Chapter 3
Creating an IO Capable Organization: Mapping the Mindset

Bjørn-Emil Madsen
SINTEF, Norway

Lisbeth Hansson
SINTEF, Norway

Jan Eivind Danielsen
Bouvet, Norway

ABSTRACT
Integrated Operations (IO) is an organizational change and the mindset of the organization and the mindset of individuals affects this change process and vice versa. In this chapter, the authors discuss the changes introduced by IO, requirements to the change management process and a concept, they call IO Mindset. Change processes may be supported by use of tools and methods such as surveys and interviews. The chapter describes three different methods especially developed to assist IO change management processes, all including IO Mindset elements. The first one, TAM-IO, supports implementation of new ICT tools while CCP supports the change towards team based work forms. The third method, IO Mindset assessment is a newly developed tool, taking into consideration experience gained through implementation of IO and experience with other tools. Pilot testing of IO mindset assessment is described and discussed. This work is based on the “IO Mindset project” performed in the “IO centre” (Madsen et. al, 2011).

INTRODUCTION
A major frame condition for reaching the state of IO, are the possibilities offered by new ICT tools. In fact, already in 2003, the petroleum industry in Norway declared that the application of ICT is a prerequisite as well as a driving force for the development of more integrated work processes within all main activity areas, such as drilling, operation and maintenance (OLF, 2003). To fully realize the potentials of the many technological innovations, teams and individuals both within

DOI: 10.4018/978-1-4666-2002-5.ch003

Copyright © 2013, IGI Global. Copying or distributing in print or electronic forms without written permission of IGI Global is prohibited.
Creating an IO Capable Organization

and across companies must utilize the technology efficiently in their practice. Thus, IO is to the same extent about work processes and work forms, as the bandwith of the optic fibre cables or data quality. As stated by Grøtan et al (2009) - from being primarily focused on technology development and application, the development of IO now takes new directions: - increased focus on challenges related to new work processes, integration of information throughout whole value chains and a wide recognition of the prime significance of human and organizational factors for the success of IO. As argued by (Moltu and Sæther, 2008), to better understand and implement IO, one need to take into consideration the different interactions between these key factors: ICT solutions, Architecture/workplace designs, Human capabilities, Organizing, Management, Work Processes and Work forms. These factors produce direct effects on the development and success of IO, as well as various interactional effects, as when new open office solutions are implemented, management must be performed in new ways.

Implementing IO is undoubtedly a major scale organizational change. Consequently, the need for a structured approach to transitioning individuals, teams, and organizations from a current state to a desired future state – change management (Ficilicetti, 2007), is evident. The human dimension is clearly a major transitive factor concerning the organization's ability to gain success within the other change dimensions of IO.

The IO Mindset concept was developed to better meet the challenges of managing the human dimension. The concept has emerged through working with Integrated Operation projects over the last decade and it has been operationalized into a mapping method. Several methodologies exist covering the human and organizational changes imbedded in IO, some of them represented in Figure 1. Methodologies such as TAM-IO, IO screening and CCP have been building stones in IO Mindset assessment and visa versa. The insight and knowledge about the mindset of the organization and the individuals will fertilize the change management process.

The objective of this chapter is to give an introduction to the change management processes required when implementing IO. We will present some methodologies available for covering the human dimensions and specifically present the concept of IO Mindset and the tool IO mindset assessment.

CHANGE MANAGEMENT AND IO

Being one of the most frequently used terms within the oil- and gas industry for the last 10 years, there is still no common (in a strict sense) definition of Integrated Operations (IO). The concept’s ambiguity is partly a consequence from the fact that IO also holds the aims and ambitions of how future operations will be carried out (Grøtan et al, 2010). Accordingly, IO encompasses many different needs agendas and changes, from the companies’ top business strategic level down to how work is planned and performed in the sharp end.