Chapter VII Rethinking Virtual Teams for Streamlined Development

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ABSTRACT

Much of the research on creative teams tends to focus mainly on relatively small teams working in the fuzzy front-end of product development. In this chapter, we bring a complementary perspective from an industry context where creativity is often perceived as risky business—yet a precondition for success. Here, we focus closely on people and teams that might not usually describe their own work to be of a primarily 'creative' nature, and that currently work under circumstances where traditional approaches for enhancing creativity might no longer be applicable. Drawing from experiences in automotive and aerospace development, we argue that it is time to radically progress our current understanding of how creativity could be introduced in organizations where factors like legal demands and contractual agreements severely restrict 'outside-the-box' thinking, and where well-known creativity enablers such as trust, shared goals, and shared culture are becoming increasingly difficult to accomplish.

INTRODUCTION

The motivation for this chapter is to question, or at least provide a reality check on some of the 'quick fix recipes' for virtual team creativity that often seem to take a rather idealized perspective on how creativity might be infused in geographically dispersed development teams. Our stance towards creativity techniques is generally positive. Not surprisingly, we too believe that creativity is a crucial building block of successful product development in just about any industry context. However, much of the research on creative teams tends to focus mainly on relatively small teams working in the very front-end of product development, such as in the initial idea generation phase of a consumer electronics project. If anything, such development projects explicitly target the creative aspects of collaboration to showcase innovative concepts for a future market. We bring a complementary perspective from an industry context where creativity is often perceived as risky business—yet a precondition for success.

Consequently, we direct our focus to what we have chosen to call 'streamlined development'-here defined as development activities which are considered as relatively mature with respect to achieving accelerated development and significant cost reduction, while maintaining or increasing product performance. We do not imply through this term that the 'fuzzy front-end' of innovation (so called due to the high level of uncertainty encountered during the initial states—this concept is discussed further in Chapter X of this book, "Virtual Teams in Practice: Tales from the Battlefront of the Fuzzy Front End of the Innovation Process," by John Feland) is entirely free from harsh deadlines, demanding industry regulations, downstream production planning, or supply chain integration issues. We merely want to focus more closely on the concerns of virtual teams that might not usually describe their own work to be of a primarily 'creative' nature. First and foremost, we are interested in the individuals and teams that enter the field after the contracts have been written; the people whose job it is to 'deliver what has been promised.' Not only do we realize that these teams are in serious need of appropriate creativity enablers, we also realize that these teams currently work under circumstances where traditional approaches for enhancing creativity might no longer be satisfactory.

Drawing from experiences in highly streamlined product development work in the automotive and aerospace industries, we aim to provide insights into the complex relationships between geographically dispersed team members and the day-to-day activities through which they collectively create the cars and aero engines of tomorrow. The overall business context in these industries is rapidly and continuously changing, which has serious implications on how global partnerships are formed and sustained. For the virtual teams engaged in such partnerships, creativity is undoubtedly a key to success. However, as this chapter will highlight, we argue that it is time to radically progress our current understanding of how creativity could be introduced in organizations where factors like legal demands and contractual agreements severely restrict 'outside-the-box' thinking, and where well-known creativity enablers such as trust, shared goals, and shared culture are becoming increasingly difficult to accomplish.

Some overall characteristics of automotive and aerospace development in a global perspective are elaborated upon using examples from two Swedish companies that have already taken significant steps towards realizing the Virtual Enterprise vision. This chapter's 'tales from the battlefield' are also taken from these companies and are based on observations and experiences from two car platform development projects at Volvo Car Corporation, and from two aero engine development projects at Volvo Aero Corporation. These tales are thematically organized around four different dilemmas, which fundamentally implies that while establishing trust, shared goals, and so forth, seems to be highly important for successful collaboration in virtual teams, the special conditions under which these virtual teams work are often not conducive to building those creativity enabling properties. Furthermore, these dilemmas also imply that, for example, trust as a creativity enabler is not about an unconditional either/or question. Briefly stated, it is about knowing when

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