

# Projects, Routines and Economies of Repetition

P

**Dajana D'Andrea**

*University G. d'Annunzio, Italy*

## INTRODUCTION

Scholars' interest in project-based organizations has been increasing in the last decades. Project-based organizations have become the typical organizational form in several industries: there has been an intense projectification of economic activities (Midler, 1995). Originally emerged in defense, construction, and civil engineering – e.g. Polaris, Manhattan, and Atlas projects –, these organizations have become widespread in many other sectors, like marketing and consultancy firms (Alvesson, 1994; Semadeni & Anderson, 2010), film industry (Cattani & Ferriani, 2008; De Fillippi & Arthur, 1998; Ferriani, Cattani, & Baden-Fuller, 2009; Lorenzen & Taube, 2008), music (Lorenzen & Frederiksen, 2005; Peterson & Berger, 1971), architectural practice (Winch & Schneider, 1993), shipbuilding (Levering, Ligthart, Noorderhaven, & Oerlemans, 2013) accountancy (Morris & Empson, 1998), advertising (Grabher, 2002, 2004), television (Starkey, Barnatt, & Tempest, 2000; Sydow & Staber, 2002), software (Grabher, 2004), elite sport competitions (Andersen & Hanstad (2013), legal profession (Hobday, 2000), and complex products and systems (Davies & Brady, 2000; Gann & Salter, 2000; Hobday, 1998) – e.g. oil platforms, mobile telephone systems, aircraft engines, and power stations (Prencipe & Tell, 2001). This trend is due to the need to realize innovative products and services, which satisfy specific needs of the client (Davies & Hobday, 2005; Gann & Salter, 2000; Hobday, 2000; Midler, 1995). However, the attitude to be flexible makes these organizations face the challenge to capitalize on experience in

order to avoid reinventing the wheel in each new project.

Routines represent an important vehicle to achieve capitalization on experience and to manage new lines of business more efficiently and more effectively (Davies & Brady, 2000). This chapter adopts a practice perspective to routines to clarify how efficiency and effectiveness can be acquired across projects. This perspective implies a focus on the internal dynamics of the routines (Dionysiou & Tsoukas, 2013; Feldman & Pentland, 2003; Parmigiani & Howard-Grenville, 2011). Although research on project-based organizations attributes an important role to routines, the latter are given for granted. Recently these scholars have started addressing more explicitly the internal dynamics of routines. However, we still know very little about such dynamics, the role of participants in the implementation of the routine and in the achievement of efficiency and effectiveness. In this chapter, I aim to shed more light on how looking at the internal dynamics of the routines enables us to better understand how project-based organizations may manage their business more efficiently and effectively.

## BACKGROUND

In an increasing number of industries firms need to customize their products and undertake innovation to be competitive (Hobday, 1998). Innovation is paramount mostly for Western firms, which have been forced to outsource manufacturing operations, due to the increasing competition they face from Asian, low-cost firms (Davies, Brady, Prencipe, & Hobday, 2011). These firms have started

adopting more flexible organizational forms to achieve innovation. Such flexible organizational forms are named project-based organizations, and are those organizations that bring together new and different resources and knowledge for specific productions through projects (Gann & Salter, 2000; Hobday, 2000). In a project the client has the opportunity to participate actively in design activities, increasing the opportunities of personalization (Hobday, 2000).

Although projects represent a source of flexibility, project-based organizations implement several mechanisms to manage them in order to capitalize on the experience acquired in each project (Andersen & Hanstad, 2013; Cacciatori, Tamoschus, & Grabher, 2013; Prencipe & Tell, 2001; Zoiopoulos, 2013). These mechanisms include informal people-to-people communications and artifacts (Keegan & Turner, 2001; Newell, Bresnen, Edelman, Scarbrough, & Swan, 2006; Prencipe & Tell, 2001). Top management relies on documents, standard operating procedures, and ICT tools (Cacciatori, 2003). These artifacts store knowledge about what to do and are particularly effective in transferring knowledge when the firm is large and geographically dispersed (Boh, 2007; Newell, et al., 2006; Prencipe & Tell, 2001). On the other hand, informal people to people communications transfer knowledge about how to undertake tasks and are more effective when the firm is small and not dispersed geographically (Boh, 2007; Newell et al., 2006; Prencipe & Tell, 2001).

