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Multimedia Education: Current Scenario and Future Potential

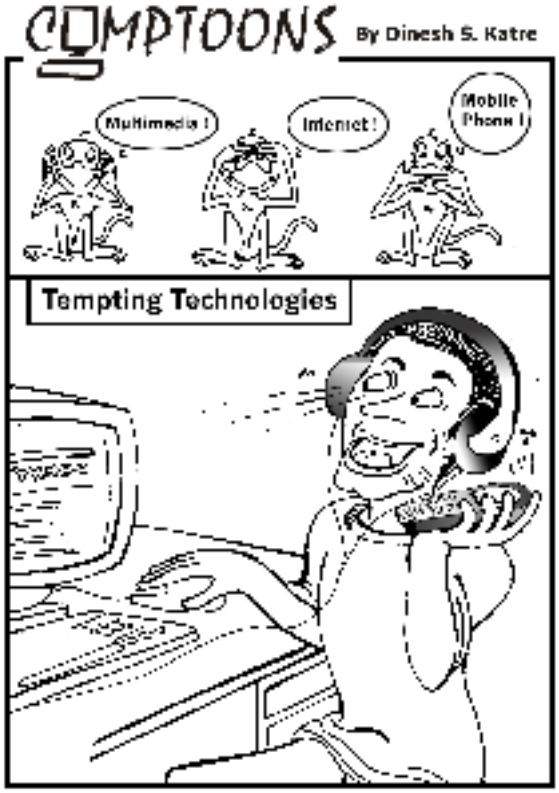
Dinesh S. Katre
Centre for Development of Advanced Computing (C-DAC)
Ministry of Communications and Information Technology, Government of India,
Agriculture College Campus, Near District Industries Centre,
Shivaji Nagar, Pune 411005, India.
Tel/Fax: 91+020+5533250
dinesh@cdac.in

1. Market Potential in India

The multimedia industry in India has flourished by leaps and bounds in the last decade or so. Its primary segments can be further divided into entertainment, publishing and IT industries. The electronic revolution symbolized by Television, Telecommunication and Computers has tremendously boosted the requirements of multimedia content production and innovative applications. It is further expanded through powerful dissemination networks like Cable TV, Internet, Broadband and now Wireless Handheld Devices like Mobile Phones and Pocket PCs. Let us take a look at the speculative indicators of the Indian multimedia industry.

Indian entertainment industry is estimated to be $4 billion (around Rs. 17,200 Crore) this year with the current growth rate of 20% per annum. The IT Enabled Services sector, which includes interactive/digital multimedia, animation and gaming; is expected to employ around 1.1 million professionals by year 2008. Computer, Video and Wireless (Mobile) Game development is also showing a very promising growth, wherein 80% of the projects are outsourced from the western countries to India. The animation industry, which is growing at the rate of 30% every year, is expected to be around $1 billion as per the NASSCOM reports. Around 80 to 100 million TV homes, hundreds of TV channels in variety of regional languages, over 60000 Cable Operators in India, are increasingly demanding for media content to provide 24x7 entertainment and information services for the television viewers. Also the Internet and Broadband subscribers are expected to grow to the extent of 40 million and 20 million respectively in India by year 2008. As per Jakob Neilson, the Indian Offshore industry will require to employ around 4 Lakh interaction designers by year 2008 to achieve the $63 billion software export. The bottom line of these indicators is that there are very bright prospects and opportunities for the multimedia industry. Excluding the entertainment and television industry, most of these market projections are influenced by the inflow of outsourced projects for the foreign users. **Otherwise, the proportion of multimedia content produced for the domestic users is**

relatively less. Our country can achieve the future market projections only if we develop strong multimedia training and education culture. Therefore, let us assess the present trends in multimedia training and education to identify the scope for improvement.



