Theory is generally considered to be the bedrock of academic research. It is the foundation upon which scientific research is organized and built. In particular, IS research draws heavily on theory from a variety of disciplines—over 85 theories have been widely used in IS research.\(^1\) IS research has developed or appropriated theories to examine central disciplinary themes such as IS development, adoption, implementation, training, application, as well as strategic, social and political factors. Some theories have originated within the IS field, while others have been drawn from complementary disciplines such as psychology, sociology, management, economics, and mathematics.

Despite its ubiquity, there are very few frameworks to organize theories used in IS research. There has not been extensive work on the categorization of the conceptual variables used in IS research, or work that establishes theoretical ties between IS research and research in other disciplines. We believe that it is possible to advance the IS field by studying the theories it has developed and uses.

This minitrack seeks to thoroughly examine, inform, and extend theoretical approaches used in IS research. We believe this minitrack targets an important niche in IS research, and can gain interest from IS researchers at all levels. We are presenting six papers in two sessions this year.

The first paper develops a social capital theory of communication in organizations, linking the use of computer-mediated communication for transmitting socio-emotional signals with one’s ability to develop social capital, where Theory of Mind is a major mediator.

The second paper draws on the concept of organizational integration, developing a typology for classifying IT applications. IT applications in previous research were classified and the results compared with the hypothesized impacts from the proposed framework. Their framework correctly predicted 87% of past significant findings.

The third paper examines interfield nomological nets using semantic analysis to systematically identify, categorize, and predict relationships among constructs.

Preliminary results demonstrating confirmatory, exploratory, and interfield research applications are presented.

The fourth paper explains the multifaceted roles of IT in enabling organizations to achieve competitive firm performance, using a holistic configurational theory approach. The study extracts several patterns of fused dynamic interactions among IT, organizational agility, and environmental turbulence that explain how IT plays those different roles.

The fifth paper examines the potential of grounded theory to generate stronger and better empirically grounded IS theory. A number of issues surrounding grounded theory research are studied.

The sixth and final paper seeks to demonstrate the importance of semiotics, the study of signs, symbols and meaning, for information systems. An integrative framework based on personal, social, and the material is built, and the implications of this framework for IS research is examined.

\(^1\) AISWorldNet “Theories Used In IS Research” (http://www.istheory.yorku.ca)