

Edutainment – The Integration of Education and Interactive Television

Stephen Skelton
UNITEC,
Auckland, New Zealand
skeltand@xtra.co.nz

ABSTRACT

This paper describes the process of an educational institution implementing an interactive television solution. The fundamental issue is the educational role within a TV environment as research continues to show that viewers expect entertainment on television. Edutainment, the successful integration of education into the entertainment environment of television is not going to be a trivialisation of real education. Instead, the new paradigm of interactivity for education in broadcast TV formats offers sophisticated, personalised, exciting and innovative ways to present traditional academic courses.

1. ACHIEVEMENTS IN COMMERCIAL ITV

In the ever-changing world of commercial TV broadcasting, everyone is looking for gold. Analysts claim that there is a US\$20 billion ITV market, that 30 million households in the US will be wired for ITV by 2004 and that 625 million people around the world will have access

to online services on their TV sets. The question remains, what will all those people really be doing and will it benefit education?

Consider the current situation: In the UK 97% of UK homes have at least one TV set! What has commercial interactive television achieved in this market? So far over 5 million people on BSkyB UK have access to interactive services. Woolworth's interactive TV site in the UK (on Open Interactive, a company which is currently valued at over US\$3 billion) generates over 5000 orders a week and is the 3rd largest store in the UK out of 800 in entertainment sales. The Pantene Study, trialed in 78,000 homes, found that 60,000 went into an interactive ad space and 30,000 worked their way through 10 screens to request a product sample! Interactivity provides an engaging platform for people to connect directly with the broadcasters.

2. IMPLICATIONS FOR EDUCATION

How can this commercial model be applied to education in a way that enhances educational services? In today's business environment universities and other

educational institutions are competing for the diverse needs of students worldwide across a wide range of subjects and material. It is commonplace for a student in New Zealand, for example, to study anywhere in the world and new media opportunities like interactive television allow institutions to reach those students directly in their homes wherever they are.

The familiarity of television makes ITV a stronger B2C model, enabling educational institutions to reach critical market segments, such as those who don't have the Internet or are not computer literate. The security problems of the Web are almost eliminated. An OfTel Study reported only 2% of ITV users were concerned with security thus enabling a great relationship with students in terms of safety of their fees. All analysts agree that t-commerce will surpass e-commerce heralding excellent potentials for any commercial transactions such as fees conducted through ITV. "By 2004 ITV will generate US\$11 billion in advertising, US\$7 billion in t-commerce, US\$2 billion in subscriptions" Forrester Research.

Interactive Television enables, most significantly, students, faculty and administrators to interact face-to-face over live sound and video with colleagues anywhere in the world. Many Universities are already using this communication technology, such as Illinois State University, USA. The potential for distribution efficiencies and fantastic export opportunities, without the "clunky" video streaming challenges of the Internet, makes early mover status for educational institutions in this new industry critical.

3. STRATEGIC MODEL FOR EDUCATION IN ITV

Step 1: The Approach

An educational institution's approach to interactive television must cover the following key areas:

(Example using AUSTAR (Australia))

- a] Service Creation – the creation of interactive templates, media, advertising, courses and tests (Massive Interactive)
- b] Service Platform – an end to end solution for creating, scheduling and operating interactive services between institution/teacher and student over multiple networks (Oracle Interactive Services Solution)
- c] Middleware – the software that enables the stu-

dent to interact with the television, through the set top box, by pushing the remote control (Open TV)

- d] Deployed Digital Boxes – the hardware boxes that sit on top of your television set e.g. Motorola
- e] Merchandising and Fulfilment – the group responsible for the successful delivery of any services and t-commerce e.g. collection of student fees (TV Shopping Network).

Step 2: The Phases

Any approach to interactive television must evolve in phases as technology allows. The rollout of interactive services would take place in two stages:

Stage 1- available at launch. Digital channels can allow viewers to access back-up text while still watching the video stream at a reduced size. It will be accessed via the viewer's remote control. Some of the text may be enhanced with pictures and could include:

- a] Interactive tools designed to help you identify your educational strengths and weaknesses e.g. subject tests. Also meet and chat with other students, opinions/comments on past courses
- b] Self-diagnosis tools, text-based back-up information for the institution's subjects and programmes
- c] Guides to local resources including courses on-line, local events
- d] Links to a host of other sources, for example to official bodies in education or student clubs
- e] Regularly updated news, keeping students in touch with the latest courses

The e-shop would contain courses at launch as well as supportive products including text books etc .

Stage 2 - available within 2 to 3 years. Viewers would be able to programme 'smart' STBs to select which programme areas or lectures to record for viewing, and then eventually call up content direct from central servers in the combinations that best suit them. Video on demand (VOD) has significant bandwidth requirements so the costs must be considered carefully. WAP software would be added to the STBs (for provision of the same services to mobiles).

There are already many educational websites

– education is said to be the one of the largest subject areas on the Worldwide Web – but none of them are integrated with authoritative, impartial, empowering interactive television channels. The total NZ tertiary educational market is worth some \$500 million and growing. Research among consumers and professionals indicates widespread support for an interactive educational channel and associated website.

All content created and broadcast or published will be tagged and stored digitally, ready for on-demand access in the interactive and broadband world, when new revenue streams will come from on-demand, personalized educational services.

There are enormous opportunities for revenue potential for educational institutions. Apart from charging fees for interactive lectures and forums run through interactive television, such as interactive ads, sponsorship, infomercials and content sales to other networks.

4. CONCLUSION

The traditional view of “the place” of education in television as being more static and informational could be replaced by a new paradigm, that of education as a dynamic, entrepreneurial and innovative medium. Channels like Discovery and National Geographic point the way to the possibilities of engaging the viewer in a sophisticated way.

Interactive TV is not an enhancement. It is a fundamental paradigm shift in the evolution of television, how it is used and what opportunities and financial models it will generate. The opportunities for educators are enormous...are you going to be there?

REFERENCES

G. O’Driscoll, (2000) *The Essential Guide to Digital Set Top Boxes and Interactive TV*, Prentice Hall, New York.

www.opentv.com (industry statistics and research)

