35 years are using the internet in a big way, a major initiative is being taken to spread consumer awareness through the internet. All the print

advertisements as well as the Audio Video spots of the Department have been uploaded on the website of the Ministry i.e. www.fcamin.nic.in.

11. Advertisements in journals of Publication Division

The Department has entered into a tie-up with Publication Division under the Ministry of Information & Broadcasting for displaying advertisements in the journals brought out by the Division such as Yojana, Kurukshetra, Bal Bharti, Aajkal and their regional editions. Focused articles on consumer awareness are also being published in these magazines keeping in view their target readership.

12. Collaboration with Gmbh for Technical Support

The Department has collaborated with Deutsche Gesellschaft Fur Technische Zusammenarbeit (GTZ) for providing technical support regarding production and development of publicity material.

13. Proactive Legislation For Consumer Protection

In consonance with the special emphasis placed by this Department on the development of legal metrology in the country, a comprehensive Legal Metrology Bill has been enacted to replace the Standards of Weights and Measures Act, 1976 and the Standards of Weights and Measures (Enforcement) Act, 1985.

14. National Consumer Protection Authority

Another important policy initiative by the Department is a proposal for setting up a National Consumer Protection Authority, which would be a proactive body, empowered to take sue Moto action for better protection of the interests of the consumers in general. This Department is also in the process of framing a 'National Consumer Policy' which would shape the future of consumer movement in the country. Under this policy, it is proposed to attune the consumer movement in the country with the United Nations Guidelines on Consumer Protection.

An Analytical Framework for Consumer Education

The question as to the place consumer education should have in consumer policy can be viewed from three viewpoints. Each viewpoint can also be used to determine the level (of qualification) at which the education should be pitched and also the player(s) which have a responsibility for consumer education. These three viewpoints are: a. consumer protection; b. market forces and c. protecting the public interest. However, the first responsibility for consumer education rests with the consumers

themselves; consumers must make an effort to avail themselves of the existing consumer education on offer in order to be fully equipped to play their part as a consumer in the real world.

a. Consumer protection This approach, originally the primary viewpoint of the consumer policy pursued by the Dutch government, is also based on "basic consumer rights", including the right to information and education, as formulated by the Council of the European Communities in 1975. This approach is also clearly discernible in the new EC Treaty. This is a specific responsibility both of the European Communities and of our national government, which can also call in civil society and intermediary organisations for that matter. As far as policy is concerned, the government put consumer protection into practice in the Netherlands in the 1980s and 1990s by passing a large number of laws (some of them originating from European legislation. If there is a sound basis in legislation, consumer education can be confined to the first and second level of qualification. As, in this approach, consumer education is mainly a function of consumer protection, which is essentially a task of government, consumer education will be first and foremost a government responsibility in this respect.

b. Market forces A well-developed demand side is of essential importance for ensuring that the market for products and services operates properly, not only in terms of quantity, i.e. purchasing power, but also in terms of quality, i.e. consumers who know what is available to buy. Matters such as market structure and market transparency, negotiating power and the transaction are key elements of consumer policy in this approach; consumer policy is regarded as an integral part of the policy to stimulate market forces. In the Netherlands, the consumer policy pursued by the government developed in this direction throughout the 1990s. Information, both general and specific, and the accessibility and availability of information are essential in this viewpoint. Consumer education can therefore serve the interests both of market players and of government (in line with its responsibility for ensuring the efficient operation of markets).

c. Protecting the public interest in this third viewpoint, the emphasis is not on the individual consumer (as in the first case) or on the consumer as a market player (as in the second case), but on the external effects of consumer behavior. This is not

about the specific interests of the consumer, but about the public interest. The idea is that the principle of the consumer's individual freedom of choice should be honored, but freedom of choice has its limitations and boundaries, which manifest themselves in the negative external effects of consumer behavior on the environment, public health and public order. In this viewpoint, consumer education must be used to equip the consumer with the necessary knowledge and has an urgent role to play at all three levels of qualification. As the protector of the public interest, the government has primary responsibility for providing consumer education but civil society organizations will feel called upon to play a part in terms of consumer education.

Conclusion

In the good olden days the principle of -Caveat emptor', which meant buyer beware governed the relationship between seller and the buyer. In the era of open markets buyer and seller came face to face, seller exhibited his goods, and buyer thoroughly examined them and then purchased them. It was assumed that he would use all care and skill while entering into transaction. Consumer is the focal point of any business. Consumers 'satisfaction will benefit not only

business but government and society as well. So consumerism should not be considered as consumers' war against business. It is a collective consciousness on the part of consumers, business, government and civil society to enhance consumers' satisfaction and social welfare which will in turn benefit all of them and finally make the society a better place to live in.

The Future Roadmap

The multi-media publicity to educate consumers and make them aware about their rights will have a long lasting impact not only on the end consumers but also on the entire manufacturing and services sector. It will go a long way in introducing greater accountability and transparency in the services provided by the public as well as private sector since the end user i.e. consumer will be educated and will become aware enough to ask for best possible services in return of his hard earned money. The day is therefore not far off when the consumers will be truly empowered.

Customer is king and will remain empowered always.

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SURYADATTA

Changing Trends in Education

Dr. Archana Wafgaonkar

Abstract

This paper gives a glimpse on changing trends in education. Methods used for teaching are changing with the change in the society. With the growth of social networking and internet new methods of teaching are coming up. With the expansion of the worldwide marketing in the business, carrier oriented approaches are becoming popular. Teaching methods are changing according to the requirements of the new generation.

Objectives

1. To study the changing trends in education.
2. To find the benefits and drawbacks of the change in the education.
3. To find how to overcome the problems in the education.
4. To find out the reasons of change in the trends of education.

Methodology

This is an exploratory and descriptive type of research. Study is based on the secondary data. Various websites have been referred for this study.

There are drastic changes in the learning methods in this new changing world. Educational Institutes are giving more emphasis on various approaches as discussed below –

1. Career Oriented Approach

Educational institutes are taking more efforts to educate their students for their career and make them ready for the job market. Students also choose colleges which will make them ready for the job market.

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Changing Trends in Education

Business schools make their students ready for the corporate world where as fine art colleges prepare students for arts. Students are prepared for their career path and are provided with various apprenticeship programs and practical training which is their first step towards their career.

