Interactive Multimedia: A Tool for Government Transformation

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As government agencies are faced with having to do more with less, interactive multimedia may provide solutions. In this paper some of the challenges are discussed, the nature of interactive multimedia is illuminated and its potential as a tool for production, information, performance support and learning is explored. Government programs using interactive multimedia are briefly described. And finally a strategy is outlined for implementing multimedia solutions that highlights both opportunities and pitfalls.

Tighter budgets — Fewer personnel — More work...
Increasingly these are the facts of life throughout government. Managers in Departments such as Labor, Agriculture or Education, or in agencies like the Environmental Protection Agency or General Accounting Office are being asked to “do more with less” in these times of rapid societal changes, shifting cultural paradigms, and a pervasive technological revolution.

Like their counterparts in business, many government managers feel overwhelmed by the realities of:

• exploding knowledge and information,
• the changing nature of work,
• fewer and less qualified workers,
• shrinking resources, and a
• demand for more and higher quality products.

Working under such conditions, administrators fre-

quently find themselves operating in a crisis mode, making decisions on solutions before they’ve had an opportunity to analyze problems and alternatives comprehensively. Too often, they perceive technology as the quick-fix or panacea for their problems. Such a response is usually not informed by the experiences of the past taken within the context of reasoned planning for the future.

An example:

One of the authors was recently approached by an agency near the end of the fiscal year when “the use it or lose it syndrome” had struck! The managers were expected to make decisions on hardware and software procurements that could not be adequately researched and analyzed with the few days given. While they did manage to
put together a list of computer equipment, peripherals, and software that they hoped would provide a degree of flexibility, they were frustrated... They realized that this equipment may not be replaced for a decade or more, rendering any mistakes of judgement quite costly.

The full potential of multimedia technology can only be realized when a thoughtful and systematic approach is used. Proper analysis of a situation is important at the beginning with a full statement of the problem, a fresh look at potential solutions, and a carefully considered implementation strategy for solving the problem. As a colleague of ours says, “In government that ain’t easy.”

With respect for the multiple challenges and constraining conditions government decision-makers face, we propose three actions:

• First, they need to release the crisis mentality that mires us all in the limitations of the past;

• Second, in its place, adopt the Chinese perspective that recognizes the duality of ‘crisis.’ There exists in every crisis both danger and opportunity.

• Third, appreciate multimedia as tools that have the potential for transforming crisis situations into opportunities of success.

In this paper we will: briefly explore some common challenges managers face; “illuminate” the nature of multimedia; discuss the uses of multimedia in government; identify exemplar multimedia programs in government; and finally, suggest what government agencies can do to capitalize on the potential of multimedia technology.

Exploring the Challenges Within Climates of Change

Leaders in government, business and society, in general, are faced with some significant challenges, including:

• exploding knowledge and information: the volume of information produced in our society continues to accelerate geometrically;

• the changing nature of work: increasingly work is information-based, requiring manipulation of multiple symbol systems, greater mental and less physical activity, with workers being given increased responsibility, authority and control over their own work;

• fewer and less qualified workers: according to demographic projections, by the year 2000 the majority of the entering work force will be minorities and women;

• shrinking resources: regardless of the Administration in the White House, the trend is toward making do with less. The Department of Defense has perhaps the greatest challenge as we shift to a post-cold war economy; and

• a demand for more and higher quality products: consumers are demanding more and higher quality goods and services, both of companies and of government.

An example:

Like other agencies, for the past several years, the General Accounting Office has been responding to the U.S. Congressional request for more and higher quality reports. Like other agencies, GAO has had to create them with fewer staff and more limited resources per report.

In response to the challenge of producing more reports more efficiently and effectively than in the past, the GAO has initiated an ambitious automation project. They recognize that to achieve the long-term benefits of automation, they need to initially make a substantial, up-front investment of scarce resources. Part of that investment will cover costs of training personnel, not only on how to use new computer programs, but also on new behavioral patterns for GAO evaluators. To properly document the effects of this innovation and to effectively describe its findings, the GAO is adding videotapes to some of its Congressional reports, all without proportionate increases in personnel or overall budget.

One can imagine Congress in the near future enjoying these graphic reports so much that they will request graphic reporting of conditions and conclusions in future GAO reports.
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