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Editorial Team:

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Executive Editor	:	Ms. Hepzibah Mary
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DRIVE

From the Chief Editor's desk:

The Importance of Viva Voce:

Viva voce is a Latin phrase literally meaning "with living voice," but most often translated as "by word of mouth". The aim of viva voce is to test orally the level of familiarity and aptitude of students on a variety of topics that are revealed through their responses to the different questions put forward by the questioner or the examiner. It also aims to test whether this knowledge is more or less than what was revealed through written examination and the marks scored. A viva voce examination enables us to identify the reasons and the remedies if a wide gap is observed between the written performance and oral performance.

A viva voce examination focuses on the effectiveness of the course offered – whether it was compatible with the knowledge level or the learning ability of the students and the relevant trends. It brings out the weak and strong areas of the students which in turn perfects the teaching learning process. If the viva is conducted for a research or survey study, it helps in analyzing the depth and extent of the efficacy and the applicability of the research or survey carried out. Moreover it helps the examiners in discerning if the research or survey had any significant bearing on the student's academic inputs and if the research contributed to the already existing knowledge base.

The discussion ensuing during the viva voce examination gives a new perspective and dimension to the topic being discussed which further helps in the extension of knowledge, gives birth to new research methodologies and pedagogical tools, gives newer meanings to concepts making it more practical and enriches theories and philosophies.

During viva voce examination students bubble with enthusiasm and brim with eagerness to reveal and share their knowledge and expertise. But unfortunately fear kills their voice and spirit. Viva voce examination gives them sufficient opportunities to express their learning with more confidence and effectiveness. With passage of time viva voce improves their vocal dynamics and that in turn boosts their morale driving away fear. With this comes conviction and conviction makes their oral presentation a new and cutting edge. The trends in the present world require students to make presentations very frequently. What could be more helpful than viva voce examination! Students become more positive, articulate and well informed and well conversant. With this a new boost is given to the overall presentation of the student's self.

Theoretical knowledge is dormant and not of much use unless it is proved by practical knowledge. Viva voce examination focuses more on creating a link between or drawing a correlation between theoretical knowledge and practical knowledge. The correlation thus drawn makes the learning more effective, meaningful, focused and relevant. Moreover it equips the students to think out of the box and gives them the much desired life skills, skills that are not merely ornaments but tools to conquer the world in terms of knowledge and wisdom.

The topic discussed in viva voce examination gains momentum during the course of discussion giving it a new implication, view and facet. So viva voce serves as a sort of brainstorming where the best is brought out and the urge for further progress is kindled. Old ideas take on new wings soaring to greater heights of learning.

By:

Dr. Nikhil Zaveri

Director & Principal,

SEMCOM.

SEMCOM updates

BBIC Workshop:

BBIC Workshop on conducted on 27th December 2012 for which Mr. Rupin Patel, Chartered Accountant, Anand, was the Guest Speaker and he spoke the preparation of financial projects for business idea. The workshop saw the participation of 120 students and the coordinators were Dr. Subhash Joshi, Dr. Yashasvi Rajpara, Mr. Renil Thomas and Mr. Abhishek Trivedi.

Workshop for final year students:

A workshop for the final year students was organized on 28th December 2012. The theme of the workshop was, 'Be Different - Make the Difference' and the speaker was Dr. Milind Antani, ENT Doctor and a Law Graduate, Nisith Desai and Company, Tax Consultants, Mumbai, and he spoke on motivation. Dr. Kamini Shah and Dr. Subhash Joshi were the coordinators.

ISO Surveillance Audit:

The Second ISO Surveillance Audit to retain the 9001:2008 certificate was on 31st December 2012. Mr. Nirav Lakhtariya was the Auditor. Dr. Waheeda Thomas was the Management Representative and Dr. Subhash Joshi and Ms. Nisha Macwan were the Deputy Management Representatives.

Workshop by Ms. Dulari Amin:

A workshop on 'Entrepreneurship – How to be an Entrepreneur' was conducted for

TYBBA – General and 4th Year BBA – ITM students on 3rd January 2013. Ms. Dulari Amin, Chief Operating Officer, Phenomena, Los Angeles, was the Guest Speaker and she taught the students how to become an entrepreneur from her personal experiences as an entrepreneur. Dr. Kamini Shah was the coordinator.

16th Annual Sports Day:

16th Annual Sports Day was on 17th January 2013 and Mr. Hemant Patel, Vice President of Anand Cricket Association, was the Chief Guest. He declared open the 16th Annual Sports Meet. Dr. B. L. Nagar, Princiapl, S. S. Patel College of Physical Education, was the Guest of Honour. The event was coordinated by Mr. Nilay Vaidya, Vice President, Students' Council, Mr. Jay Nanavati and Mr. Chirag Patel.

Book Review:

CHANGE WE CAN BELIEVE IN

- Barack Obama

The book titled '**CHANGE WE CAN BELIEVE IN**' is by Barack Obama, an offspring of a black man from Kenya and a white woman from Kansas and presently the President of the US. The title itself is suggestive of the promising newness that the author wants to disclose in the discourse. It also reflects the author's confidence for the positive response that people will give to his new vision and mission.

The book titled '**CHANGE WE CAN BELIEVE IN**' is all about the changes that Barack Obama wants to bring in the US during the tenure of his Presidency. This book is all about his plans to renew America's promise. It includes seven key speeches from the 2008 campaign. The foreword of the book has been written by Barack Obama himself. He focuses on the present domestic and international problems (political, social, environmental, and economic) that the US has been facing. He unfurls his visions and missions and the drastic changes necessary to materialize them in a very straight forward and effective use of language.

The book has been divided into two parts: Part I 'The Plan' and Part II 'The Call'.

Part I has the following sub topics: Reviving our economy (strengthening the middle class), Investing in our prosperity (creating our economic future), Rebuilding America's leadership (restoring our place in the world), Perfecting our union (embracing America's values), and Conclusion (yes we can).

Part II has the following sub topics: Declaration of candidacy, Iowa Caucus night, New Hampshire primary night, A more perfect union, Father's day 2008, Renewing American competitiveness and A world that stands as one.

In Part I he reflects various problems like (1) economic problems, (2) restructuring of the investment in different sectors like education, business, science and technology infrastructure of

21st century and global economy, American people, (3) restoring trust in Government/union and (4) the firm determination and belief in the power of all the people that always believes: YES WE CAN

In Part II he speaks about his childhood days, his job, his education, declaration of candidacy, his faith in the change which he will be bringing in US and his purposes being the president of America.

This book is written to show the boldness and specifics about how to fix the ailing economy and strengthen the middle class, make health care affordable for all, achieving independence, and keep America safe in a dangerous world. '**CHANGE WE CAN BELIEVE IN**' is not only to believe in Barack Obama's ability to bring change to Washington but also to believe in oneself.

I as the reviewer find Barack Obama's great faith and vision to bring changes in America's story. The three words which he is holding up for the faith in his presidency and the work are YES, WE CAN. I find the book an extended argument of Barack Obama to renew America's promise. The book relates to the works/changes which Obama wants to bring in different sectors of economy, social, political, education, environment, etc.

The author is very clear in his message through the book. The author is at present the President of US and he is trying to fulfill the promises to the people. The author's most important points are that he firmly believes about the changes which he will be implementing. This can be proved by the following lines...

'Yes we can to justice and equality. Yes we can to opportunity and prosperity. Yes we can heal this nation. Yes we can repair this world. Yes we can'. (Page No. 212)

'But I have asserted a firm conviction... a conviction rooted in my faith in God and my faith in the American people- that working together we can move beyond some of our old racial wounds, and that in fact we have no choice if we are to continue on the path of a more perfect union. (Page No. 226) The possibilities which are suggested by the author to the reviewer are 'to believe in oneself'. The book left out the discussions or to highlight the important contributions of the X presidents and foreign secretaries of the US.

ISSN NO- 2277-2510

The best thing I liked about the book is the words which are repeated again and again like 'changes we can believe in' - the changes which Barack Obama wants to bring for the upliftment and development of all areas of America and the firm determination and faith which he has in his people and God in making the changes.

