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BIG DATA AND WHY IT CANNOT BE IGNORED

This paper discusses the importance of Big Data and that it cannot be ignored because people and organizations that understand Big Data are using it to gain competitive advantages.

The term Big Data has come into use because just purchasing an information technology (IT) tool does not lead to better capabilities, efficiency, and effectiveness, even though intuition may suggest that more data and better tools should lead to better operations. At this point in the evolution of computers, Big Data is shorthand for the question, “**What do we have to do to realize the potential of ever-better computer-based data generators, ever-larger data stores, and increasingly complex computer networks that connect evermore data stores?**”

The last 30 years’ investments in (1) computer-based tools for generating data and (2) information storage facilities have left organizations with very large volumes of data and information. A few people are proving adept at exploiting this data and information. However, most people and organizations only sense unrealized potential.

Most investments in computer-based tools for generating and storing data and information have been focused on supporting a particular user community (e.g., sales, operations, or finance). The organizations that have performed the best have integrated data and information from all their divisions. One result of well-integrated information has been that corporations focus their advertising in areas where they have outlets. This may sound obvious, but some large corporations have spent millions of dollars advertising in areas where they did not have outlets. IT expenditures in such corporations often reinforce impediments to information sharing, degrade corporate synergy, and lead to financial problems.

Eliminating such waste and starting to answer the Big Data question above requires IT managers, developers, and users to shift from (1) concerning themselves only with their computer-based tools and their corner of their enterprise to (2) a perspective that (a) understands the details of their computer-based tools and their corner of the enterprise and (b) relates those concerns to accomplishing the enterprise’s goals.

The heart of Big Data is all elements of an organization taking actions that generate, share and use data and information in ways that improve the performance of (1) each element of the organization and (2) the organization as a whole.

To ignore Big Data is to ignore the concepts, methods, and tools being developed by many diverse efforts across governments, academic institutions, and business with the intent of realizing the largest possible advantage from investments in IT.