2. Activity Based Approach

Activities are arranged for the students. Students gain knowledge from quiz or games which are arranged or the mock trials at law schools where they get experience of the cases they are going to take. Students get knowledge through role playing, case studies, projects and presentations which give real life experience. Nowadays instructor plays a role of facilitator who arranges the seminars for them depending upon their environment.

3. Student assessment and evaluation pattern

Use of technology has made grading system as well as classroom assessment very easy and error free. Time and efforts are saved due to computerization. Everything related has become fast and transparent. Students are happy by this change due to fool proof results.

4. Online Learning

5. Online Learning is a success as it is serving various courses throughout the world. It has changed the procedures and practices at the same time it has made possible house wives to study online by sitting at home. Online learning helps them to choose their own time for learning.

Traditional methods are also used along with new methods. Combination of these methods has made learning smooth, flexible and interesting. We should always follow these trends to achieve success in the learning. [1]

Here are some additional trends of education which are also known worldwide –

- Ground Up Diversity – Education should be through talks, writing advertising and teaching so that all the students can understand. Today's ways of education should be changed accordingly.
- Another way of changing education is to use social networking New blogs can be used to teach students to learn all the basic skills rather than using stagnant ways of learning.
- Talking Education – Using talking and videos lessons can be reviewed to teach concepts to make it interesting.
- Underground Education – Education should teach students to survive in the real world. Education should give them tools

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to live and breathe in the real world.

- Problem Based Learning – is popular in Australia. Students work together on real world problem nursing college students take the advantage of this type of learning.
- Learning with technologies – This kind of learning is heavily used in Australia which helps students learn various technologies to survive in the real world.
- Constructing Learning – Students create their own learning environment by participating in the various activities used for acquiring knowledge. While acquiring knowledge they make many mistakes. Hence this type of learning is not stable and hence many systems reject it.
- International Objectives- Many countries are giving importance to international student's education. These countries benefit economically in education and employment.
- Mobile Education – We always have our mobile with us any where we go. We get knowledge between conversations. Laptops also can help to acquire knowledge which will help us educate ourselves.
- Personalized Education – Personalized education means education which gives importance to personalized needs and desires. This education is having high value than ever.
- Flexible Learning – in this type of learning students are given choice of selecting their own subjects depending upon their interests and by maintaining all the standards.
- Flipped Learning – In this type of learning environment is flipped so that students can do some interaction for learning with their teachers instead of learning in a classroom.
- Classical Education – Classical education should be delivered as it is whether it is drama by Shakespeare students gets this type of education in his online class in Oxford.
- Free Post-Secondary Education – Countries all over the world are offering this education. This type of education is for the students who cannot go to the school or college. They can work at the same time they can educate themselves.
- Moral Education – This education is a religious education and is on how humans interact with each other.
- Character Education – Education on morality should be given to students. Character education is stronger than morality education. Every student should get this education.
- Expeditionary Learning – is the learning other than the confined learning in the classroom. Students learn while achieving

goals and by accomplishing character development.

- Gamification – It includes gaming experience to education. Gamification word was introduced by English programmer, Nick. [2]

Recent Trends in Higher Education

Privatization – Colleges are having private ownership and due to this have private management and control. Control includes money and administration as well as decision making. Private owners usually start state private universities, deemed universities and academic institutions with foreign collaboration. Privatization has evolved in various forms in India. Privatization in the government institutions takes place by starting private courses in government organization with self-financing with or without recognition. There is a need 1) to start privatization to increase competitive efficiency of public sector. 2) To fulfill the demands of higher education with rapid growth in population. 3) To reduce the financial problems of the government 4) Good quality education can be given 4) To fulfill the needs of setting the curriculum according to global, national and local needs. 5) To meet the needs of skilled workers 6) To meet the needs of liberalization, privatization and globalization 6) To

enable technological and economic development. IN India need for privatization started in 90's due to privatization, globalization and liberalization. Privatization of higher education has made tremendous effect on poor, diversity, weakened equity and openness. These institutes cannot guarantee quality of the education. 2) Globalization – Due to information and Communication Technology barriers between the countries are broken which in turn has resulted in growth in the educational fields at international level. Globalization has resulted in - 1) Increased comparison between higher institutions has increased 2) Increase percentage of education abroad. 3) Percentage of setting educational institutes abroad has increased. 4) Worldwide marketing has increased.[3]

Issues in changing Trends of education

Various trends are also having certain drawbacks which are as follows. –

- Standardized tests – Students only prepare for these tests and the main purpose of the education is lost. Parents are worried for the amount of efforts, resources and time spent on these tests.
- Equity in education – Is one big question. Education is different for different classes of the people. All are not receiving the

same education. Poor children are getting education which is of low standard due to which they hardly are able to complete high school education.

- Adaptive Learning – As computers are used for learning, adaptive learning is a problem. Teachers can recognize the qualities of the students and accordingly decide which course or training a student is to be given while computers are not having this ability. Parents are insisting real people and not computers as teachers to teach their children.
- One new trend is to give the child good elementary education so that he will perform better in his higher education.
- Second trend is to change the higher education system as current education only costs more spends lot of time and money and does not provide the expected education to prepare him for his future career. Four years degree has lost its value. After taking a highest degree student is not capable for his future best career. Cost effective and career oriented solution should be found out.[4]

Some of the Trends and their issues

1) To make the students creative they are given time and opportunity. But this increased time is reducing the time of reading a big novel.
2) Information technology enhancements have introduced new ways like blogging, podcasting, online video and social networking in the class room. But this may divert students attention to various other online things like video games, videos other than educational etc.[5]

Findings and Conclusions

- There a drastic change in the education trends.
- The change is due to Information technology enhancements. It has made online learning a success. It helps them choose their own time for learning. But there is a fear of students getting diverted due to online things like video games, videos other than educational etc.
- Career oriented approach makes the students ready for the corporate world.
- Activity oriented approach is beneficial for giving real life experience or practical experience to the students.
- Various learning types have improved the quality of education.
- Privatization has benefited students, private colleges as well as government.
- Worldwide marketing has increased due to globalization of education.

Suggestions

- There is a need of improving the quality of education as four years degree has lost its value. Cost effective and career oriented solution should be found out.
- Privatization has made education costly. The efforts should be made to minimize the fees by the government.

