Title: Business impact visualization for information security and compliance events

Abstract:

In an effort to explore the potential value of business impact visualization in improving decision awareness and comprehension, a user-centered design methodology was employed to inform the development of a prototype. This prototype was designed to instantiate visualization concepts derived, in large part, from user-centered field research. IT professionals needed a prototype for these concepts to be sufficiently tangible in order to facilitate evaluation through interaction and application. These professionals were asked to evaluate the prototype's potential for improving their decision-making, and to determine the broad potential benefit of visualization to the selected problem space overall.

Starting with a broad outline of improving the awareness and comprehension of security and compliance events for business leaders, this effort enlisted the assistance of seven experienced IT professionals in the Des Moines metropolitan area. These individuals influenced the selection of a problem space, explored related challenges, contributed to requirements definition and prioritization, reviewed designs and, finally, tested a prototype. The group consisted of leaders and senior technical staff working in various industries. At the end of the methodology, a group of unrelated IT professionals with no prior knowledge of the research was asked to perform an objective evaluation of the project. That evaluation is reported in this document and forms the basis of conclusions regarding the research hypothesis.