TUCK SCHOOL OF BUSINESS AT DARTMOUTH
GLASSMEYER/MCNAMEE
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Digital Technology:
Threat Before Opportunity for Media, Entertainment Industries

The media and entertainment industries face both danger and opportunities in digital technology, but the danger presents more urgency, while benefits from the opportunities will appear later.

Members of a panel convened by the Center for Digital Strategies at Tuck on November 7, 2002, declared that digital copying, which suffers no loss of quality from generation to generation, could have an impact as devastating on their businesses as Napster and its cousins had on the music industry--unless cooperation within and among media and entertainment industries is unprecedentedly complete and fast. By contrast, digital technology will create production and distribution economies more gradually, and they probably will not be unduly disruptive. Similarly, the creation of more engrossing entertainment through digital techniques, which is already happening, is unlikely to radically alter the structures of movie studios, hardware manufacturers, and cable and broadcast networks.

Tuck Professor Alva Taylor, moderator of the panel, first asked participants to outline the biggest challenges and opportunities presented to their industries by the changes digital technologies will bring.

Glenn Britt, T'72, Chairman and CEO of Time Warner Cable, responded that for digital technology to become more than just another way to send information over cable networks, one must determine "how to create benefits to consumers." And that depends crucially on protection of intellectual property value. "We won't have an industry if we don't work together on this," he warned.

Digital technology will provide content creators "tools to create spectacles that are more immersive and more intense" than today's entertainment, said Lisa Sanders, D'81, Executive Director of Operations at Sony Pictures Imageworks. She agreed with Britt that copyright protection is essential, calling for a combination of legislation, physical security measures and careful planning to protect investments. "The loss to content creators through digital copying and piracy already is in the billions worldwide," she said.

The entertainment industry as a whole faces a chicken-and-egg problem, according to Jim Sanduski, Vice President of Marketing - Visual Display Products Group, Digital Consumer Electronics Division at Samsung Electronics America. Consumers won't buy high-definition television sets without content, and broadcasters won't invest in the technology without customers who can receive programs. Meanwhile, for Samsung the challenge is to acquire retail shelf space for the new hardware.

The protection of intellectual property "is where our value is realized," agreed Seth Skolnick, D'85, Senior Vice President, Business Development at Paramount Digital, who noted that Paramount has 55,000 hours of content in its library. "Protection of that is--pardon the pun--paramount." As for opportunity, he said, studios have never marketed directly to the final entertainment consumer, but digital technology "allows creation of one-to-one relationships."

Skolnick said technology will also offer opportunities on the creative side of Paramount's business, but those are largely unrealized so far. "People are still passive," he commented. "They are still sitting back and digesting entertainment."

Asked by Taylor to project changes in the next five years, Sanduski predicted that in terms of hardware, television would not lose ground to the personal computer, but that the ubiquitous CRT display would fall victim to thin panel displays, including plasma and CCD screens.

Skolnick predicted that in five years developments in distribution would enable people to "view what has been a linear product in a more personal way. You will be able to view what you want to watch, when you want to watch it." Video will be available on wireless devices, with downloadable games that will accommodate multiple players "as characters in the story." Such highly immersive entertainment will resonate with younger people, and creators will need to learn how to combine character and story telling with these techniques.

In his business, Britt said, "Not much will change in five years, but you will see the beginnings of many things. For instance, HDTV will be more successful than most people think." For Time Warner, Britt said, the key question is, "Can I tell stories better? If you answer that question, you will know what is coming. For the consumer, it's all about choice. They want somebody to program a network for them, because viewing is still basically passive. But they want to be able to choose what they watch."

"We will see a networked home," Sanders predicted, with movies in a media room, games on hand held devices, and content moving among various devices. However, she said, people will still congregate in living rooms and dens. "You can't under-estimate the value of the shared entertainment experience."

Asked what will happen with intellectual property, Sanders said content providers are still grappling with the problem of its protection, developing techniques of encryption and watermarking. "It's very complex," she acknowledged. "Studios need to cooperate, and it will take time. Our chief technology officer is pessimistic; he feels the lid is already off the pot."

Britt also was pessimistic, and predicted that movies will suffer the piracy that music did before the problem is solved. "It will require the cooperation of several industries which are not used to cooperating with each other," he said. "The real issue is, can we work together? The lid is off, and time is short. We need to focus on solving the problem, and not on remaking the industry. We can't spend all our time squabbling."

"Does Samsung care about the outcome?" Taylor asked. "After all, you can still sell TVs."

“We do care,” Sanduski replied, noting that consumers won’t relate to digital television if they have no legal way to copy material. “We are all very much mutually dependent.”

“So how do we capture value in this world?” Taylor persisted.

Digital technology will eventually provide more efficient production methods, Skolnick said, and digital distribution to theaters will cut costs as well. In marketing, it will provide cheaper ways to reach consumers.

Sanders described a value chain that includes image capture, digital post production, and display and distribution. “All or none of those links can be digital at this point,” she observed. “George Lucas says it should be digital end to end,” she added--but others contend that digital technology may not save any money at all before the stage of display and distribution.

In any case, Britt predicted, the structure of content producers, networks and retail distributors will not transform significantly. “The way value will be created will not change that much,” he said.

Finally, Taylor asked whether federal regulation of the media and entertainment industries is appropriate.

Definitely, Sanduski responded, noting that 90 percent of all homes can now receive HDTV over the air, but only 10 percent of people use antennas. “So the challenge is to get digital content over the cable, and we need standards.”

However, the rules are flawed, because they were formulated to save broadcast networks, Britt said. “But you can’t force people to buy new TV sets,” and the digital transition won’t happen until 85 percent of homes have sets that take full advantage of digital technology. Instead of focusing on the survival of broadcasters, he said, “We have to focus on, why is this good for the consumer? This will not be driven by the technology. We have to provide real consumer benefits.”

Studios must do what the music industry did not do, Skolnick said: offer a legitimate alternative to Napster and its ilk on the Internet that works. Encryption will not work. “People will constantly try to break encryption. There is a generation of kids growing up who feel it is OK to take things. There is an educational need here.”