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SURYADATTA

SWAYAM MOOCs : Initiative of Ministry of Human Resource Development of India

Pranav Ozarde

'Online' is the buzz word of today. Everybody spends hours on internet and gets the benefits of being connected and updated, fast communication and saving time, money and energy. How can Education lag behind in this Social Revolution? Keeping in mind the needs of Millennial generation as well as elder citizens of our country, the Government of India recently launched 'SWAYAM', a portal for free online education.

SWAYAM is designed to achieve the three cardinal principles of Education Policy viz., Access, Equity and Quality. The objective of this effort is to take the best teaching learning resources to all, including the most disadvantaged. SWAYAM seeks to bridge the digital divide for students who have hitherto remained untouched by the digital revolution and have not been able to join the mainstream of the knowledge economy.

This is done through an indigenous developed IT platform that facilitates hosting of all the courses, taught in classrooms from 9th class till post-graduation to be accessed by anyone, anywhere at any time. All the courses are interactive, prepared by the best teachers in the country and are available, free of cost to the residents in India. More than 1,000 specially chosen faculty and teachers from across the Country have participated in preparing these courses.

The courses hosted on SWAYAM will be in 4 Types – (1) Video lecture, (2) Specially prepared reading material that can be downloaded/printed (3) Self-assessment tests through Tests and Quizzes and (4) An Online discussion forum for clearing the doubts. Steps have

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been taken to enrich the learning experience by using audio-video and multi-media and state of the art technology. In order to ensure best quality content are produced and delivered, seven National Coordinators have been appointed: They are NPTEL for engineering, UGC for post-graduation education, CEC for under-graduate education, NCERT & NIOS for school education, IGNOU for out of the school students and IIMB for management studies.

Courses delivered through SWAYAM are available free of cost to the learners, however students wanting certifications shall be registered, shall be offered a certificate on successful completion of the course, with a fee. At the end of each course, there will be an assessment of the student through proctored examination and the marks/grades secured in this exam could be transferred to the academic record of the students. UGC has already issued the UGC (Credit Framework for online learning courses through SWAYAM) Regulation 2016 advising the Universities to identify courses where credits can be transferred on to the academic record of the students for courses done on SWAYAM.

SWAYAM platform is indigenously developed by Ministry of Human Resource Development (MHRD) and All India Council for Technical Education (AICTE) with the help of Microsoft and would be ultimately capable of hosting 2000 MOOCs (Massive Open Online Courses) and 80,000 hours of learning: covering School, Under-graduate, Post-graduate, Engineering, Law and Other Professional courses. SWAYAM App is available on Google Play. This really adds a lot of convenience for the young students who are Tech Savvy.

Our country has seen rapid progress since independence. We are well positioned to become the Powerhouse of Global growth. The crucial input in this drive is to get highly qualified and trained youth, to be shaped and delivered by the higher educational institutions in the country.

There is a need to improve the quality of the teaching learning process in the higher educational institutions. The higher education system has to build in each personality a spirit of inquiry and quest for creation of new knowledge. This can be done by a high quality teaching-learning process and research that creates

new knowledge.

The quality of teaching learning process is the heart of higher education. We have seen huge difference in the quality of attainment levels in higher education between the urban and rural areas, between the states and between institutions within a state. There are large numbers of students who study in vernacular languages whereas most of the knowledge is still in English. There is a requirement to make concerted efforts to bridge this gap.

The spread of Technology, Telecom Penetration and Internet has offered an opportunity to quell the divide in terms of Access and Quality. And, we should seize this opportunity with both our hands. Digital technology enables good teachers to directly teach large number of students who are not physically present in classes. The digital modes are cheaper, more easily accessible, interactive, and offer flexibility for people to learn at their own pace. We need to work together to ensure that they are widely adopted for teaching.

It is really a good news that the SWAYAM portal has become fully functional which enables one to take courses offered by the best teachers, remaining where they are. SWAYAM should be a call to the pioneers amongst teachers to put new courses in the upcoming areas

on this platform in the MOOCs format. It is also a call to the other teachers to use this material and improve their own teaching capacity. Ultimately, it should lead to better attainment levels in the students.

However, there can be multiple drawbacks to online education in comparison to traditional classroom education.

Lack of accreditation and low quality

If you earn a degree from a school with no accreditation, you can find yourself with a worthless degree that will leave you in debt and no better prepared for the workforce. Verifying an online program's accreditation is a small step that can save you time, money and heartache in the long run.

Little or no face-to-face interaction

While this may seem obvious, students have a tendency to underestimate the impact of never

meeting the instructor and other students in the class. Mark Edmundson, an English professor at the University of Virginia, argued in a Time opinion piece that online education creates a "monologue and not a real dialogue" in the learning environment. Building relationships with your instructor and classmates will require more effort in an online environment.

More work

Online courses typically require a greater amount of reading and assignments than traditional classes. Programs in general are improving the quality of their online courses, and this means that students will have to do more to prove that they've mastered the material. Expect to spend at least 10 hours per week on each online course. However, it is not uncommon for a single course to require 15 or 20 hours per week.

Intense requirement for self-discipline

Online courses usually have deadlines for assignments, tests, commenting on lectures, etc. That's not the problem. The problem is the time management and organization skills necessary to stay on top of your work, allot an appropriate amount of time to complete each task and balance your coursework against other priorities in your life. If you tend toward procrastination,

then you might need to strengthen your skill set before choosing an online course or program.

Even more intense requirement for self-direction

Traditional college programs typically offer or even require that students meet with advisors to help them plan their path in college. If you only need a course or two, this is not an issue. However, if you are pursuing an entire degree online, you will need to be proactive in finding the information you need to ensure that you are taking the right classes for your degree plan. Straying from this path could constitute failure to make academic progress, and you may have trouble securing financial aid.

Online courses require more time than on-campus classes.

Believe it or not, you will spend more time studying and completing assignments in the online environment than you will in an on-campus course. How can that be? The online environment is text-based. To communicate with your instructor and other students, you must type messages, post responses and otherwise communicate using your fingers (i.e. through typing). As you can probably guess, typing is slower than speaking. (Try reading each word as you type it and compare the difference if you had spoken the

same thing.) In the same sense, reading your lecture materials can take more time than listening to an instructor deliver them, although spoken lectures have a distinct disadvantage. If you are sitting in a classroom, it's likely that you'll miss a good percentage of what the instructor says, no matter how focused you are. It's human nature to zone out for brief periods of time. When you are reading, you will have a tendency to go back over the notes if you miss something and that takes more time. The point is that you will likely learn more in an online environment, but you will have to make a greater effort to accomplish that learning.