Project-based research argues that routines have a key role in favoring the transfer of knowledge across projects. When engaged in a completely new project, participants tend to rely on routines exploited in the past, and explore new ones when the latter prove inappropriate (Andersen & Hanstad, 2013; Davies & Brady, 2000; Engwall, 2003). Routines represent the vehicle to reach economies of repetition, which consist in the execution of an increasing number of similar projects more efficiently and effectively (Brady & Davies, 2004; Davies & Brady, 2000). Drawing on

the broader literature on routines, more recently, project-based research has started delving into the internal dynamics of routines, showing what enables new routines to emerge effectively and how they evolve once emerged (e.g. Bresnen, Goussevskaia, & Swan, 2005; D'Andrea, 2012). This chapter complements these recent works, by adopting a practice perspective to the study of routines and defining them as recognizable patterns of interdependent actions, which recur across projects and involve multiple project participants. In this work I clarify the importance of delving into the internal dynamics of routines to understand how routines enable project-based organizations to achieve economies of repetitions.

## **ROUTINES AND ECONOMIES OF REPETITION**

Davies and Brady (2000) develop the concept of economies of repetition to show that project-based organizations can offer “repeatable solutions by recycling experience from one project for others in the same line of business” (Davies & Brady, 2000, p. 932). Ericsson, a Swedish company, producing telecommunication equipment, and Cable and Wireless, a business unit of the British telecommunication operator, move to a new line of business - turnkey solutions and outsourcing solution respectively – and reduce the costs of bidding and operations of successive projects in the same lines (Davies & Brady, 2000). Similarly, a British engineering consulting firm, which provides also support services, develops economies of repetition to prepare the bids for private finance initiative projects, by capitalizing on the experience accumulated in previous projects of this type (Cacciatori, 2008).

Crucial to the achievement of economies of repetition is the development of routines. Once undertaken a one-off project, the same participants are involved in successive ones of the same type, in order to consolidate routines, which they adapt according to the contingencies of each project. At

7 more pages are available in the full version of this document, which may be purchased using the "Add to Cart" button on the publisher's webpage:

[www.igi-global.com/chapter/projects-routines-and-economies-of-repetition/107382](http://www.igi-global.com/chapter/projects-routines-and-economies-of-repetition/107382)

## Related Content

---

### Spatial Data Analysis Using Kernel Density Tools

Boris A. Portnov and Marina Zusman (2014). *Encyclopedia of Business Analytics and Optimization* (pp. 2252-2264).

[www.irma-international.org/chapter/spatial-data-analysis-using-kernel-density-tools/107411](http://www.irma-international.org/chapter/spatial-data-analysis-using-kernel-density-tools/107411)

### Innovative Approaches for Efficiently Warehousing Complex Data from the Web

Fadila Bentayeb, Nora Maïz, Hadj Mahboubi, Cécile Favre, Sabine Loudcher, Nouria Harbi, Omar Boussaïd and Jérôme Darmont (2012). *Business Intelligence Applications and the Web: Models, Systems and Technologies* (pp. 26-52).

[www.irma-international.org/chapter/innovative-approaches-efficiently-warehousing-complex/58410](http://www.irma-international.org/chapter/innovative-approaches-efficiently-warehousing-complex/58410)

### Uncovering Actionable Knowledge in Corporate Data with Qualified Association Rules

Nenad Jukic, Svetlozar Nestorov, Miguel Velasco and Jami Eddington (2013). *Principles and Applications of Business Intelligence Research* (pp. 210-229).

[www.irma-international.org/chapter/uncovering-actionable-knowledge-corporate-data/72572](http://www.irma-international.org/chapter/uncovering-actionable-knowledge-corporate-data/72572)

### Research Topics in Complex Systems

Jay Ramanathan and Rajiv Ramnath (2009). *Co-Engineering Applications and Adaptive Business Technologies in Practice: Enterprise Service Ontologies, Models, and Frameworks* (pp. 351-376).

[www.irma-international.org/chapter/research-topics-complex-systems/6600](http://www.irma-international.org/chapter/research-topics-complex-systems/6600)

### Propose a Conceptual Model of Adaptive Competitive Intelligence (ACI)

Sareh Mohammadalian, Eslam Nazemi and Mohammad Jafar Tarokh (2013). *International Journal of Business Intelligence Research* (pp. 22-32).

[www.irma-international.org/article/propose-a-conceptual-model-of-adaptive-competitive-intelligence-aci/104736](http://www.irma-international.org/article/propose-a-conceptual-model-of-adaptive-competitive-intelligence-aci/104736)