2. Trends in Multimedia Training and Education

Let us first understand what is meant by training and education, which will help us in interpreting the current trends of teaching in multimedia. **Training means a narrowly focused program that leads to high proficiency in a specific skill.** It prepares a student for one particular job or activity. Usually, one has to go through several vocational training programs as markets shift and technology changes. **On the other hand, education enables the students to deal with and solve a wide range of problems.** It inculcates ways of thinking that are productive. **Education is long term and one can adjust to the changes in market.** Here, the intention is only to convey that training and education play unique roles and both are necessary.

'Multimedia Professionals' the term, which is often used by the multimedia training institutes to address those persons who use multimedia for developing a variety of applications, is very loosely defined, in my personal opinion. Like the term 'film makers', can encompass the director who visualizes and orchestrates the creative craft of movie making, the cinematographer who produces the aesthetic imagery for the movie and also the video photographers who shoot the public events. Movie making is a very difficult subject to teach if compared with

video shooting of public events. Similarly, the term ‘multimedia professional’ is very general and it can encompass all the creative and non-creative activities. Therefore, I am restricting myself to the education of ‘multimedia-application-developers’ (those involved in visualization, design and development) in the following discussion. There is another important category, which can be referred as ‘multimedia-technology-developers’. This one needs far greater support and boost as compared to the education of multimedia-application-developers.

2.1 Multimedia Training

Multimedia training in India is mainly imparted through private institutes mushrooming across the country. The training syllabus offered by many institutes revolves around teaching and promotion of branded software products. Hence, there is less emphasis on conceptualization and visualization of innovative multimedia applications. Also the ancillary subjects like interaction and interface design, visual communication, content structuring, user experience design, interactive storytelling, script writing, and several other related topics are not covered. **Problem solving multimedia-application-developers can be produced only if adequate emphasis is given on ancillary subjects apart from the usage of regular software and hardware tools.**

Like a typical wave graph, the initial rise in multimedia training was driven by the quantity of students trained. This wave is now declining as the market is maturing. **The next rise of this wave demands multimedia education, which is deeply grounded in academic content.** I am not using the word ‘quality’ which is usually coupled with ‘quantity’, as it has got diluted due to meaningless overuse in the context of multimedia training. The industry is just beginning to understand the different streams of specializations like 2D animation, 3D animation, special effects, multimedia scripting/programming, non-linear video editing, instruction design, interaction design, content structuring, content management, and so on. Application oriented specializations are yet to reflect in the academic curriculums e.g., 3D modeling for games requires different set of skills than the 3D modeling for video production.

Weaknesses in the Pedagogy

Present multimedia education lacks pedagogical maturity. Some multimedia courses are highly tool oriented wherein the focus is on teaching the user interface of branded software products. Some of them have an indiscriminate mixture of diverse topics with very superficial coverage. The professional courses are very application or service oriented. The specialization based multimedia courses are very rare. Most multimedia training institutes are under severe pressure of financial targets. **The expensive licensing policies of software tools and pressure of upgrading these tools almost every six months has set the low-quality-high-quantity trap of multimedia training.** It forces the training institutes to relax the eligibility criteria during admission of students. One is left with no option but to suffer from weird batch timings and just-passed-out faculty members to teach multimedia. ‘Unleash your creativity’ remains a mere

slogan printed on course brochures. **The short-term professional / vocational training programs give steroidal strength and skills to students, which wear off after a few months.** The long-term but part-time teaching programs do not leave any effect on students due to discontinuous approach. This situation needs to improve. So far we have discussed the negative side of multimedia training but there is a positive side too. The multibillion dollar IT industry of India is thriving on thousands of software professionals which have been produced through such training programs only. With China providing a competitive alternative to offshore IT projects, it is paramount for us to elevate the level of IT training and education.

