Section 6.c
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Introduction: Design teams in the pursuit of innovation

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Introduction
Designers often work in teams to develop new services and products through leveraging the knowledge and ideas of multiple members (Ancona & Caldwell, 1992; Beckman & Barry, 2007). Design work requires teams to not only understand each other’s perspective, but also integrate their knowledge in an innovative outcome. Yet team members often struggle to process information across their different perspectives (Chiu, 2002); and ultimately fail to produce creative and sustainable products and services. Different epistemological beliefs, concerns, and languages make such process very difficult. And while information processing in design teams is acknowledged as a key mediator through which a team’s diversity of information, function, and work-related background influences team performance (Hinsz, Tindale, & Vollrath, 1997), the mechanism for integrating diverse knowledge is not clear (van Knippenberg, De Dreu, & Homan, 2004).

Research in this track explores how design teams engage in knowledge work as they pursue innovations (e.g., in products, services, or business models), or search for innovative solutions to problems of organizing, managing, or strategizing. The basis for research in this track includes previous work which has shown that the integration of knowledge in design teams poses considerable challenges, including a lack of clarity on how design features and performance are related (Stewart, 2006). The papers in this track improve our understanding of how design teams integrate knowledge and innovate in practice; and makes practical recommendations for design teams.

This track includes five papers, two of which are included in these proceedings (based on author permission, rather than editorial review). Two papers address visualization in design studies. The first, included in the proceedings, is “Exploring a Colored Linkography for Identifying the Member of Design Teams” by Xu, Chuai, & Gan. The authors modify
linkography, a tool for design cognition and performance (Goldschmidt, 1990), to visually analyse design team interaction, providing, and measure member design contributions. They validate their adapted tool on an industrial design student team. Comi & Bresciani’s presentation, “Design Thinking and Techniques in Management Teams: Understanding the Role of Visual Facilitation” also addresses visualization effects. They report an experimental study which finds that teams using visual templates – especially with software support – were better able to understand synergies between the alliance partners, and to design innovative opportunities for the alliance.

The second set of papers investigate the multiple perspectives present in design work and the means of linking the associated knowledge and capabilities. In “Analogies in Multidisciplinary Design Teams,” Graff and Clark discuss how specific modes of communicating knowledge can support integration of diverse team members’ unique perspectives, relating information processing and analogical research streams. Fei’s paper, “The Knowledge Boundaries of Cross-boundary Teaming in Design-driven Value Co-creation,” investigates how task and leadership characteristics moderate the relationship between localized, embedded and invested knowledge (Carlile, 2002, 2004) and cross-boundary teaming. The empirical data are collected from design-driven co-creative project teams in both public and private sector. In the second proceedings paper, “The Design Capabilities of Dynamic Teams Pursuing Innovation in an Academic Context,” authors Coulson and Woods examine the role of academia and design capabilities in the development of new businesses. By utilizing a mixed method case study design, the authors identify different design capabilities throughout the design-led innovation process and how these capabilities affect outcomes.

Together these papers and presentations pursue processes and tools which can improve our understanding of information processing in design teams in their quest for performance and innovation.

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About the Track Facilitators

Daniel Graff is a Lecturer of Design Innovation at
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organizational level.

Mark A. Clark is Associate Professor, Kogod School of
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Alice Comi is a Lecturer in Business Design in the Department
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Fan Fei is a Lecturer in College of Design and Innovation,
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