

# Distributed Work Arrangements Supporting Organizational Needs

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## INTRODUCTION

The objective of this paper is to provide understanding in developing high performance distributed work arrangements (DWA), and suggestions for an evaluation framework for measuring productivity changes in these distributed work arrangements. Globalization and development of information and communication technology (ICT) enables many organizations be more geographically distributed with work conducted in multiple locations. Distributed work and virtual organizations are at the center of much attention not only from the business world, but also from academia. In recent years, many different distributed work settings have been created to improve productivity while reducing costs.

Since all organizations and types of work are not suitable for the distributed work setting, initially, organizations need to consider whether or not their objectives and culture, as well as characteristics of main factors are a good fit for the distributed work arrangement. This paper identifies and categorizes main factors having major impact on successful distributed work into four categories: organization, worker, work processes, and supportiveness of ICT and office environment. A self-evaluation table provides an example of how to assess the potential appropriateness for establishing DWA within an organization. Additionally we evaluate relevant attributes demonstrating an organization's level of appropriateness toward DWA. Generally the level of organizational friendliness to DWA, the level of worker's preference to DWA, the minimally needed frequency of interaction and communication among workers, and the level of ICT supportiveness are keys to measure the level of appropriateness toward DWA.

Once an organization decides to establish the distributed work setting, the next step will be about planning, managing, controlling, and supplying issues since it becomes harder to manage and control when the work

becomes more physically and virtually distributed. In order to maintain an effective distributed work arrangement, adopting a new type of management practice, facility management (FM), which strives to optimize people, process, assets, and the work environment, into the distributed work environment is needed.

## BACKGROUND

As Harrison and Stegles (2005) state, "Increasingly organizations will move outside of the physical container of their own buildings into larger organizational networks across cities, countries, the region or the world" (p. 1). As more organizations become physically distributed and the traditional ratio of workers to work space is reduced, distributed work arrangement (DWA) approaches are expected to increase in the future. There are many different forms of alternative workplaces as Gilleard and Rees (1998) well defined. They describe two types of alternative workplaces: on-site workplaces and off-site workplaces. Within the workplaces they further identify four main types in on-site workplaces: free address, hoteling, group address, and project team environments; and four main types in off-site: telecommuting, satellite officing, remote telecenters, and virtual officing.

The main purpose of this paper is to provide understanding in developing high performance distributed work arrangements. In this context, a definition of distributed work is needed. Executive producer of the Work Design collaborative, Jim Ware (2003), explains that we can consider a workforce "distributed" if it meets any of the three following conditions:

1. Individual workers are in different physical locations.

2. Most normal communications and interactions, even with colleagues in the next office, are asynchronous.
3. The individual workers are not all employed by the same organization, or are working within distinctively different parts of the same parent organization (p. 3).

Venkatesh and Vitalari (1992) define distributed work arrangement as a “Decentralized organizational structure where the core organization distributes a portion of its functions to a remote site” (p. 2). Distributed work arrangements are typically described as various work settings in which workers do not have a permanent work space in an organization’s premises. Distributed work arrangements consist of many types of alternative work settings rather than traditional work at an assigned workstation in the main organization office. Many large organizations have adopted distributed work arrangements as a breakthrough in order to increase workers’ productivity and at the same time, reduce costs.

While Hequet (1994) states that pilot studies of teleworking revealed that the average productivity increased by 10-16%, Qvortrup (1998) says that the results of telework have often been poor. Some distributed work arrangements today neither add much value nor work effectively. The rapid rate of business pattern change impacts the workplace as organizational practices evolve, the workplace is typically unable to adapt as quickly as needed. It is now critical to come up with comprehensive solutions that can help organizations create high-value and effective distributed work arrangements supporting the organization’s needs in the Knowledge Age. DWA implementation can be helpful to large organizations due to its potential benefits, however organizations must consider whether or not their goals, objectives, and surrounding conditions, as well as characteristics of their work, workers, and work environment are appropriately fit for successful distributed work arrangements.

In order to maximize the advantages of DWA implementation, attributes of organization, people, work, and support level, all need to be strategically combined to maximize the expected best forms of DWA. There have been research efforts to define relationships among factors of distributed work arrangements. Belanger and Collins (1998) indicate that those efforts have not resulted in clear results for the real world and the findings were not strong enough to build a clear theoretical

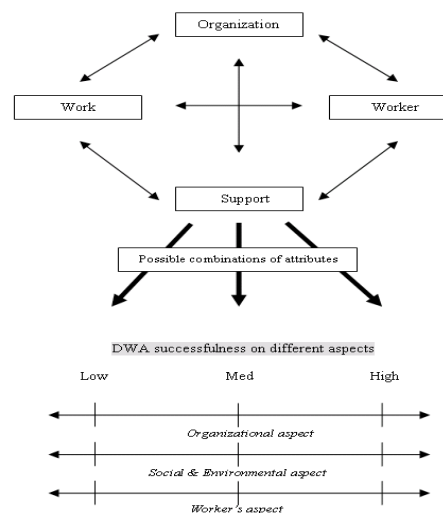
foundation for this field of study.

Pamela Hinds and Sara Kiesler (2002) mention that “In distributed work, there is considerable uncertainty about others’ behaviors. To reduce uncertainty, group members need information about the remote work and what other group members are doing” (p. 311). Pancucci (1995) states that managers should hold regular meetings and review sessions with specific goals to manage distributed workers and at the same time they must be available for coaching these remote workers. Since Shin, Sheng, and Higa (2000) also point out that there has been a lack of theoretical support for most telework research, we expand on prior research and provide examples of how important major attributes can be combined to analyze the different types of DWA and their most appropriate use.

## PARAMETERS SURROUNDING DWA

Venkatesh and Vitalari (1992) think of supplement behavior as a function of three factors in a conceptual model for work at home: (1) organization/work; (2) information technology; and (3) household (individual characteristics included). Given that the right people need to do the right work for the right organization with the right support, the four parameters selected in this study are: the organization, worker, work, and support-iveness; all are interdependent as shown in Figure 1.

*Figure 1. Interdependency and successfulness*



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