Executive Summary

New Media, Information Technology and Indiana:

A Retrospective on the 2000 Battelle Study

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In December 2000, Battelle Memorial Institute published a report entitled *Nurturing Central Indiana's Pillar Industries for 21st Century Midwestern Pre-eminence.* The Battelle Study identified advanced manufacturing, life sciences and information technology as pillars of Central Indiana's economy.

The ensuing dot.com bust and stagnation in employment in the Information Technology sector suggested limited value in pursuing technology related employment as an economic development strategy.

This conclusion is in error, as it is based on industry, not occupational data. Simply, firms outside the traditional information technology industry were absorbing production of emerging media content and delivery systems.

At the same time, more specialized firms were born, creating a niche set of products and services focused on delivering content across the Internet. Understanding the growth of Emerging Media's role in the U.S. economy involves accounting for these occupational shifts both within and between firms.

Occupational data suggest that employment in information related activities is occurring broadly across the national and State economy. Emerging media plays a central role in this expansion. Commercial reliance on emerging media includes not merely in production for media related activities, but as a venue for the sale and distribution of other goods and services. Digital connection to goods and services has created behemoth corporations (Google, Ebay, DoubleClick) in under a decade. It has also altered existing industries, notably print, radio and television media.

From an economic development perspective, emerging media is important not only for its end content, but also for the extensive value chain created by its adoption. A 'value chain' is a commercial business term that describes the combination of inputs from commodity through finished product. The emerging media value chain encompasses both the new uses for digital media and the replacement of existing information media tools throughout the economy. However, for the purposes of evaluating the usefulness of emerging media as an economic development focus area, it is important to understand the emerging media value chains. They include extensive content development (research and development), physical production (technology, multimedia skills, software and maintenance), transmission and distribution hardware and software (the Internet, local area network (LAN) equipment, networking equipment for wireless and wireline technology, computer human interface) and maintenance of the network (both physical and through informational linkages).

In summary, IT remains a pillar of growth in Indiana as it was correctly identified in the 2000 Battelle study. However, the focus of IT growth has changed. Growth in IT related firms within the IT sector is heavily oriented towards more specialized firms. Emerging media content is perhaps the most dynamic set of firms within the broader IT sector. Demand for workers with IT skills has exploded within firms outside the IT sector. These workers engage both in traditional IT related occupations, and work in other occupations, where IT skills – most especially emerging media skills – are increasingly a requirement of any job. The future for these sectors is bright in Indiana, and should be nurtured by both private and public efforts.