Online courses make it easier to procrastinate.

Just as there is a dark side to that controversial property known as the Force, there is a dark side to Internet-based courses. The dark side starts with procrastination. Procrastination will chop you to bits in an online course. There is no one to tell you to get to class on time. There is no one reminding you that assignments are due or that exams are coming. There is no one to preach to you, beg with you, plead with you to stay on top of your coursework. (Sounds pretty good, huh?) It's easy to put off reading and assignments in the online environment. Before you know it, weeks have gone by, you haven't done any homework and it's exam time. Scary bad.

Online courses require good time-management skills.

An Internet-based course demands that you develop personal time-management skills. As with most things, if you don't manage your time properly, you will find yourself buried beneath a seeming insurmountable mountain of coursework. Online courses require the self-discipline to set aside chunks of time to complete your studies. It means you have to make online studying a priority and not let other activities interfere. Sometimes, it means making difficult choices.

Online courses may create a sense of isolation.

In an online course, no one can hear you scream. And that causes discomfort for some online students. Studying alone with only the computer as your companion can be terrifying. There's no whispering in the back of the room, no wise remarks from the peanut gallery, no commanding presence at the front of the classroom pleading for everyone to listen. The online environment is a much different atmosphere that takes some getting used to. Hopefully, your online instructor is sensitive to this problem and can help you overcome those feelings. In any

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case, you should be aware of them and seek help if they start to impede your studies. A quick e-mail to a classmate, your instructor or a counselor can help you feel better connected if the sense of community you seek is missing.

Online courses require you to be an active learner.

It's a sink or swim proposition and you can't have it both ways. If you desire to become a responsible, self-sufficient, independently minded citizen of this planet, then now's the time to start. Life is not a dress rehearsal.

Online courses don't have an instructor hounding you to stay on task.

It's an advantage for the instructor. He doesn't have to become the all-powerful Oz and threaten you with dire consequences if you don't do your work. He doesn't have to control you, manipulate you, scold you, act like a parent or babysitter to you. He can treat you like an adult with the respect that you deserve.

Online courses give you more freedom, perhaps, more than you can handle!

This freedom can be dangerous if you don't learn how to handle it.

Online courses require that you find your own path to learning.

It is far better to let students find their own way. Instructors can be beacons, lighthouses of knowledge, so to speak, but we can't steer the ship. Hopefully, everyone makes it safely to harbor. Occasionally, someone shipwrecks. But in all cases, everyone learns, and that is important.

Online courses require you to be responsible for your own learning.

Only you are responsible for your learning. One can't force it on you. One can't make you study. Someone can share a little knowledge and experience, show you a few tools and hope you get it. The spark and desire to pursue your dreams must be yours.

So, the real disadvantage to an Internet-based course is that you might not take responsibility for your studies and your goals. You might get way behind and never catch up. It needs a mature approach to make use of Online Education. Happy Learning!

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SURYADATTA

Success of Animation in Education Sector with Trend Visualization

Wadmare Siddhant Vasantrao

Abstract

In Animation Field we used different Techniques to show Trends in Virtual-dimensional Data. In Animation Field we have interesting data and an appealing to present helps for audience in getting effective results for analyzing data. This paper proposes three visitations of analysis's and presentation. While it is the fastest techniques for presentation and participant find it interesting and exciting. Animation is the least effective from for analysis; both depictions of trends are significantly faster than animation, and the small multiples display more accurate results.

Key wards

Visitation, Creativity, Animation.

Introduction

Trend Visualization, A trend in data is an observed general tendency (Webster's Dictionary).Trends are observed after visualizing is the trend increase or decrease that reverses directions is perceived as a reversing trend.Plotting multiple variables on a time line allows the user to see counter trends.If there is a variable generally increasing or a few are decreasing,the decreasing variable can pop out and perceive in counter trends. In this Paper we will focus only on information trends and can be perceived visually without statically trends estimation.

Revolution in Multimedia & Animation

The information super highway involves the merging and communication of Multimedia Animation Industries such as Telephone, Cable TV, Movies & other trends. Most recently vast network that will bring

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Multimedia Software and assorted other services in to the home via telephone lines, fiber optic cable and even satellite. The thought of connecting telephone to your TV set or computer may seen assorted now, one day they may all be in the same box. Interactive Adventure, Multimedia let you explore information at your own space. You can wonder through an Art gallery or choose to select picture gallery or you want to expert spoken commentary or on screen with an extra annotations to point out imaginary and the repeated themes. Animation does not stop at the age of really world either from the cockpit of Jet air craft or with virtual terrain of the today's interactive games. Once the information, real or imaginary has been digitized on put on us CD ROM or Internet or it can formed a spectacular interactive world of Discovery.

Most of the Multimedia or Animation software Titles produced today is design for general use (at Home & workplace). Education which supplements class room schooling and Entertainment.

Visiting a modern Museum or Art gallery is perhaps the only Multimedia experience or combination of many element of that we have made from CD ROM base Multimedia so successful the exhibits in the education by written information, Visual display and sometimes video Presentation and listen to the expert commentary from the Mentor.

Multimedia Class Rooms

Educational Software has a long roll to play in schools and colleges, Offering students Structured learning Exercises that they can carry out with their own Names the Multimedia potential for Entertainment has let to a new software breed of software Known as "Edutainment "that promotes learning through play, creative Activities and Adventure games many popular edutainment titles combines elements of entertainment and education so effectively that younger generation are unaviour what they are learning. The best Educational titles have learned some valuable lesion from the games titles – they are packaged colorful animations, sound, video & hummer. Such titles are equally associable to very young children's, if they help by an adult and older generations. Who can explore new words on –screen at their own space Edutainment is now as important consideration when a family byes multimedia computer.

Animation

Animation is the sequence of Images use to convey the illusion of Moments. [1] Animation is

inherently a change of some visual representation over time, hence is naturally use to facilities perception of changes in some model over time. Animation has been use in user interfaces for a Varity of purposes In Animation in Visualization has been used to show changes of several kinds:1]transition from data from one state to another. 2]Transition between one views to another.

One early use of Animation in visitation was for algorithm animation. Kehoe et al.[2] describe a study of demonstrated that animation did with help of noted that it improved motivation and making a difficulty topic more approachable. This study suggests that using animation for trend understanding could be valuable.

