

The Model on the Concept of Multimedia (MCM)

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Abstract

The Model on the Concept of Multimedia (MCM) is invented to give students the concepts of multimedia through model. The model is comprises of the concepts of multimedia elements; multimedia elements; multimedia authoring; different levels of interactivity; and finally, the different category of software.

Key Words: Multimedia, Multimedia Authoring, Multimedia Elements, Graphics, Text, Animation, Audio, Video, Levels of Interactivity, No Interactivity, Manual Interactivity, Branching Interactivity, Sophisticated Branching, Full Control Interactivity, Edutainment, Kiosk, Information Booth

1. Introduction

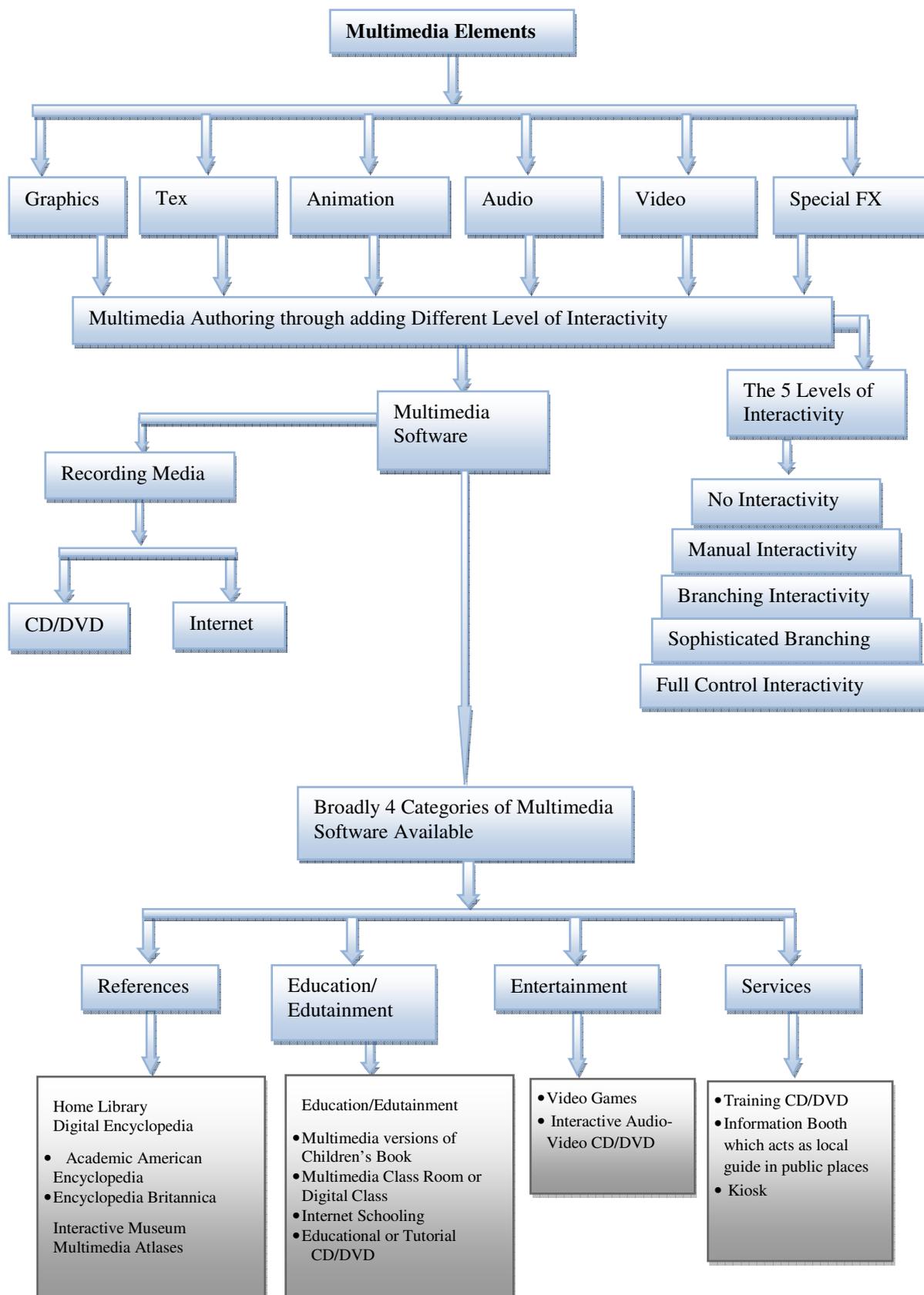
Bangladesh is a developing country. And at the same time it is with a big population of 14, 97, 72,364 (Bangladesh Bureau of Statistics, March, 2011) in 147,570 square kilometers. Once, the big population was burden for the country. But now the population is being transferred to human resources by emerging small entrepreneurship, by going abroad with small skills, and also by establishing educational institute which gives such creative, technology, business, and marketing based education so that students can go into job market after passing out from the institution. Shanto-Mariam University of Creative Technology is one of those kind endeavors which main objective is to bring out the country from degree culture. The university has the course like, Graphic Design & Multimedia, Fashion Design, Interior Architecture, and Apparel Manufacturing & Management etc. After passing Higher Secondary education student get admitted here. But many of the students do not have pre-idea about the creative and technological education. And they don't know even which kind of courses they are admitting in as our traditional education system does not give our students the adequate knowledge about Graphic Design & Multimedia or any other creative courses up to HSC level. As I am a faculty member of the department of Graphic Design & Multimedia I have made the Model on the Concept of Multimedia (MCM). I believe the model not only can help my students to get the notion about multimedia but also it may helps those don't have idea about the multimedia. The model is in next page.