The things which I did not like in this book are the criticism which the author had quoted for Bill Clinton and George Bush during their presidency in US (economic loss, social loss, etc. during their presidency). He is not and never wants to appreciate and speak about the works of other people for US. On the contrary he is criticizing the policies and the work which governed during their presidency.

At the end I would like to say that this book reflects the positive changes which Barack Obama wants to implement during his presidency for the upliftment of US and the people of it. He wants to bring equality among all kind of people living in US and wants the people to work together for the changes in various sectors of US. He has a great plan to renew America's promise and above all he has faith in his people and God. I suggest the readers of the review to read the book as it gives plans or ideas for the upliftment of US and its people and the reader can get inspiration from the author in one's life too in bringing about changes in one's life or nation. Truly I see great passion and faith in Barack Obama for the changes that he wants to bring in US. That is all about the book 'CHANGE WE CAN BELIEVE IN' BY BARACK OBAMA a foreword by himself.

BY:

Ms. JJoe Mary George
Lecturer,
SEMCOM.

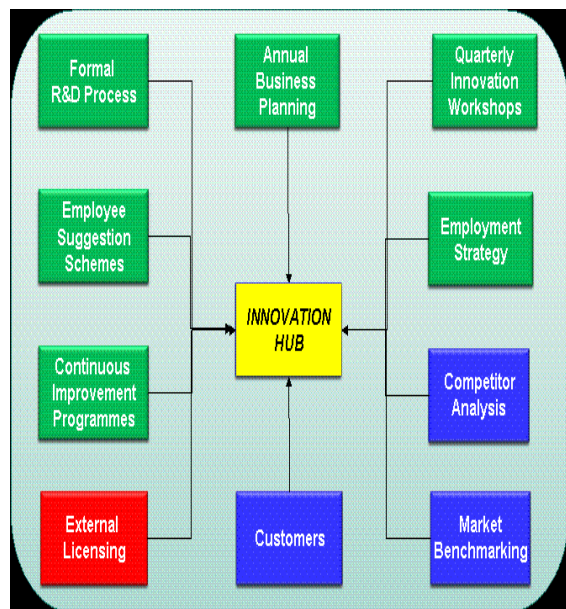
Article:

Innovation Management

Introduction:

The term innovation comes from the Latin innovatio, the noun of action from innovare. The Etymology Dictionary further explains innovare as dating back to 1540 and stemming from the Latin innovatus, pp. of innovare "to renew or change", from in "into" + novus "new".

The central meaning of innovation thus relates to renewal or improvement, with novelty being a consequence of this improvement. For an improvement to take place it is necessary for people to change the way they make decisions, or make choices outside of their norm. Schumpeter c.s. (~1930) has stated that "innovation changes the values onto which the system is based". When people change their value system, the old (economic) system will change to make room for the better one. When that happens innovation has occurred. Innovation can be seen as something that does, not something that is.



Innovation is an important topic in the study of economics, business, entrepreneurship, design, technology, sociology, and engineering. Colloquially, the word "innovation" is often

synonymous with the output of the process. However, economists tend to focus on the process itself, from the origination of an idea to its transformation into something useful, to its implementation; and on the system within which the process of innovation unfolds. Since innovation is also considered a major driver of the economy, especially when it leads to new product categories or increasing productivity, the factors that lead to innovation are also considered to be critical to policy makers. In particular, followers of innovation economics stress using public policy to spur innovation and growth.

Those who are directly responsible for application of inventions are often called pioneers in their field, whether they are individuals or organizations. When pioneers are followed by many others, the dominant value system may be replaced by the better one. When this happens innovation has occurred a posteriori:

In the organizational context, innovation may be linked to positive changes in efficiency, productivity, quality, competitive positioning, market share, etc. and that can be affected positively by innovative forces. All organizations can innovate, including for example hospitals, universities, and local governments. Some will flourish under its influence. Others will die. So as innovation typically changes value, innovation may also have a negative or destructive effect as new developments clear away or change old organizational forms and practices. Organizations that do not compensate effectively for innovative forces (mainly from outside) may be destroyed by those that do. Hence managing an organization typically involves risk. A key challenge in management is maintaining a balance between the current processes and business model.

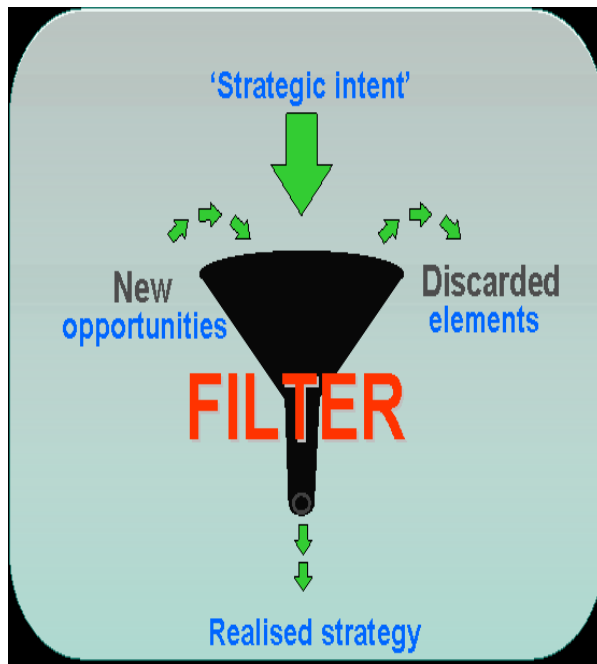
Invention is the embodiment of something better and, as a consequence, new. While both invention and innovation have "uniqueness" implications, innovation is related to acceptance in society, profitability, and market performance expectation. An improvement on an existing form or embodiment, composition or processes might be an invention, an innovation, both or neither if it is not substantial enough. According to certain

business literature, an idea, a change or an improvement is only an innovation when it is put to use, is accepted by users and effectively causes a social or commercial reorganization.

In business, innovation can be easily distinguished from invention. Invention is the conversion of cash into ideas. Innovation is the conversion of ideas into cash. This is best described by comparing Thomas Edison with Nikola Tesla. Thomas Edison was an innovator because he made money from his ideas. Nikola Tesla was an inventor. Tesla spent money to create his inventions but was unable to monetize them. Innovators produce market and profit from their innovations. Inventors may or may not profit from their work.

Innovation Management:

Innovation Management is the discipline of managing processes in innovation. It can be used to develop both product and organizational innovation. Without proper processes, it is not possible for R&D to be efficient; Innovation Management includes a set of tools that allow managers and engineers to cooperate with a common understanding of goals and processes. The focus of innovation management is to allow the organization to respond to an external or internal opportunity, and use its creative efforts to introduce new ideas, processes or products. Importantly, Innovation Management is not relegated to R&D; it involves workers at every level in contributing creatively to a company's development, manufacturing, and marketing. By utilizing appropriate innovation management tools, management can trigger and deploy the creative juices of the whole work force towards the continuous development of a company. The process can be viewed as an evolutionary integration of organization, technology and market by iterating series of activities: search, select, implement and capture.



Innovation processes can either be pushed or pulled through development. A pushed process is based on existing or newly invented technology, that the organization has access to, and tries to find profitable applications to use this technology. A pulled process tries to find areas where customer's needs are not met, and then focus development efforts to find solutions to those needs. To succeed with either method, an understanding of both the market and the technical problems are needed. By creating multi-functional development teams, containing engineers and marketers, both dimensions can be solved. The lifetime (or product lifecycle) of new products is steadily getting shorter; increased competition therefore forces companies reduce the time to market. Innovation managers must therefore decrease development time, without sacrificing quality or meeting the needs of the market.

With the growing popularity of innovation initiatives, ever more companies are launching their own actions. However, many are going forward in a piecemeal fashion, running a brainstorming event here, trying out an ideas campaign there and promoting innovation in vague ways in marketing communications. Such an approach works, somewhat, but it is not ideal.

The best approach is to have a comprehensive innovation process management (IPM) structure that treats innovation as a series of cycles that run within a grand, enterprise innovation process cycle.

Innovation Process Management:

An innovation process cycle combines creative problem solving (CPS) with scientific peer review evaluation and some typical business tools.