2.2 Multimedia Education

The art, design, media and computer engineering programs are still to introduce multimedia as a subject of specialization in their degree syllabus. The universities and institutes where formal education is provided need to become more agile and receptive to the fast changing world. Therefore, the private training institutes have taken over to provide the professional multimedia training. Very small number of institutes like Industrial Design Centre, IIT, Mumbai; National Institite of Design, Ahmedabad; C-DAC's National Multimedia Resource Centre, Pune have been encouraging academic thinking in multimedia application development. Jadavpur University, Kolkata is probably the only place in India, where a postgraduate degree program in multimedia is offered. The Film and Television Institute of India (FTII), Pune is the only film school where multimedia technology is now introduced in the teaching syllabus. S.N.D.T. Women's University, Mumbai is another unique place where a postgraduate degree in e-learning technologies is offered.

Multimedia education appears to be lagging behind both in terms of quality and quantity if compared to the multimedia training in India. Universities, engineering colleges, art schools and other academic institutes offering degree programs must awaken to the fact that multimedia education (as a main stream course or in some course as a complementary subject) is inevitable in today's world.

Employers must demand for specialization

Employers of multimedia-application-developers must demand for specialization during the recruitment. Also there is a need to clearly understand different roles and related skill sets within the multimedia domain. Generally, the emphasis on technical capability is much higher than the design and visualization skills. Ideally, it should be on both. The employers expect both types of capabilities from the same person to save costs. It is unfair to expect a visualizer to be good at lingo-scripting and vise versa. This results in mediocre quality of multimedia applications. Indian film industry has matured enough over the years and hence separate departments based on specializations handle the film production. Similar maturity must develop in interactive multimedia software domain. Project management, team structuring, roles and responsibilities, activity flow, product

maturity cycles, maintenance, distribution networks and other professional practices related to multimedia must be evolved further and institutionalized. Multimedia education and training can bring this transformation in the market.

3. Interdisciplinary Cooperation

Multimedia is a highly interdisciplinary subject and has applications in all the disciplines. The multimedia training programs attract students from variety of disciplines like fine arts, design, architecture, interior decoration, film production, engineering, arts, commerce, and several other disciplines. Most multimedia training institutes teach these students with same teaching methodology and syllabus. The technical and creative strengths of students originating from different disciplines are different. They should be trained to extend their existing knowledge and skills in multimedia instead of thrusting the same syllabus on all of them. Multimedia unifies and interweaves various disciplines together. It provides many opportunities for interdisciplinary research and cooperation, which can be exploited, provided multimedia education is propagated in India.

4. Scenario in Pune

Multimedia business is getting siphoned from Mumbai to Pune due to improved connectivity through the express highway. It is possible to provide better work environment to multimedia-application-developers in Pune and reduce the overheads as against the saturation of space and high overheads in Mumbai. Creative-I college and Symbiosis Institute of Design, Pune have recently launched multimedia and design education programs. But their success will depend on how they sustain the academic tone. Apart from these two, there are several multimedia-training institutes, which offer part-time, full-time, short-term and long-term multimedia-training programs. If compared with the national scenario, apparently, Pune is progressing faster on the front of multimedia education.

5. The Future of Multimedia

If the Indian film industry can produce largest number of films in the entire world then why can’t multimedia industry produce the largest number of CD Titles or Games or multimedia applications or websites? This can definitely happen if the domestic use of multimedia increases. If India can produce the most talented software engineers then why can’t it produce the most creative multimedia-developers? If a country like Malaysia which is smaller than Mumbai city, can establish a Multimedia University, why shouldn’t we expect much more from India? There is a tremendous potential for multimedia industry to grow. Government of India must use multimedia as an effective tool to promote culture, tourism, education and rural development at a very large scale to create the desired impact. The Indian bureaucracy belongs to the second wave of industrial revolution and has the responsibility to nurture the third wave knowledge workers. The multimedia developers are part of the third wave revolution. It must realize the difference between the second wave and the third wave economies and prepare for a big change at earliest! This is what we can infer from the

Future Shock and The Third Wave of Alvin Toffler. There are problems that multimedia can solve and there is this hugely talented Indian youth waiting for the opportunity. All you need is the support, conducive environment and high quality multimedia education to hone the skills at an affordable price.

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