2. Multimedia Elements

Multimedia Elements are those elements are required communicate through multimedia. It may be assumed that communication through various (multi) media is multimedia, but it is not exactly like this. The walking of multimedia as we exactly mean by the concept is started with start of digitization; yes the key to this multimedia revolution is digitization.

Through multimedia user takes information actively by one's own choice and own pace. And it is the specialty of multimedia. In order to give the facility of taking information actively it requires giving interactivity among multimedia elements. And to give interactivity it requires converting analog multimedia elements to digital.

Computer is a digital device which only deals with binary code that is 0 and 1. Whatever we put in computer like Beethoven's symphony, a Vinci's Mona Lisa or a firm's five years business plan everything will be interpreted in computer by these digital code. So to make relations and giving interactivity among media elements like, image which can be seen, music which can be heard requires digitization.



Before 80s multimedia elements that is graphics, text, animation, audio, video etc. were there but the concepts of multimedia was not there. At that time it was not massively possible to convert the analog media elements into digital. In 1981, IBM brought it first PC in the Market, then, after multimedia started to grow.

2.1 Graphics

Graphics can be called heart of multimedia. It is pictorial representation of any information may be combined with typography, images, illustrations etc. intended to communicate target audience. When motion or animation is given to this graphics to communicate to on screen audience is called motion graphics.

2.2 Text

Another important multimedia element is **text** because only image or illustration cannot properly communicate to audience it requires text to explain. Designers create or select special type of text or font to serve the special communication purposes is called Typography.

2.3 Audio

Like text **audio** is important integral part of multimedia. An audience may bother in reading textual information but he may be pleased to hear that textual information. Rather a blind person can hear the textual information through audio. Furthermore, one can experience the difference without audio by turning off the sound from an advertisement or from a movie clip for a while.

2.4 Video

It is nothing is to say differently about the need of **video** in giving information. To see the captured any information could be arranged or naturally occurred video is inevitable.

2.5 Special Effects

Many of us may not consider the **Special Effects**' individual identity as multimedia elements. Because they think special effects is given to multimedia elements to draw viewer's attention for better communication. But some effects are there which may not be fall totally under any multimedia elements such as Panoramic Movie or QTVR, or Morphing-Warping. So, to give more emphasis on FX I am considering it as individual multimedia element.

3. Multimedia Authoring

The multimedia may be defined as the integration of multiple media elements that are graphics, text, animation, audio, video and special effects into one and then defining how the user can interact with them as one get information from internet. The process of integrating multiple media elements and giving interactivity is called **multimedia authoring**.

