# Chapter 10 Virtual Team Leadership, Operation, and Technology Deployment: A New Model for Remote Working

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## ABSTRACT

The COVID-19 situation has shown many leaders that their face-to-face meetings leadership style may well now be a thing of the past. Tech-savvy companies are now deploying new technologies to support the creation and leadership of virtual teams, working remotely in different locations around the globe. This presents a range of new challenges for both project leaders and team members, who must now adopt new ways of working. Using an inductive approach based on an analysis of relevant literature, online surveys, and in-depth interviews with project leaders and other practitioners, this chapter examines the transitioning to virtual team leadership and operation, identifies critical success factors, and discusses the facilitating role of new technologies. An operational model (V-CORPS) to guide the building and operation of virtual teams is developed and explained with the aim of increasing the flexibility and efficiency of virtual project teams and establishing a checklist of action points for team building and leading.

## INTRODUCTION

With the globalization of the automotive industry, virtual teamwork is becoming the predominant way of working in multinational organizations. One result of globalization has been to increase the interdependence of different companies, who thus have developed their own functioning networks, among other things in the form of teams, to be able to work more efficiently. However, globalization is leading to an increasing division between spatial and functional aspects of the value chain, which has changed the organization and the working environment in the companies concerned (Lenz & Machado, 2008).

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Researchers and practitioners have started to think more deeply about the complexity of projects with dispersed teams, the new opportunities for project management, the required changes in processes, as well as the needed technological support and human skills development. This has led to the concept of "virtual leadership" or "e-leadership", which focus on the social influencing abilities of executives in dispersed (or "virtual") teams. These virtual teams use collaboration and communication technologies that are of increased importance for the pursuit of project goals. Guinaliu and Jordan (2016) stated that the growth of virtual teams has been constant since the late 1990s, but this growth, along with a rethinking of their role and operation, has been massively accelerated by the COVID-19 pandemic, where employees have been compelled to work from home whenever possible (Newman & Ford, 2020).

This chapter builds upon the commonalities of globalisation, digitalisation, and the increasing importance of teams to develop the V-CORPS model (Virtually: Create the team; Organise the team; Relationship building; Performance evaluation; Sign-off and closure) for virtual team building and leadership. Following this introduction, relevant literature is reviewed, and then the research methodology is outlined. The findings section details the critical success factors (CSFs) derived from the literature and validated through semi-structured interviews, and then the V-CORPS model is set out and explained. The findings also examine how digital technologies can be deployed within this framework. Finally, the conclusion summarises the main themes covered in the chapter and suggests some possible areas for future research.

## BACKGROUND AND RELEVANT LITERATURE

This section reviews the extant literature to assess how new technologies can support team building and leadership. The review highlights the current use and potential of new technologies in team building and leading. The impacts of globalization on project team operations are also reviewed. The focus is on the automotive industry, which is one of the most complex industries to analyze, where projects are not only executed by global companies, but also with suppliers from all over the world. Outsourcing adds another possible dimension to global project management, with team members coming from a number of different business entities. Due to the rapid advancement of globalization, however, the focus here is on the effects and working methods of the team members scattered around the world, as it is common practice for these virtual employees to create their own unique way of working (Caulat, 2006). A basic and stable structure for a virtual team can engender reliable long-term performance.

## **Digital Technologies and Globalisation**

A decade ago, the advent of Industry 4.0 brought a new focus on developing systems with automated data exchange and new functionality, whereby manufacturing systems could communicate with each other, as well as with humans, for data to be accessed worldwide (Chung & Kim, 2016). One of the benefits was seen as a simplification of working methods and increased efficiencies. Here, ways of working with teams at a distance, the so-called virtual teams, are examined, and the important role of digital technologies in the operation of such teams is reviewed. For the purposes of this discussion, "digital technology" is regarded as more or less synonymous with "information and communications technology" (ICT), which not only supports mutual communication between the virtual team members, but also supports the tasks of the leader, for example, in the form of control and reminder functions. Digital technologies encompass a broad spectrum of tools, systems and technologies, including social media, mobile, cloud

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