According to Bartram [3] animation evokes an emergent property of grouping when multiple, similar motion occur a dense data display. Thus, animation allow a user to immediately recognize associated elements which may be wildly dispatched and this suggest trends can be effectively portrayed with animation – if a group old data elements and all the moving in generally that same direction, then the general trends will be perceived, and counter trend can become apparent.Ware's [4] observation that the brain has a strong tendency to group moving objects in hierarchical fashion.

4.1 Different Types Of Animation

As we have noted Animation is a process of giving illusion of moment or Models or in animate Objects. Animations are drawn by describing wild range of frame-by-frame, 2 or 3 Dimensional film making techniques. From this we can say different types of animation like, Cell Animation, Puppets Animation, Cutout Animation, Sand Animation, Clay Animation and Visit able Animation.

A] Cell Animation, The process of Animation in cell Animation is comparatively simple and easy. In this form of animation, Drawings are divided in to "Key Frames", in between and cleanup. Cleanups are the final frames which have entire Animation, key frames and in between together in one in which Frames and which help in the link and painting and also are important to know the area of drawing properly.

B] Puppets Animation, The puppets animation is not only more innovative it is also one time of most interesting and exciting forms of animation.In this a stop motion camera that is decided moments or position of the character are short and well projected.

C] Cut out Animation, This is very unique form of animation.

Whatever the character it is first studied and then drawing on the paper or card board. Then with either scale by or in the field of chart are composed together and the final footage is ready.

D] *Sand Animation,* Sand Animation is important to have these three different sand animations and can be one of the most physical challenging situations. The basic process of animation of sand animation is the cell Animation that has to key frames, In-between and cleanups.

E] *Clay Animation,* Clay Animation is not only interesting but it is the most laborers process. It uses the same technique as sand Animation or any other animation but again different course in the same manner of capturing the frames.

F] *Visit able Animation,* Visit able Animation is the funniest from of animation. Even though it follows the procedure of cell animation, it is absolutely different matter in its presentation process.

Conclusion

Hence we conclude that, In Education sector there are different trends for utilization and it depend on the recourses (Human Power,

Machinery & Tools that need fit in the budget). In future, new trends may be innovated that supports in real life situation and same is the case with Multimedia and Animation in educational sector.

More presentable scenarios can be thought of with the creative mind.

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SURYADATTA

Transmission and Transformation of Cloud ERP Systems

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Abstract

The challenges of recent trends in ERP is shifted from traditional to Cloud ERP. This paper provides a framework for comparison between the in-house implementation of ERP systems versus the in-cloud implementations. Advances in Enterprise Resource Planning (ERP) help vendors in transforming the changes in business domain too. The paper first establishes a framework for the comparison based on three factors: pre-live, i.e., the implementation methodologies of both options; post-live, i.e., cost, time and the user-friendliness of the systems; and other factors, i.e., security and scalability. Advances in Enterprises Resource Planning (ERP)helps person to change the domain in-cloud systems are faster to implement, less costly and easier to use and scalable. In-house system, compared with in-cloud, gives organizations more control and hence many organizations deem them more secure.

Keywords: Enterprise Resource Planning (ERP) systems, Cloud Computing.

Introduction

The acronym ERP stands for enterprise resource planning. It refers to the systems and software packages used by organizations to manage day-to-day business activities, such as accounting, procurement, project management and manufacturing. ERP systems tie together and define a plethora of business processes and enable the flow of data between them. By collecting an organization's shared transactional data from multiple sources, ERP systems eliminate data duplication and provide data integrity with a "single source of truth."

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Today, ERP systems are critical for managing thousands of businesses of all sizes and in all industries. To these companies, ERP is as indispensable as the electricity that keeps the lights on.ERP systems are designed around a common, defined data structure (schema) that usually has a common database. ERP systems provide access to enterprise data from multiple activities using common constructs and definitions and common user experiences.

Literature Review

The history of ERP goes back more than 100 years. In 1913, engineer Ford Whitman Harris developed what became known as the economic order quantity (EOQ) model, a paper-based manufacturing system for production scheduling. For decades, EOQ was the standard for manufacturing. Toolmaker Black and Decker changed the game in 1964 when it was the first company to adopt a material requirements planning (MRP) solution that combined EOQ concepts with a mainframe computer.

MRP remained the manufacturing standard until manufacturing resource planning (called MRP II) was developed in 1983. MRP II featured modules as a key software architectural component and integrated core manufacturing components including purchasing,

bill of materials, scheduling, and contract management. For the first time, different manufacturing tasks were integrated into a common system. MRP II also provided a compelling vision of how organizations could leverage software to share and integrate enterprise data and boost operational efficiency with better production planning, reduced inventory, and less waste (scrap).

As computer technology evolved through the 1970s and 1980s, concepts similar to MRP II were developed to handle business activities beyond manufacturing, incorporating finance, customer relationship management, and human resources data. By 1990, technology analysts had a name for this new category of business management software—enterprise resource planning.

Cloud ERP?

Cloud ERP is an approach to enterprise resource planning (ERP) that makes use of cloud computing platforms and services to provide a business with more flexible business process transformation.

From the 1990s until the beginning of the twenty-first century, ERP adoption grew rapidly, as more organizations relied on ERP to streamline core business processes and improve data visibility. At the same time, the cost of implementing

ERP systems began to climb. Not only were on-premises hardware and software expensive capital investments, enterprise ERP systems often required the additional costs of custom coding, consultants, and training.

Meanwhile, ERP technology evolved to embrace the internet, with new features and functionality, such as embedded analytics. As time went on, many organizations discovered that their on-premises ERP systems couldn't keep up with modern security demands or emerging technologies, such as smartphones. Enter the cloud—or the software-as-a-service (SaaS) delivery model—for ERP. When ERP software is "in the cloud," it simply means that it is kept on a network of remote servers, instead of at a company's location. The cloud offers a more affordable alternative for ERP that lowers both operational expenses (OpEx) and capital expenses (CapEx) because it eliminates the need for companies to purchase software and hardware or hire additional IT staff. With no costly infrastructure to support, resources can be invested in growth opportunities. Employees can change focus from managing IT to more value-added tasks.