4. Levels of Interactivity

There are five levels of interactivity. Which level of interactivity is required for multimedia software is depends upon the outcome required and user-friendly of different types of user. Kids may not be able to use all levels of interactivity. The levels of interactivity are:

4.1 No Interaction

It is a computer controlled multimedia presentation in an entertainment environment.

4.2 Manual Interactivity

It is a multimedia presentation where user can be able to start, stop, and pause the presentation.

4.3 Branching Interactivity

Here user takes information through branching out the software according to his choice as he takes information from internet. It is common in point of information (POI) and point of sale (POS) applications.

4.4 Sophisticated Branching

This includes a range of navigational features and do not necessarily force the user down prescribed paths. It is used in educational and training applications.

4.5 Full control Interactivity

This includes multimedia applications in which user can tailor a body of provided resources, or add their own, to create new applications. These include presentation and multimedia authoring software.

5. Multimedia Recording Media

After authoring the multimedia software is prepared now it is to record in a recording media to reach the target audiences. The most popular offline recording media is CD and DVD and online media is internet.

6. Multimedia Software

Multimedia software may fall into four broad categories these are discussed below:

6.1 References

The first category is **references**, which brings the resources of the public library into the home. For example Digital Home Library, Digital Encyclopedia, Multimedia Atlases, Virtual or Artificial Museum etc.

6.2 Education

The second category of multimedia software is **education**. Multimedia is considered as a most powerful tool yet invaded. Another concept of education is emerged with emergence of multimedia that is edutainment means education through entertainment (learning through play, creative activities, and adventure games).

6.1 Entertainment

The third category of multimedia software is **entertainment** is the biggest growth area. Computer games developer now have million dollar budget and in the recent years big name music publisher, television companies, and movie studios have broad their skills and backing into the multimedia entertainment industry.

6.1 Services

The fourth category is **services**. It covers wide range of multimedia applications in work places, public galleries, shopping malls, and even in airplanes. The example of this category is training CD/DVD, information booth, kiosk etc.

7. Conclusion

The word multimedia is mostly known and widely used in the first world countries not only because of its user's freedom of gathering information but also its vividness of giving information. If someone reads book he gets only textual information or at best one or two related pictures. But in case of multimedia user not only get related textual information or pictures but also experts' commentary, videos, sounds, and also with the essence of special effects for better knowledge gathering rather memorizing. I believe my model can be able to enhance the awareness of multimedia to students of multimedia and the people don't have the ideas of multimedia.

References

ARENA Design Team, *Concepts of Multimedia and Internet*, Andheri Mumbai, India

C.R. Kothary, *Research Methodology: Methods & techniques*, New Age International (P) Ltd. New Dillhi

David Ogilvy, *Ogilvy on Advertising*, Vintage Books, New York, 1985

George E. Belch & Michael A. Belch, *Advertising & promotion: IMC perspective*, Tata Mcgraw-Hills Publication Company Ltd. India 2003

Keller Kevin Lane, *Strategic Brand Management*, Dorling Kindersley (India) Pvt. Ltd. 2008

Naresh K. Malhotra, *Marketing Research: An Applies Orientation*, Pearson Education (Singapore) Pvt. Ltd. 2005

Ruth Colvin Clark & Recharad E. Mayer, *e-Learning and the Science of Instruction: Proven Guidelines for Consumers and Designers of Multimedia Learning*, Pfeiffer, San Francisco, 2008

S H H Kazmi, Satis K Batra, *Advertising & Sales Promotion*, Excel Book, New Delhi, 2004

Timothy J. O'LEARY & Linda I O'LEARY, *Computing Essentials 2005*, McGraw –Hill/Technology Education, New York, 2005

Vicki Sharp, *Computer Education for Teacher: Integrating Technology into Classroom Teaching*, McGraw – Hill/Technology Education, New York, 2005

William Wells, Sandra Mariarty, & John Burnett, *Advertising: Principles & Practice*, Dorling Kindersley (India) Pvt. Ltd. 2009

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