The Challenge

The cycle starts with a problem or goal which needs to be formulated into an innovation challenge. Once this is done, the challenge is presented to the problem solving group. This may be done in the form of a brainstorming event, ideas campaign or other activity. The group problem solving group may be a team, all employees in the firm, the public or any other group of people.

Collaboration

In order to maximize the creative potential of the problem solving group, the idea generation activity should be collaborative in nature. This can be accomplished in many ways. Idea management and innovation process management software often provides on-line collaboration tools, while facilitators of brainstorming and other ideation events should promote collaborative idea development.

Combination

Because of an innovation process cycle starts with a challenge, ideas tend to be interrelated and many are complementary. Hence, before going further, it is best to combine such complementary ideas into larger, more sophisticated ideas so that they can be handled as a single package. This makes the next steps in the cycle more efficient.

Scientific Peer Review Evaluation

Here is where a lot of innovation initiatives break down: choosing the best ideas. Many poorly thought out approaches use voting, which is a good way to identify the most popular idea, but an appallingly ineffective method for identifying the

most potentially innovative idea. I have also seen organisations put a great deal of effort into idea generation, leaving the final decision to a manager who basically picks out her favourite idea. Assuming the manager has suitable business expertise, such an approach is better than voting – as it is based on expertise rather than popularity – but it is typically far from perfect. The scientific approach of peer review by expert, on the other hand, is ideally suited for identifying the most promising ideas in a cycle. Instead of basing selection on popularity (can you imagine Einstein sending his special theory of relativity to the public for a vote in order to determine its validity?) or the whim of a manager, you apply a set of business criteria to the idea and rank how well the idea meets each criterion. If an idea achieves a sufficiently high ranking, either as is or through additional modification, it should be developed further.

Testing and Development

Ideas identified as being potential innovations are now ready to be tested and developed. Here is where typical business tools come in useful. A business case is a useful means of hypothetically implementing an innovative idea and projecting the potential results. Of course it is not perfect, but it indicates possible issues in the implementation of the idea, as well as benefits that may not have been obvious to the original idea developers. Prototypes are an excellent means for testing ideas. Not only do they allow you, your colleagues, customers and others to see how an idea would actually look in implementation, but building and playing with a prototype is a good method of further improving upon the core idea. Prototypes are, of course, ideally suited towards material ideas such as new products. But more abstract ideas, such as new services, process improvements and other concepts can often be prototyped through role-play, building structural models and making diagrams.

Implementation

Ideas that make it through testing and development are ready to be implemented. Unless the idea is a radical change from your usual

activities, you don't need me to tell you how to do this!

Review

Once ideas have been implemented, they need to be reviewed, probably against an ongoing series of milestones. If an implementation does not achieve a milestone, it needs to be modified or killed. Moreover, even the most spectacularly effective and profitable breakthrough innovations need to be improved on a regular basis.

New Needs and Inspiration

Hence, reviewing the implementation of new ideas should indicate new needs which can be transformed into challenges which, in turn, start a new innovation process cycle. Likewise, implementations can inspire new corporate goals. Again, these can be turned into new challenges and new cycles.

Conclusion:

An innovative company, however, should not have a single innovation process cycle in operation. Rather it should have many of them! Large cycles are suitable for enterprise-wide innovation. Meanwhile, business units can run somewhat smaller innovation process cycles in order to manage their own ideas (although it should be noted, collaborative groups need not be limited to employees of that business unit). Teams, departments and any other group can also run their own innovation process cycles.

However, these innovation process cycles should not be in isolation. Rather they should inspire and feed other cycles elsewhere in the organisation. For instance, the implementation of a new product idea should inspire innovation cycles in the marketing, sales and customer service divisions as well as at the enterprise level.

References:

Managing Innovation in the New Millennium, S.S. George, ICFAI Press
Competitive Innovation Management, James A Christiansen, Macmillan Business
www.wikipedia.com (accessed on 28th May,2011)
A white paper on “An Integrated Approach to Managing Innovation”, Simon Derry (www.project-leaders.net)
www.jpb.com

BY:

DR.YASHASVI RAJPARA

Lecturer

SEMCOM.

Research Article: Multimedia Packages and its Effectiveness in Education

Multimedia uses computers to present text, audio, video, animation, interactive features, and still images in various ways and combinations made possible through the advancement of technology. By combining media and content, those interested in multimedia can take on and work with a variety of media forms to get their content across. This is an exciting new field for those interested in computers, technology, and creative career options. Multimedia can be accessed through computers or electronic devices and integrates the various forms together.

As the role of educational multimedia increases, it is increasingly important to have an idea of the potential it affords for teaching and learning. Multimedia offers the potential to augment learning with vibrancy. For example, multimedia can add clarity through multiple views, as in process guidelines alongside an animation. It can provide depth through additional information channels and resources. It can also add richness and meaning, through video, to show as well as tell. And, if it is not done thoughtfully and well, it can add needless complexity and provoke frustration. So we should use it carefully that it helps us to improve learning and teaching process in education.

This term is often used in reference with creativity using the PC. In simple words Multimedia means multi (many) and media (communication/transfer medium). Hence it means many mediums working together or independently. It can be considered to be a combination of several mediums:

- 1: TEXT**
- 2: GRAPHICS**
- 3: ANIMATION**
- 4: VIDEO AND SOUND**

They all are used to present information to the user via the computer. The main feature of any multimedia application is its human interactivity. This means that it is user friendly and basically caters to the commands the user dictates. For instance, users can be interactive with a particular program by clicking on various icons and links, the program subsequently reveals detailed information on that particular subject. The above theme can be considered to be a GUI (Graphical User Interface).

A **Multimedia System** can be defined as below:

A communications network, computer platforms or a software tool is a multimedia system if it supports the interaction with at least one of the types of the above-mentioned mediums.

The components of a multimedia package are:

1: TEXT

It is one of the most popularly used mediums of appearance, in 99% of the occasions text provides the core structure to the package. A major drawback of using text is that it is not user friendly as compared to the other medium. Also it normally has a lack luster performance when judged with its counterparts. It is for instance harder to read from a screen as it tires the eyes more than reading it in its print version. But now with the availability of TEXT to SPEECH software this drawback is speedily disappearing. We can also provide Hypertext. Hypertext in a way provides a choice to the user in reading or not reading the information in detail, attached to a particular word of text.

2: PICTURES/ GRAPHICS

Pictures enhance the overall look of a multimedia package; pictures express more than normal text can. Pictures can be created using the following ways: By using a drawing tool like MS PAINT (from Microsoft Inc.), using digital scanners, or original photographs taken with the help of a web camera

or its equivalent. The size of these images can be sometimes very large and the factors which determine these are: The size of the image in terms of pixels, Resolution i.e. dots per inch (Dpi), number of colors that the system monitor can display at one time. Color depth is the amount of binary data, the computer reserves for describing each pixel.

3: VIDEO AND SOUND

Sound is used to set the rhythm or a mood in a package. Speech gives an effect of a language (pronunciation) for instance. Sound files in various Sound File Formats like the MP3 can be easily transmitted through the NET. Voice over IP VOIP is an upcoming field with a great future. Sound can be recorded into a mic or from any other medium like tape or cassette player onto the PC. Interactive multimedia and electronic publishing are products of this convergence and their impact on all kinds of communication from marketing to education is immense.

➤ Multimedia in education

The use of multimedia in industries has been extensive, as it has been effective in increasing productivity and retention rates, where research has shown that people remember 20% of what they see, 40% of what they see and hear, but about 75% of what they see and hear and do simultaneously (Lindstrom, 1994). This is especially significant in the CBT (Computer-Based Training) modules in corporations like Ernst & Young, and Union Pacific, where employees are trained in organizational procedures and in flight simulations in the aviation industry to train pilots. It is now permeating the educational system as a tool for effective teaching and learning. With multimedia, the communication of the information can be done in a more effective manner and it can be an effective instructional medium for delivering information. A multi-sensory experience can be created for the audience, which, in turn, elicits

ISSN NO- 2277-2510

positive attitudes toward the application. Multimedia has also been shown to elicit the highest rate of information retention and result in shorter learning time (Ng and Komiya, 2000; Hofstetter, 1995). On the part of the creator, designing a multimedia application that is interactive and multi-sensory can be both a challenge and a thrill. Multimedia application design offers new insights into the learning process of the designer and forces him or her to represent information and knowledge in a new and innovative way (Agnew, Kellerman & Meyer, 1996). [8]

Multimedia Development Tools:

They are required for building applications and reviewing some of the products that are commercially available commercially.

