Organizational Systems Track

Strategic and Competitive Information Systems Mini-Track

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This mini-track continues the long tradition of examining the linkage between organizational strategy and information technologies. This has gained new urgency with burgeoning electronic commerce and new communication technologies. For new technologies to be adopted not only do they have to be technically feasible, they have to provide some strategic advance to the firm. Conversely, some firms may adopt technology that is still evolving. This is made clear in the first paper by Au and Kauffman. They use analytic modeling to show that some bill payers may adopt e-billing technology early, even in face of better solutions that might be available in near future, if there is a substantial installed base effect.

Feurstein, Natter, Mild and Taudes look at knowledge sharing within the organization and they find that despite availability of advanced tools and techniques, of the kind discussed in detail in the Collaborative Technology Track, its success in organization depends crucially on incentives and other variables of the organizational architecture.

Collaborative technology improvements and other advances in IT are expected to reduce costs, and increase output. This should result in an increase in productivity – the ratio of output to input. But empirically, this has been hard to establish. “We see computers everywhere but in the productivity statistics,” said Robert Solow, Nobel laureate economist. Debate has since then raged in the literature and this issue has been dubbed the “productivity paradox.” The next paper by Thatcher and Oliver sheds new light on this matter. They use an analytical model to show that the paradox may be created by mis-measurement of productivity. Many researchers use revenue as a proxy for output in productivity measurement. The authors identify this mis-measurement as a source of the paradox.

Continuing in the examination of decision making in the firm, Clemons and Aron look at the decision to allocate budget for product development and advertising. In this innovative work, the authors unite two hitherto disparate streams of literature. Investments in product design have been much studied in engineering management while marketing researchers have examined the value and cost of advertising. On the margin, a manager has to pick between these two competing activities and to-date there has been no comprehensive model to address these issues.

Finally, Rudi, Gundepudi and Seidmann also unite two streams of literature, theory of options in finance and pricing from marketing, to offer fresh insights into inter-temporal purchases, such as subscriptions, of information goods.