

Foreword

Unlike information technology (IT) itself, which has evolved with an alacrity that is truly astounding (some would say, alarming), the evolution of the human side of IT has been grounded in existing theory and mainly characterized by reactivity to technological innovation.

In the 1960s much of what was understood about people and information was present in the literature of behavioral accounting, which drew heavily on modern theories developed in areas such as psychology, sociology, and political science. This made great sense since these areas focused on human behavior and had a large literature to draw on that went back to ancient times. Behavioral accounting often clashed with the model of the system that portrayed the production of information as a straightforward processing of inputs into outputs. As an output, information is quite complex, especially when produced for use in an organizational context. What makes it complex is the fact that people are the ultimate consumers of the information. Many factors contribute to the way people view and use information, including task requirements, organizational settings, and personality characteristics.

People were important in information systems (IS) even when IS were not computerized. Many young students of information systems today have difficulty comprehending manual IS since there are so few available to observe or use. With the proliferation of the various classes of computers throughout the world came a general perception that IS are computer-based. Students who pursue degrees related to IS envision a workplace where they will be surrounded by various instances of IT—computers, programs, communication devices, printers, scanners, display units, etc. While it is often difficult to teach students about the complexity of hardware or how to write a good program, it is even harder to get them to think seriously about what the IT is intended to produce; namely, information. Those students who go into a managerial position quickly learn the value of information, since their jobs and careers are so clearly dependent on it. Quality IS are important since they produce and distribute information to the people who need it.

Today it is generally accepted that people are an integral element of an IS. System development methodologies include various kinds of people—managers, analysts, programmers, support staff—in the development process. IT could be wasted if various aspects of human behavior were not seriously accommodated.

For example, people generally resist change of any sort. For many people, a new computer-based IS represents change with a capital C. Many people resent having to spend time and effort to learn something new when they feel that the old system still gets the job done. Some people fear they may not be able to satisfactorily adapt to and learn the new system, in particular, the new hardware and software requirements. Some people fear they may lose their jobs when the new system becomes operational.

Resistance to change is one of many reasons people react negatively to IT in systems. The need to understand how people respond to IT led to a new area of study called “human factors.” Though the term has been used to mean different things, a good definition has been offered by Beard & Peterson (1988, pp. 12-13): “Human factors is the scientific study of the interaction between people, machines, and their work environment. The knowledge gained from this study is used to create systems and work environments which help to make people more productive and more satisfied with their work life.” In order to more clearly define major research themes on human factors, Beard & Peterson (1988, pp. 13-18) divided the existing literature into five categories for ease of use and reference:

- Human-Machine Interaction This category refers to the way people and computers communicate.
- Interface Specification Tools. This category refers to the formal techniques for the detailed design of the focus of interaction between people and computers.
- Information Presentation. This category refers to the way data is portrayed (graphic, numeric, alphanumeric, tabular, text, audible, tactile, etc.) to the system user.
- System User Documentation. This category refers to the needs and techniques of producing documentation in a form and style suitable to the expert or novice system user.
- End-User Involvement. This category refers to the methods used to involve users directly in the various stages of system development.

Within these five categories fall many different topics and issues related to the human side of IT management. These are often featured as tracks at professional conferences or form the focus of special issues of scholarly journals. For example, the annual Information Resources Management Association International Conference (IRMAIC) has a number of paper sessions in the Human Side of IT track from which many of the papers in this volume were taken. Also, Idea Group Publishing sponsors a Series in Managing the Human Side of IT that publishes books of scholarly papers contributed by scholars and practitioners specializing in the various topics and issues in the area. Mehdi Khosrowpour and your first co-editor assembled a collection of papers that had been presented at the fifth IRMAIC held in San Antonio TX. Researchers from Canada, Finland, Saudi Arabia, Singapore

and the United States addressed topics on IT implementation, the role of attitude toward IT, culture and IT, the impact of IT on health and privacy, personality and IT, group work and IT, and ethics and IT. A second volume has been published in 2002. It will include papers by researchers from the United Arab Emirates, England, New Zealand, Australia, and the United States addressing topics on leadership and IT, social antecedents of business process planning, jobs and IT, email and corporate change, e-communication of interdepartmental knowledge, personal information privacy and the Internet, GSS facilitation, collaboration and IT, cross-cultural communication and IT, and culture and IT professionals. The number of topics and issues continues to expand as new and emerging technologies result in human behavior responses which must be studied with a view toward developing better theories about people and IT.

This volume of full conference papers and previously published articles is being released by Idea Group Publishing with a view toward focusing on the specific topic of human factors so as to provide contributors to IRMAIC much greater visibility and exposure of their contributions to colleagues in the field throughout the world. It is hoped that by disseminating the ideas of current researchers in the field of human factors, the field will grow to produce an ever greater understanding of people and IT.

SELECTED REFERENCES

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