Presentation Tools:

These tools are necessary to create multimedia presentations on a PC. Presentation tools are tools like overhead projectors. These tools actually improve the overall effect and help the speaker to get his message across in a professional manner.

Authoring Tools:

These in contrast with the presentation tools support features such as layout graphic design animation control of branching and navigation the manner in which the end user will be able to move through the application. Authoring tools may also provide screen design help to harness the layout of text images and places where user interaction is required. Libraries may support audiovisual and graphics functions and implement multitasking capabilities under different operating systems. Some of these authoring tools are Authorware and Director from Macromedia, Hypercard from Apple Inc. etc. [1]

National Council of Educational Research and Training [4]

Multimedia Packages Developed by DCETA

- ▶ [Fractions](#)
- ▶ [Locus](#)
- ▶ [Milestones in Genetics](#)
- ▶ [Photosynthesis](#)
- ▶ [Hierarchy of Biological Diversity and Organisation](#)
- ▶ [Ray Optics](#)
- ▶ [Chemical Bonding & Molecular Structure](#)
- ▶ [Wave Optics](#)
- ▶ [ICT and Curriculum](#)



Developed by DEAA

- ▶ [Art Education](#)

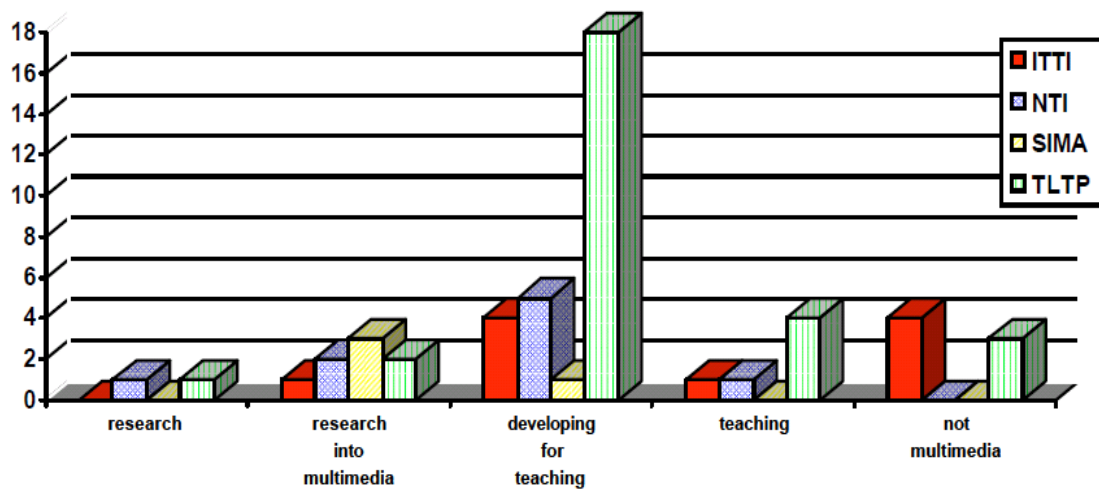
- ▶ **Principles that influence the effectiveness of multimedia [6]**

Principle	Description
Multimedia	Learning from text and graphics is better than from text alone.
Spatial Contiguity	Learning from corresponding text and graphics is better when the corresponding text and graphics are presented near each other.
Temporal Contiguity	Learning from corresponding text and graphics is better when the corresponding text and graphics are presented simultaneously rather than consecutively.
Coherence	Learning is better when there is no superfluous text, graphics, or sound.
Modality	Learning is better with animation and narration than from animation and on-screen text.
Redundancy	Learning is better with animation and narration than from animation, narration, and on-screen text.
Individual Differences	The effects from these principles are stronger for low-knowledge and high-spatial learners than for high-knowledge and low-spatial learners.

- **Survey:** Existing on-line survey references are used for finding out the Multimedia Packages and its effectiveness in Education.

1. Survey of the Uses of Software and Hardware for Multimedia Applications in UK Higher Education: ^[2] Use of Multimedia

Funding Body	ITTI	NTI	SIMA	TLTP	Overall
research tool	0	1	0	1	2
research into multimedia	1	2	3	2	8
developing for teaching	4	5	1	18	28
teaching	1	1	0	4	6
not multimedia	4	0	0	3	7



Use of Multimedia

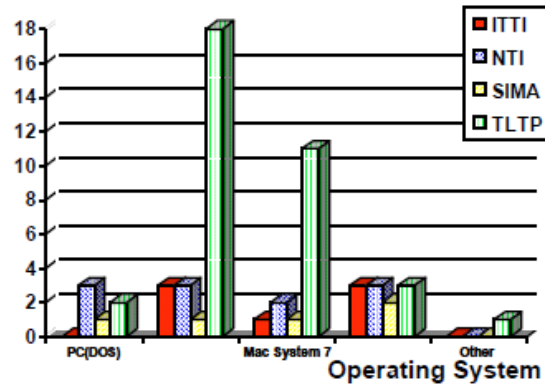
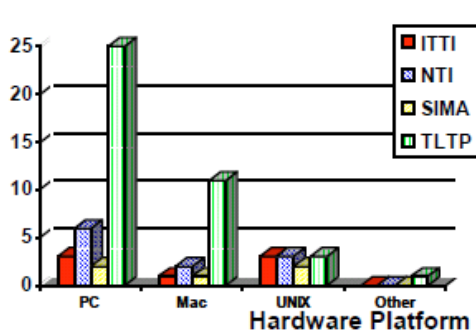
Development System

Hardware Platform:

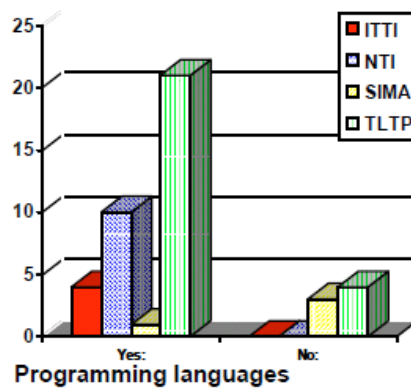
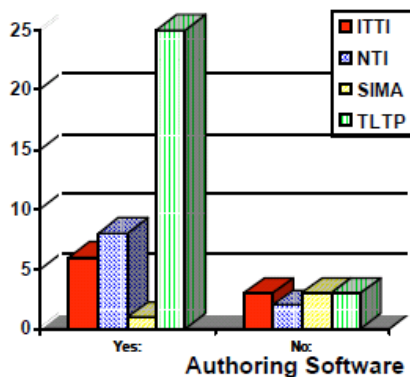
Funding Body	ITTI	NTI	SIMA	TLTP	Overall
PC	3	6	2	25	36
Mac	1	2	1	11	15
UNIX	3	3	2	3	11
Other	0	0	0	1	1

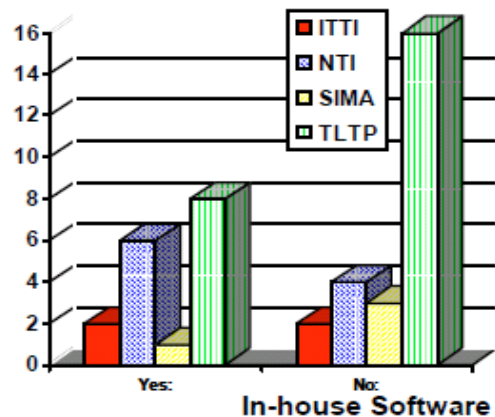
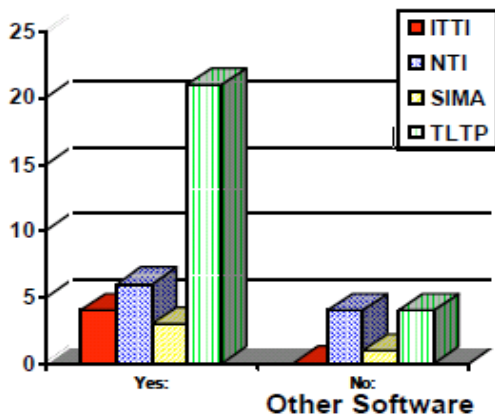
Operating System