Objectives

Following objectives can be checked:
1. To understand the traditional ERP terminologies
2. To understand the cloud ERP terminpologies
3. To bridge the GAP between traditional ERP and cloud ERP

Next-Generation ERP: Built for Any Size Business

While the legacy ERP systems of the past were often too expensive for small to medium businesses (SMBs), the cloud has broken that barrier. With a SaaS solution, smaller companies can leverage the same proven, industrial-strength ERP software that larger enterprises have been using for years. A cloud-based ERP solution can be implemented quickly, with no CapEx investment. For small to medium businesses looking to innovate quickly and seize new business opportunities, cloud ERP offers the flexibility to quickly add new users and support changing business needs.

Delivering an Extended Enterprise to Fuel Opportunities

When cloud ERP extends its core financial architecture to include integrated customer relationship management (CRM), supply chain management (SCM), human capital management (HCM), and enterprise performance management (EPM), the system seamlessly ties all the applications together with a single data repository and a common user

experience.

An extended cloud ERP system enables all departments to be managed with improved visibility and collaboration, as if they were a single organization. It also provides seamless access to advanced reporting features, such as data visualization and advanced analytics. With access to emerging technologies, such as the Internet of Things (IoT), organizations gain a comprehensive, real-time understanding of business activities not only in the front office, but also in warehouses and on factory floors. This knowledge is readily available to employees on their mobile devices through social tools. Built for the digital age, today's ERP cloud embraces mobile, social, and analytic tools. Anything less won't move an organization forward.

ERP Cloud Embraces the Next-Generation Workforce

ERP has moved to the cloud—and there's no going back. The cloud is not just the proven baseline for ERP—it is the path forward for the diminishing number of companies that still have active on-premises systems. Unlike yesterday's legacy ERP, cloud-based ERP enables companies to meet the requirements of the digital economy. Today's workforce demands access to twenty-first century technology—such as

mobile and social with an easy-to-use interface—that enables them to easily collaborate and share information. And they are unlikely to accept antiquated processes, out-of-date technologies, and ugly interfaces. Organizations that fail to meet these expectations put their future at risk.

Embracing ERP: The Suite Always Wins Over Point Solutions

An important characteristic of modern cloud ERP is the unified solution or applications suite. When compared to deploying a single-point software application—such as human resources or sales automation—an ERP cloud suite offers the best advantage. A complete solution that encompasses all core business functions integrates operational processes across the organization. Employees gain improved visibility and insight into all aspects of the business. An ERP cloud suite enables companies to quickly build a foundation that meets immediate needs with the agility to respond to changing market conditions.

How Cloud ERP Compares To On-Premise ERP

If you're considering an ERP system for your business, chances are you're being bombarded with choices. As you consider your options, one of the most important decisions you'll need to make is

whether to select a cloud-based ERP solution or one that's installed locally.

The basic difference between on-premise ERP and cloud ERP is clear: On-premise ERP solutions are installed locally on your company's hardware and servers and then managed by your IT staff while cloud ERP—also called SaaS, or Software-as-a-Service—is provided as a service. With this type of deployment, a company's ERP software and its associated data are managed centrally (in the Internet "cloud") by the ERP vendor and are accessed by customers using a web browser.

What may not be so clear is that the type of ERP deployment model you choose can have a significant impact across your business. Here are some key factors that you need to consider when weighing whether to use on-premise or cloud-based ERP software.

Features of Cloud ERP

On-premise ERP systems usually require large upfront and ongoing investments to purchase and manage the software and the related hardware, servers, and facilities necessary to run it. If your company doesn't have a large or experienced IT staff, you may also have to also invest more time and money in additional personnel and train them. Even more importantly, on-premise systems require that your IT team spend a significant amount of their time and budgets ensuring your system are up-and-running when you need it, including maintenance of hardware, server rooms, and more. IT must then redeploy the system across the various users' computers and re-implement various customizations and integrations that your business installed on your previous software.

For cloud-based ERP, initial costs are typically much lower because you simply implement the software to your requirements and then access it through your computer's internet connection. The cloud ERP provider hosts and maintains all of the IT infrastructure for you, ensures the system is always running, that the data is secure, and that product enhancements are rolled out painlessly to your solution without breaking your previously implemented customization. Ultimately, this all allows your IT resources to focus on innovating and helping grow the business more effectively, rather than spending a disproportionate amount of their time on maintaining and managing your on-premise systems. Cloud ERP also offers a predictable, pay-as-you-go subscription model that can make cash flow management and planning much easier.

Over time, those IT savings add up. When comparing the total cost of

ownership of on-premise ERP solutions relative to cloud systems, one industry analyst study found that cloud-based ERP can cost 50 percent less than on-site ERP for a 100-employee company over a four-year period.1

On-site ERP software can be customized, but those customization are tied to your current software deployment and are not easy to re-implement with future versions. As your ERP provider releases new product updates and enhancements, your previously implemented customization will be wiped out when you upgrade and your IT team will have to start customizing from scratch again. That's the main reason many companies simply avoid upgrading their on-site ERP software and just settle for running their business on out-of-date technology. In fact, two-thirds of mid-size businesses are running outdated versions of their ERP software. In contrast, cloud ERP solutions like NetSuite are continually upgraded by the provider so you can be sure you're always using the latest, most advanced version of your ERP software. Because of the cloud platform today's leading cloud applications are built upon, your previously implemented customizations and integrations automatically carry forward when the solution is updated without additional investment.

Cloud ERP often delivers better performance than on-premise solutions. Cloud software architecture is designed from the ground up for maximum network performance, which can mean better application availability than traditional on-site ERP systems. Cloud-based ERP also offers optimized performance that can adapt to your needs. A local IT department is unlikely to be able to achieve these results, and may not even be able to regularly report their system uptime results to management.

It's also important to note that a cloud-based ERP solution provides real-time data that can be accessed via the Internet anywhere at any time. That means that staff at your company can see accurate information on laptops, smartphones, and tablet devices while they travel or telecommute—all without extra setup fees or ongoing costs.

Not only can cloud-based ERP provide better performance and greater accessibility, but better security as well. Because it's their core competency, Cloud ERP providers like NetSuite make securing their systems a top priority by providing strong, industry standard data security certifications such as compliance with PCI DSS and SAS 70 standards. Moreover, NetSuite follows other rigorous security,

disaster recovery, and back-up procedures that would be cost-prohibitive with on-site ERP solutions.