Funding Body	ITTI	NTI	SIMA	TLTP	Overall
PC(DOS)	0	3	1	2	6
PC(Windows)	3	3	1	24	31
Mac System 7	1	2	1	11	15
UNIX	3	3	2	3	11
Other	0	0	0	1	1



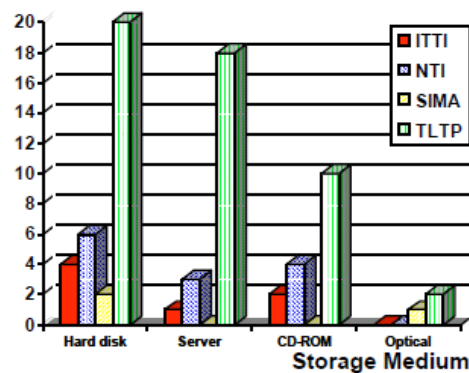
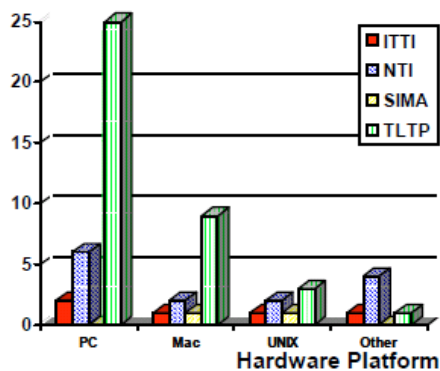
Funding Body	ITTI	NTI	SIMA	TLTP	Overall
Is Multimedia Authoring software being used:					
Yes:	6	8	1	25	40
No:	3	2	3	3	11
Are any programming languages being used:					
Yes:	4	10	1	21	36
No:	0	0	3	4	7
Are any other relevant software packages being used:					
Yes:	4	6	3	21	34
No:	0	4	1	4	9
Are any previous in-house software developments being used:					
Yes:	2	6	1	8	17
No:	2	4	3	16	25

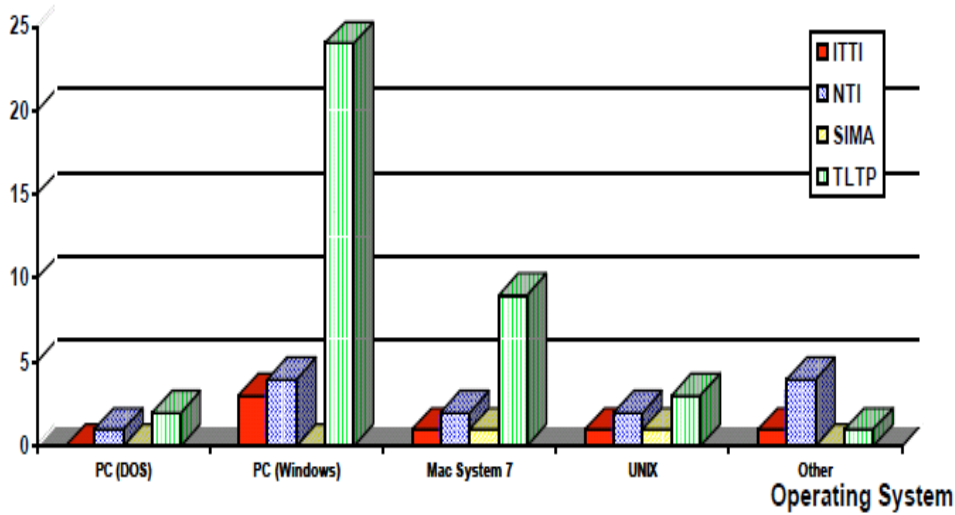




Delivery System

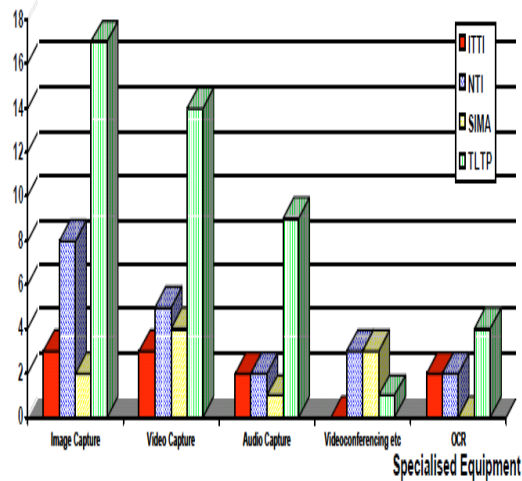
Funding Body	ITTI	NTI	SIMA	TLTP	Overall
Hardware Platform					
PC	2	6	0	25	33
Mac	1	2	1	9	13
UNIX	1	2	1	3	7
Other	1	4	0	1	6
Operating System					
PC (DOS)	0	1	0	2	3
PC (Windows)	3	4	0	24	31
Mac System 7	1	2	1	9	13
UNIX	1	2	1	3	7
Other	1	4	0	1	6
Storage Medium					
Hard disk	4	6	2	20	32
Server	1	3	0	18	22
CD-ROM	2	4	0	10	16
Optical	0	0	1	2	3





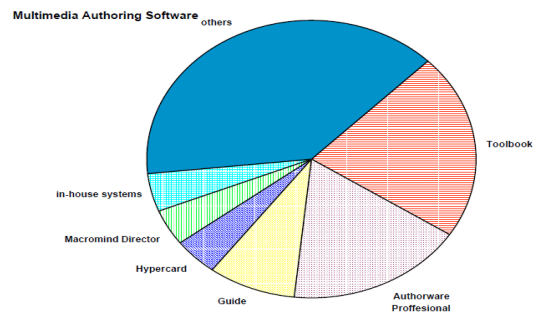
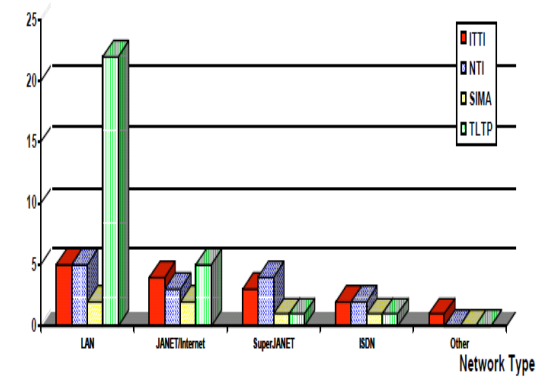
Specialized Equipment

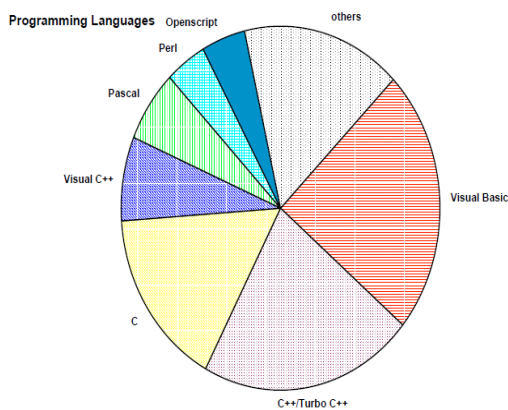
Funding Body	ITTI	NTI	SIMA	TLTP	Overall
Image Capture	3	8	2	17	30
Video Capture	3	5	4	14	26
Audio Capture	2	2	1	9	14
Videoconferencing etc.	0	3	3	1	7
OCR	2	2	0	4	8



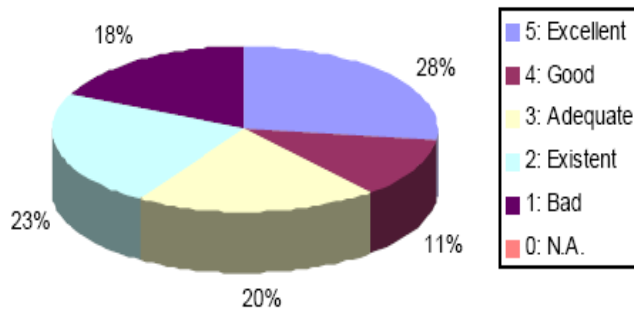
Networking

Funding Body	ITTI	NTI	SIMA	TLTP	Overall
Is the system designed for delivery over a network					
Yes	5	8	3	23	39
No	0	2	1	2	5
If so, what type?					
LAN	5	5	2	22	34
JANET/Internet	4	3	2	5	14
SuperJANET	3	4	1	1	9
ISDN	2	2	1	1	6
Other	1	0	0	0	1

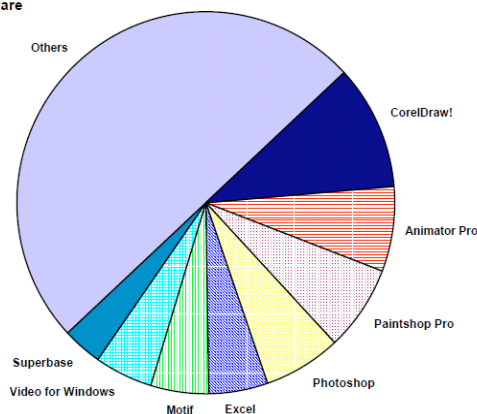




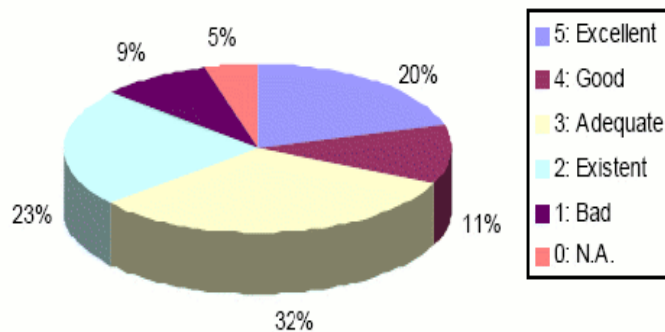
Adequacy of Sound formats



Other Software

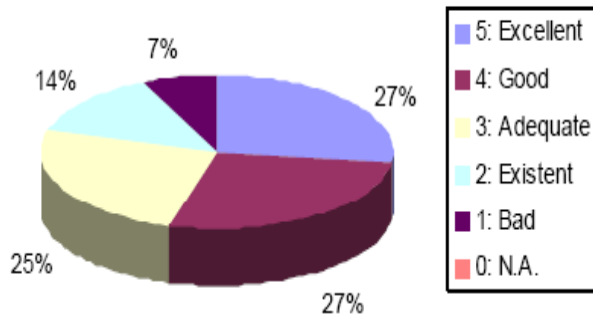


Adequacy of Video formats

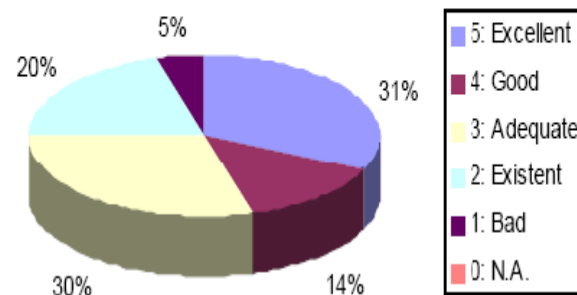


2. Multimedia Authoring Tools: The Quest for an Educational Package [3]

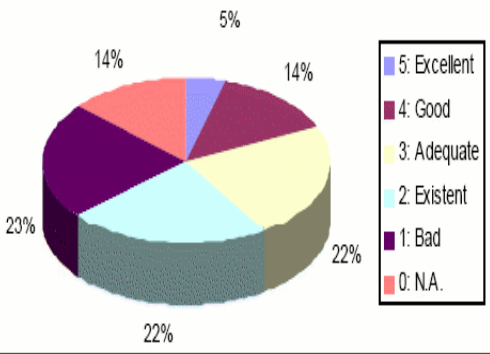
Adequacy of Image formats



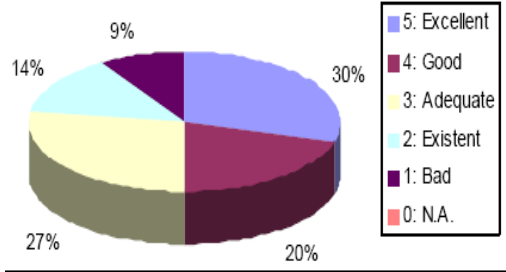
Adequacy of Text editor



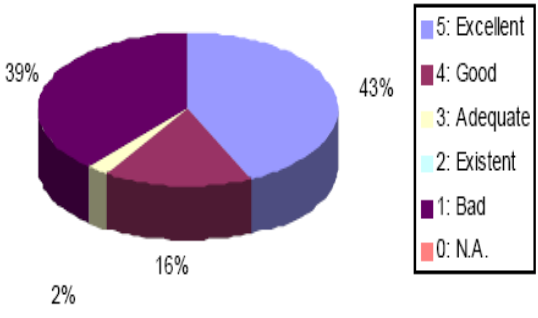
Adequacy of Animation capabilities



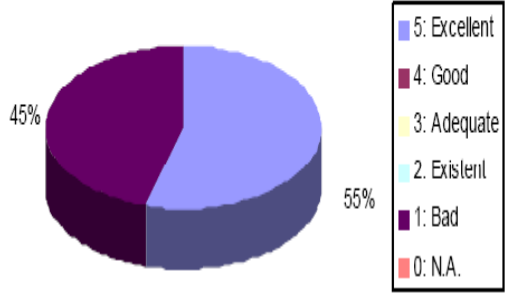
Adequacy of Interactivity



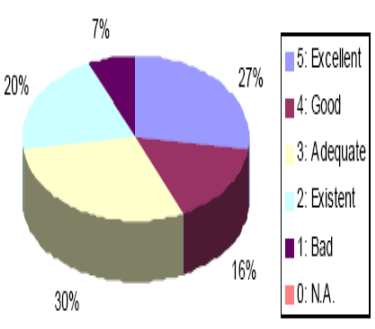
Adequacy of Export capabilities



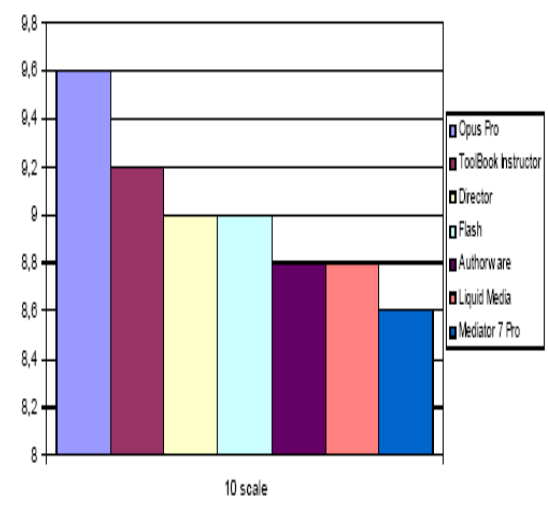
Adequacy of Web features



Adequacy of Interface



Top 7 Programs



2. Survey of Multimedia Presentations for Students with Visual Impairments ^[5]

Acronyms

AER Association for Education and Rehabilitation of the Blind and Visually Impaired

TVI Teacher of students with visual impairments

Major Impressions

- Respondents felt more comfortable with general technology than with technology designed specifically for students with visual impairments. This finding raises the question of the level of expertise we expect of a TVI for a given piece of assistive technology.
- The general pattern of technology use for blind and low vision students is similar, except that low vision students seem to be more facile with a wider range of technologies. Blind students prefer the PC platform. Low vision students, while they use the PC platform as often as blind students, are more likely to also use the Mac platform. This might indicate that the PC platform is friendlier to users who have no vision. Or that the PC platform is better able to run the specialized programs that a person without vision is apt to use.
- As one would expect, there were very different patterns in the use of access technology between blind and low vision students. Blind students are more apt to use Braille based systems while low vision students are more apt to use optical devices or a system that

enhances the visual presentation of material. Nonetheless, it is interesting to note that a moderate percentage of each group (blind, low vision) would use technology primarily aimed at the other group. This might reflect students with low vision who read in both print and Braille and, based on their acuity, were classed by their teachers as being "blind" or "low vision" for the purposes of this survey.