Every ERP deployment takes time and requires careful planning, but cloud ERP offers clear advantages when you consider speed of deployment. Since cloud ERP requires no additional hardware, your business doesn't have to waste time procuring and installing IT infrastructure. With cloud ERP, you can easily roll it out across multiple regions, subsidiaries, and divisions, avoiding the cost associated with those rollouts. If you chose a cloud-based ERP system, these differences can add up to a significant time savings: Cloud ERP deployments usually take 3-6 months compared to the 12 months that it typically takes to implement an on-premise solution. Cloud-based ERP systems are also easier to scale, giving you the flexibility to add more users as your business grows. On-site ERP solutions don't offer the same freedom—to give more employees access to an on-site system, it's often necessary to provision additional hardware.

Every business is unique, so taking the time to consider how different ERP deployment options will affect your company is critical. ERP software is an umbrella term describing a system that captures and shares information across all departments and business functions. Whereas a traditional ERP system is installed and maintained on location, cloud ERP software is delivered purely through a Web browser via an Internet connection.

- In the cloud model, the software vendor houses and manages the software and buyers pay a subscription price for the software—typically on a monthly or annual basis. This removes the need for businesses to host and maintain the software and data on their own servers.
- This model is not to be confused with "Web-enabled" software, which means that the software is still installed on-site but the data is accessible online.
- In both cases, system data can be accessed through an Internet connection, enabling employees to remotely access their business data through any device with online capabilities.

Common Features of Cloud ERP Software

Cloud ERP software includes the same features as on-premise ERP solutions, including:

1. ERP accounting: Includes general ledger, accounts receivable, accounts payable and payroll.

2. Business intelligence : Used to analyze and report business data to help companies make better decisions. Funtionality includes

analytics, data mining, reporting and more.

3. *Customer relationship management:* Used to manage interactions with prospects, customers and clients across all departments, including marketing and sales.

4. *Human Resources:* Manages HR activities such as personnel tracking and benefits administration, as well as new strategic initiatives like talent management and learning management.

5. *Inventory Management:* Helps companies track up-to-date information about their product supply, maintain stock levels and avoid inventory depreciation and overspending.

6. *Manufacturing:* Includes manufacturing resource planning software, manufacturing execution systems (MES), bill of materials (BOM), product life cycle management and more.

7. *Supply chain management:* Tracks goods as they move from manufacturing facilities to distribution centers to retail stores. Includes functionality to adjust inventory with demand changes monitor performance of suppliers and warehouse management.

Type of Web-Based ERP Buyer

Prior to beginning your software selection process, it's important to know what type of buyer you are. This will help narrow your options and provide a good launching point for deciding which system is best for you. Generally speaking, there are three types of buyers:

- Full-suite buyers. These buyers want a single, integrated system to run their entire business. The goal in relying on a single system is to mitigate integration issues and facilitate a smoother flow of information between departments and business functions. These buyers favor cloud ERP suites, such as SAP Business By Design, Net Suite Manufacturing Edition and Infor Syteline.
- Best-of-breed buyers. These buyers favor purchasing specialize applications that perform a single function, such as an HR system or CRM system. Typically, they're looking for an application that has more robust functionality than what's offered in an full-suite package. These buyers favor best-of-breed applications such as Taleo, Sales force and ADP.
- Small business buyer. Historically, there have been few options for small businesses to choose from when it comes to ERP software. That's changing, however, as the software-as-a-service (SaaS) trend strengthens in the ERP software market. Of

course, there are still several on-premise software systems available for small business buyers. Examples include MISys, Exact and Made 2 Manage by Consona.

Benefits and Potential Issues

Web-based ERPs have a number of key benefits over locally installed systems but also have their drawbacks:

- Ease-of-use. Since Web-based ERP is delivered via a Web browser, the interface will have the familiar look and feel of a Web page. This means that it will be fairly intuitive to use and should reduce the need to invest in employee training.
- Reduced IT costs. Because the software vendor hosts and maintains the software—performing maintenance, upgrades and back-ups—there is less need to invest in an in-house IT team.
- Connectivity requirements. The biggest concern with a Web-based system is that it relies on a strong, consistent Internet connection. If you have an unreliable Internet connection, then you may want to resolve connectivity issues before pursuing a Web-based system.
- Customization difficulties. Since every business receives the same version of the software, it is typically more difficult to customize a cloud ERP solution.

However, this is starting to change as technology advances.

Most popular Cloud ERP Software Options

Enterprise Apps Today recently covered what the top four ERP vendors in terms of overall market share - SAP, Oracle, Infor and Microsoft - are doing with cloud ERP software. But companies such as Net Suite, Epicor, Financial Force, Acumanica - which are among the pioneers of cloud-based ERP - are also highly active in the market.

ERP in the cloud has been gaining momentum as companies look for ways to reduce the upfront costs of ERP systems, speed up deployment times and make it easier to customize software for their individual needs. Unlike traditional ERP systems, which are installed on servers and hardware located on a company's premises, cloud-based ERP is installed on third-party servers and software and delivered via a cloud computing model.

Short List of Cloud ERP Vendors

1. NetSuite: unifies CRM, e-commerce, inventory and order management into one cloud ERP software suite. More than 30,000 organizations use it worldwide, giving credence to its claim to be the number one cloud ERP product. Unlike late-comers to cloud ERP

like SAP and Oracle, it was built for the cloud from the start and incorporates real-time analytics.

2. Epicor: can be deployed in a multi-tenant or single-tenant cloud, or on premise, but the architecture employs the same code base regardless of how a company decides to use it. Recent enhancements include expanded country-specific functionality and better compliance capabilities. It is also finding its way into organizations, at times, as a second tier of ERP.

3. Financial Force: software uses the Sales force App Cloud. Its suite includes financial management, professional services automation and human capital management (HCM). The latest release of its financial management application permits tailoring of accounts data entry, 360-degree customer views and collaboration features, built-in inter company reconciliation and automated elimination entries.

4. Acumatica Cloud ERP: Cloud Accounting are aimed at small and medium businesses. The software can run on iPad, iPhone, Android, Windows, Mac or Linux, making BYOD (Bring Your Own Device) initiatives easy to implement. It includes modules for financial management, distribution, manufacturing, project accounting and customer management.

5. Plex: focuses on the manufacturing sector. Its Plex Manufacturing Cloud platform addresses the management of manufacturing operations via modules for accounting, financials, customer management, sales, programs, scheduling, HCM, inventory, production, quality control and supply chain.

6. Rootstock: is another provider of cloud ERP solutions for the manufacturing and distribution sectors. While it gravitates more toward discrete manufacturers, it also serves tiny operations of five or more users, up to large organizations with many sites and hundreds of users. Its product suite comprises a large series of modules, which can be deployed alone or in tandem with others. These include production engineering, inventory, lot and serial control, material requirements planning, capacity planning, scheduling and shop floor control.

7. Kenandy: is another of the growing legion of cloud ERP software companies that makes its applications accessible via any device. It stresses speed of implementation, ease of use and flexibility, with core processes addressed being quote-to-cash, procure-to-pay, planning and production, global financials and trade promotion management. It allows the user to create

dashboards to view the business on one screen.

8. Aptean: 's ERP software has evolved courtesy of acquisitions of former competitors like Consona and Compiere. It provides CRM, ERP, supply chain management, business intelligence, manufacturing execution and more. On the ERP side, its portfolio includes Ross Supply Chain Management, Intuitive ERP, Made2Manage ERP, Axis ERP, Ross ERP, Encompix ERP, CimNet ERP, DTR ERP and Compiere ERP. Each caters to a different niche, with Compiere being the primary cloud-ready option.

9. Unit4: Business World cloud ERP is aimed at service-centric organizations in the public and private sectors. It stresses easy growth, the ability to add acquired companies, and divest divisions and product lines quickly with the promise of reduced operational costs and eliminated inefficiency.

10. Ramco: has plenty of modules: finance and accounting, sales and distribution, inventory and procurement, production, quality management, project management, maintenance management, HCM and dealer management. It also includes the Ramco VirtualWorks enterprise application assembly and delivery platform. All functions can be accessed via browser from a laptop, mobile phone or tablet.

Conclusion

Cloud computing is evolving dramatically and is expanding to include all services that can be provided online till it reaches the ability to include services for companies such as ERP systems provided over the cloud. The paper starts with providing an overview about ERP systems followed by an overview about cloud computing and the obstacles that these services have eliminated, making business easier.

Most companies do not have the strength or will that motivates them to migrate their systems to the cloud, this is due to their low level of analysis and knowledge about the topic; for this reason a comparative case study identifying the benefits of using the in-cloud ERP systems was conducted. The comparative case study indicates that the in-cloud ERP systems have an effect on several aspects of a company, e.g., cost and time savings. In addition, the in-cloud system is more user-friendly and interactive, encouraging users or employees to work more efficiently than the ones working on the in-house system.

It is oblivious to start going for Cloud ERP which is considered the emerging trends in the areas of cloud computing that has surpasses the old traditional ERP.

Transmission and Transformation of Cloud ERP Systems

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Book Review – By Dr. Dhananjay Awasarikar

CORRUPTION Indian Style and How to curb it! Dr. Dilip M. Sarwate, 2016, Abhijit Publishers, India, Pune (Maharashtra).

Profile of the Author

The author (of the Book titled as above) – late Dr. Dilip M. Sarwate, was a Certified Management Consultant (CMC) and Professor Emeritus. Besides, he was also an Entrepreneur and a Film Producer. He had written thirty books and numerous articles on Management in reputed regional magazines and News Papers. He was a Ph. D. Guide and twenty six students had completed their Ph.D. Research Work under his able guidance. This book is an outcome of extensive Research, he has undertaken, over five years.

The author (of the Book Review) was fortunate to be present on the auspicious occasion of publication of this book on 6th October 2016, last year. Eventually that was the birth day of Dr. Dilip M. Sarwate. In his concluding speech he said, "Really, I do not know how many more birth-days I will see." Unfortunately, that proved to be the last birth day, he could celebrate through a book publication. This review is a tribute to the great soul.

Introduction

As a matter of fact, the Corruption has undoubtedly become quite rampant in India. However, there is no book readily available as on today which describes its depth in detail. On this background, this book focuses on the concept of Public Corruption, in general and Select Sect-oral Corruption in India, in particular. In the book, not only there is a discussion of various laws prevalent in India, right now, to reduce the corruption but also there is a discussion about their executable restrictions or practical limitations. Furthermore, in all one hundred and twenty valuable suggestions are also put forward in order to curb Corruption in India under the two distinct heads, namely, Hard Options and Soft Options. Even if a certain percentage of these suggestions would seriously and sincerely be attended to and implemented by the Appropriate Government, it would definitely lead to reduction of Corruption in India to a great extent.

The book is divided into three different Sections.

Book Reviews

Section I

It comprises four Chapters, namely, Is India Corrupt?, Types of Corruption, Scope of Corruption and Public Perception on Corruption in India. On the basis of the vital statistics collected and a few well known facts, the author has convinced beyond a shadow of reasonable doubt that India is a corrupt country. Different types of Corruption covered are Monetary Corruption, Moral Corruption, Intellectual Corruption, Governmental Corruption, etc. The author has dealt with the causes of Corruption, quiet briefly, also, he has described the scope and the conditions in India in different sectors those are highly favourable for Corruption. The overall public perception in India about Corruption is that India is the most corrupt country in the world.

Section II

It comprises sixteen Chapters, namely, Corruption in Industry and Business, Politics, Bureaucracy, Judiciary, Defence, Health-Care, Education, Sports, Police, Municipal Corporation, Media, Religion, Social Sector, Women in Power, Other Sectors. In this Section, the author has also covered Scandal History of India. Indeed, it is highly interesting to know the details about all these different kinds of corruptions prevalent in India from quite a long time.

Section III

The last Section comprises four Chapters, namely, The Prevalent Laws to Curb Corruption, How Corruption is curbed in other Countries?, The Phenomena of Anna Hazare, How to curb Corruption – The Hard and Soft Options? All the measures suggested to curb the corruption are highly practical and easily executable, if it is decided by the concerned official authorities.

Concluding Remarks

In the Preface, it is mentioned that one copy of the book was sent to the Hon. Prime Minister Mr. Narendra Modi through BJP Minister Mr. Prakash Javadekar. It may be a sheer coincidence or a thoughtful decision, of Demonetization, arrived at by the Prime Minister after going through the contents of the book quite critically and meticulously.

The overall bold and straight-forward personality nature of the author gets reflected in the book on each and every page of the book. The unique writing style of the author makes the book highly curiosity arousing since the beginning till the end.

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