- By and large, general technologies are being used by blind and low vision students similarly in public schools, schools for the blind, and by itinerant teachers. The exceptions are that PC computers are used more often in special schools. While teachers in special schools might use PC computers more often for both groups of students, they seem to be using them to access a wider variety of informational venues for blind students as opposed to low vision students.
- Access technology use by blind students was not different across the job categories of their teachers, except that blind students were more likely to use Braille output devices for computers if they were in a special school. However, low vision students used several pieces of access technology less in all situations than probability would expect. For the Braille based technologies, this is understandable. However, it is surprising for screen readers and speech synthesizers. These are two technologies one would expect low vision students to be using in all educational placements. It also appears that of the three educational situations, a public school classroom is the placement

in which a low vision student is least likely to be using these particular access technologies.

- When blind students accessed multimedia presentations, they used verbal description as often as any specific piece of technology. Low vision students were slightly less likely to rely on verbal description but not by much. There was a generally wide range of technologies used by both groups.
- The pattern of technology use by blind and low vision students is similar for districts that have and have not adopted texts with multimedia formats. However, the percent of technology use is higher for most technologies in those districts that have adopted at least one text with a multimedia format. This might reflect school divisions with a more aggressive technology development policy, teachers with a greater investment in the use of technology with their students, or states with more funds allocated for technology dissemination and training. It is impossible to tell what factors underlie these results. (Table 9)
- Teachers saw their own lack of knowledge and training as one of the largest barriers to students using technology more effectively.
- Teachers note that slightly less than 1/3 of their students have, to date, received an assistive technology assessment.
- When presented with scenarios that might require the use of multimedia in regular education classes, teachers tended to rely on one of two responses: enlarging software (e.g., Zoom text) or speech software (e.g., JAWS). When faced with a scenario that did not have an obvious access

solution, a majority of teachers relied on verbal description.

➤ **Benefits of Multimedia in Learning**

Well-designed multimedia helps learners build more accurate and effective mental models than they do from text alone. Shephard synthesized studies showing potential benefits of well-designed multimedia, including:

- Alternative perspectives
- Active participation
- Accelerated learning
- Retention and application of knowledge
- Problem-solving and decision-making skills
- System understanding
- Higher-order thinking
- Autonomy and focus
- Control over pacing and sequencing of information
- Access to support information [6]
- Increases learning effectiveness.
- Is more appealing over traditional, lecture-based learning methods.
- Offers significant potential in improving personal communications, education and training efforts
- Reduces training costs.
- Is easy to use.
- Tailors information to the individual.
- Provides high-quality video images & audio.
- Offers system portability.
- Frees the teacher from routine tasks.
- Gathers information about the study results of the student. [7]
- motivates self-learning

➤ **Limitations of multimedia Packages in learning**

- Not always easy to configure
- Requires special hardware
- Not always compatible
- Expensive

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- Not always satisfy variety of students
- All teacher are not having knowledge of software development, they are dependent on available tools for teaching.
- it is difficult to decide which tool is best for learning as many tools are available

➤ **Future Scope of Multimedia Packages in Learning**

- Day by day software development tools are such that easy to learn development of system
- It can be used in distance education
- E-learning
- Multiple tools for learning
- To develop new understanding and begin to create new learning environments
- Multimedia-based learning may be a part of e-learning but the parametric set for defining an effective e-learning quality framework is much broader. It includes many other factors such as Learning Management Systems, network robustness and delivery, content/course management systems, interactivity between the teacher and the learner as well as peer-to-peer (p2p) interactions. These could be through one or more networks for both synchronous and asynchronous modes of learning, thus making e-learning a far more complex paradigm.
- In a large number of countries worldwide, especially the developing countries, multimedia is primarily being used for learning and will continue to have relevance in the classroom for a long time.

➤ **Conclusion**

The use of multimedia technology has offered an alternative way of delivering instruction. Interactive multimedia learning is a process, rather than a technology, that places new learning potential into the hands of users. Information on the design and use of multimedia characteristics are not available as a coherent body of literature.

Educators should have access to appropriate ways to design software packages that will take advantage of multimedia capabilities without losing the focus on the user's needs or the content being presented. The scope of this paper is limited to a review of online survey of educational multimedia features used for instructional purposes.

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BY:

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MY VOICE:

CAPITALISM, SOCIALISM, MIXED ECONOMY – ECONOMIC SYSTEM FOR ECONOMIC GROWTH AND ECONOMIC DEVELOPMENT

Movies do depict the traditions, culture, language, standard of living and challenges faced by people at particular point of time like say decade. The joy and happiness of Independence and promise and dream of industrialized and economically developed India, with better standard of living for classes and masses are still a dream and not a reality. Things have changed for better and we do have better socioeconomic infrastructure in form of development of capital and money market, spread of Information Technology Sector, fast growth of communication sector, better roads, better educational and health facilities, development of heavy industries and fair development of basic industries. But still the pace of economic development is inferior compared to other developed and developing economies. The road of economic development and growth is long and we are only at the beginning of the journey. Fast transportation is possible only with the development of infrastructure and technology. Favorable economic policies and economic laws are a necessary must to achieve high levels of economic growth and development. The various challenges faced by Indian economy are:

- Corruption.
- Slow and inefficient bureaucracy.
- Lack of Mechanization and Computerization in all the sectors of the economy.
- Poor infrastructure development including Transportation, Power and Health Care.
- Slow Industrialization, Poor Industrial Relations and increasing use of Robots and Machines in place of human labor.
- Increasing prices of basic necessities.
- Increasing inequality of income.
- Less allocation of funds for education and lack of quality education with poor infrastructure.

- Lack of coordination between Academics and Industry and less investment on research and development.
- Uncompetitive Indian entrepreneur due to rising prices of land, labor, raw materials, power and poor infrastructure in form of lack of quality roads, slow rail transportation, sick aviation sector unfavorable economic policies, bureaucratic hurdles and delays and so on.

India has economically progressed a lot after her Independence. The setting up of Export Processing Zones, Special Economic Zones, Electronic and Software Technology Parks, incentives to set up industries in backward areas, Institutional, Financial and Technical Assistance to small scale, ancillary, cottage, and village industries have been done, but remember the level of global competition has intensified with China emerging as a major hub of low cost manufacturing with far better infrastructure and favorable economic policies for business. German, Japanese and South Korean manufacturers are known for quality of their merchandise. The list of developed countries with expertise in different areas of manufacturing and service industry is long and listless. We need to emulate or better the economic development and economic growth of Japan, South Korea and Germany if we want to be counted in the league of economically developed countries. Quality, price and offering value for money or matching or bettering the perceived value of market offering in the mind of customers must be done by Indian manufacturers if they want to compete with Chinese and the other manufacturers and service providers from the developed world. Entering into joint ventures with the manufacturers from the developed world and emphasizing on quality education in Science, Technology and Management with massive investment on research will help us in becoming a globally competitive economy and improve our global competitiveness ranking. Favorable economic policies and efficient and

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effective bureaucracy and administration will help the cause of our economic growth and economic development. Governance, business and society have a huge role to play if India has to emerge as a developed economy. In today's globalized economy there is no place for complacency as global producers and service providers will be drawn to globally competitive economy with good marketing opportunities.

BY:

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SEMCOM.

ManageAnt: Leadership Management

Leadership and learning are indispensable to each other - **John F. Kennedy**

Leadership is not a genetic gift or a family legacy; we have sympathetically observed some failures of those assumptions. It is not a warranty with a degree from an excellent graduate business school, though a rigor of that experience can provide valuable returns. Becoming a leader is an intentional process of growth that must be lived out experientially. One must have the will to say "yes" and even "no" to an unending series of tests, large and small, each demanding that we take one more step toward a definition of all who we are. We must be ready to define our values, our character, and ours. For durable, strong leaders, the process will not end. It will become a way of life, not only in business, but within our families, our various communities, and the world. (Bowen H. "Buzz" McCoy (2007))

The Josephson Institute's (1999) Six Pillars of Character might easily be applied to a business (or another) setting. These six pillars are:

- ✓ Trustworthiness - honesty, integrity, reliability, loyalty, keeping promises and not deceiving others.
- ✓ Respect – using the Golden Rule or treating others as you wish to be treated, in addition to being courteous, listening to others, and accepting individual differences.
- ✓ Responsibility – accountability, self-control, the pursuit of excellence, and considering consequences of our actions prior to making them.
- ✓ Fairness – playing by the rules, not taking advantage of others, making informed judgments without favoritism or prejudice, and not blaming others.
- ✓ Caring – kindness, compassion, and altruism, acting to minimize hardship and to help others whenever possible.
- ✓ Citizenship – working to make one's community better, protecting the environment, making our democratic

institutions work, and operating within the law. (Mullane., 2009)

The final test of a leader is that he leaves behind him in other men, the conviction and the will to carry on - **Walter Lippman**

Looking Forward!!!

By:

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Being: Congratulation...You are alive after 21st December, 2012...

On 22nd December, 2012 in the morning at 7 a.m., I sat to read the newspaper. Before I opened the page, there was a beep in my mobile phone. It was a message from one of my friends saying, "Congratulations, we are alive even after 21st December, 2012..." The message brought a smile on my face and I thought the day started with a smile. As soon as I opened the paper, I was shocked reading the news of the gang rape of a 23 year old girl in Delhi incident. And I asked a question to myself, "Am I really lucky to be alive after 21st December, 2012? Does this not show the end of the world or humanity?" If we, in the morning, open our newspapers and search for a good news to begin our day, it would take nearly fifteen minutes to find good news in the daily newspapers. Are we still happy alive?

RAPE... We cannot imagine what pain the girls might suffer. If we look at the word, it has just four letters, but the effect of the very word is not just limited to these four letters. Recently, while teaching in one of the classes, I came across such an incident, where a person had killed 21 pilots and could very easily lead a happy life without any kind of guilt or remorse. We, all, have similar kind of nature. Of course, not the same as that person, but we can still laugh at some jokes cracked by our friends, immediately after the reading the bad news. We can still have debate with our friends on how a girl should dress. We can still ask our friends, especially girls, to roam around with us after sunset. We can still discuss the matter very seriously and soon after that book movie tickets for night show. Are we not like that person, who after killing 21 pilots was leading a happy life? We are, to some extent.

Of course, one should mourn over for years and years, but this is an alarm. One should not wait till the incident happens with someone's near ones. We discuss, that such criminals should be hanged, but immediately after that we start discussing the girl, living next door to us. How can any law punish the mind of people? And of course, it is not about boys, it is about society. It includes girls, who are fond of discussing the characters and conduct of

other girls. Indian constitution has law to punish people who are physically involved in rape. But does it have the law to punish who are mentally involved in it? Every day, thousands of women are being raped mentally. Whether they are travelling, or they are waiting for bus. Whether they are studying, or they are having tea with friends. Whether they are teaching, or they are in an interview. And there are numbers of places where women are being harassed mentally.

No constitution in world has punishment for such harassment. For that society has to change its mindset. Before looking at a girl with a bad intention, a person must think that somewhere in the world, another person must be looking at his sister, daughter, mother, wife, in the same way. Wake up, it is an alarm. Let us change the society by contributing our bit. Do not just discuss the incidents; try to change it by behaviour.

BY:

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Green Corner:

GREEN IT

Green IT stands for Green Information Technology. Information Technology is essentially the design, implementation and management of computers that both individuals and businesses use. In a nutshell, "Green" IT is composed of two things:

1. Minimizing the negative impact of information technology use on the environment
2. Using information technology to help solve environmental issues

As you can see these are almost two areas at opposite poles. In our lives technology helps us to do everything from send a funny joke to our friends, to make sure the trains run on time, to allowing us to warn cities of tsunamis and earthquakes. We need it and it is not going away any time soon. On the other hand a typical computer is made up of thousands of chemicals and if we put all the computers in the world together, they use massive amounts of electricity.

Key Areas of Green IT

Electronic Waste:

Computer contains over one kilogram of lead and a veritable cocktail of chemicals including antimony, arsenic, boron, phosphor, nitric acid, hydrofluoric acid, and hydrogen fluoride to name a few. Your computer is also rich in mineral resources. Electronics account for ten percent of the world's production of gold, of which only thirty percent is recovered from scrap. Electronics also contain copper. It is a worse situation for copper: ninety percent of copper in a computer can be recovered but only ten percent is. Mainly it has to do with the ongoing viability of the global penchant for new electronics.

Energy Efficiency:

Unlike eWaste, energy efficiency is a little harder to visualize. Essentially though energy efficiency is all

about making computers and related technology both reduce the amount of electricity they use and utilize electricity more effectively. Because the production of energy through coal-fired plants generates greenhouse gas emissions, most of which is CO₂. And greenhouse gas emissions are believed to be a major cause of global warming.

A typical desktop computer uses **868 kW of electricity per year**. And practically every company in the developed world has a computer of some sort. Many organizations have thousands of computers. For example a major bank in Australia has 20,000 computers. If we calculate the carbon emissions from 20,000 computers using 868kW of electricity each year, it equals 12,467 metric tons of CO₂. This CO₂ is equivalent to the:

- Annual greenhouse gas emissions from **2,384 passenger vehicles**; or
- CO₂ emissions from **28,994 barrels of oil** consumed; or
- CO₂ emissions from the **electricity use of 1,619 homes for one year**; or
- Carbon sequestered by **2,658 acres of pine or fir forests**

And that is just one major company.

At home, the majority of people in developed countries are likely to have a computer, a games console, or a TV. And many times they will have all three or even multiple computers and TVs. If we take the population of Australia and assume $\frac{3}{4}$ of the population has at least 1 computer, which is 15,000,000 computers using 13,020,000,000 of electricity per year. This electricity is equivalent to 935,049 metric tons of CO₂. This amount of CO₂ is equivalent to the:

- Annual greenhouse gas emissions from **178,786 passenger vehicles**; or
- CO₂ emissions from **2,174,533 barrels of oil** consumed; or
- CO₂ emissions from the **electricity use of 121,435 homes for one year**; or

- Carbon sequestered by **199,371 acres of pine or fir forests**

And that is just the homes from one country in the world.

Some good facts to know...

- By turning off your computer **each night or when not in use** (i.e. lunch times, weekends, when in meetings at night) for a year you save as much energy as it takes:
 - to run a clock radio for 1,392 weeks
 - to make 9,280 bags of microwave popcorn
 - to wash 464 loads of washing
- to use your blow dryer for 5,568 hours
- to vacuum for 464 hours
- to produce 3,480 plastic bags
- to run your microwave 24 hours a day for a week
- to boil your kettle for 24 hours a day for 268 days

By turning off your computer tonight when you leave work you will save as much energy as it takes:

- to run a clock radio for over 3 weeks
- to make over 20 bags of microwave popcorn
- to wash over 1 load of washing
- to blow dry your hair over 12 times
- to vacuum for over 1 hour
- to light a 100 watt light bulb for over 10 hours
- For both companies and individuals, there are some really easy actions they can take to reduce their energy use, including:
 - Turning off computers, games consoles and TVs when they are not in use.
 - Setting your computer to "sleep" after 15 minutes of inactivity (this reduces the power it uses because "sleep" mode is a lower-energy use mode for the computer to operate in).
 - Turning devices off at the power point (because even in standby mode your appliances are using electricity).

ISSN NO- 2277-2510

- Buy green energy (to help push electricity suppliers to convert from coal based production – which creates greenhouse gases and requires mining – to sustainable technologies like wind power).
- Buy and use a laptop instead of a desktop computer. Laptops only use 190kW (average) of electricity per year.

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