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Identifying information asymmetry challenges in the defence sector

Mario Sceral[a]*, John Ahmet Erkoyuncu[a], Essam Shehab[a]

[a]*Manufacturing Department, Building 30, Cranfield MK43 0AL,UK*

Abstract

Nowadays austerity policy and reduced funding promote the Defence Sector (DS) interested in improving interactions across the supply network to achieve more outcomes with less expense. The quality of the information link plays a key role in the supply chain. The information is often lost causing costs increase. Information Asymmetry (IA) exists when two or more parties in a contract/project have different types or amounts of information, and choose not to share or fail to understand information that is shared. This paper aims to outline some of the challenges faced within the DS as a result of the existence of IA. This is the first step towards improving the management of IA and has been supported by a literature review and through semi-structured interviews with subject matter experts. Therefore, the conclusions in this paper can be used for further developments in this area of study.

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Keywords: Information Asymmetry; Information Sharing; Defence Information; Information Management

* Corresponding author.
E-mail address: {mario.sceral}@cranfield.ac.uk

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1. Introduction

Interactions between defence actors are often based on the exchange of information. In this field the, quality, quantity and number of different types of information are key factors in promoting healthy interactions. The management of information often has a direct impact on the increase/decrease of costs associated with the acquisition or maintenance of defence capability. In many cases, organizations have to bear extra cost if there is a lack of information.

The Information Asymmetry (IA) is precisely defined as a situation in which respective parties own different amounts and types of information over time about a project or contract. The first definition of IA was given in 1970 as "Information asymmetry models assume that at least one party to a transaction has relevant information, whereas the other(s) do not" (1). Market analysts study the dynamics of relationships between buyers and suppliers in order to properly understand the basis for robust and valuable partnerships (2). In an ideal information sharing situation, buyer(s) and supplier(s) share the same type and amount of information while bidding or delivering a project. Nevertheless, this ideal state is often not the case. In such a situation, some agents involved in for example a trade possess information that other agents involved in the same trade do not have access to (1). Usually, these asymmetries arise either as a consequence of confidentiality on useful insights or from the deliberate action of sharing misleading or insufficient amount of information (3). In the defence sector (DS) a particularly common issue giving rise to IA are intellectual property/commercial confidentiality related concerns or security considerations.

In supply-chain management, information understanding is a key dimension: purchasers need a lot of information about the current and likely future condition of suppliers that are important to them (4). The Ministry of Defence (MoD) aims to focus and overcome this issue, primarily on the capability of information management where IA is one element. In general terms, the defence sector aims to continuously improve the capability and availability of complex engineering equipment. Capability is the ability to achieve a desired effect in a specific operating environment (5). The MoD's approach is to (re)build the UK's defence forces. The whole force concept is about the professional co-ordination of all elements within defence that deliver capability including defence suppliers (4).

The expected benefits of the management of IA results are: improved capability, improved MOD policy, improved recovery time or readiness, improved resilience, reduced defence costs, reduced industry costs, reduced rework, reduced stores, reduced time per maintenance operation and reduced timely delivery of capability

2. Methodology

The purpose of this paper is to identify the challenges in IA and a systematic research methodology was followed as illustrated in Figure 1:

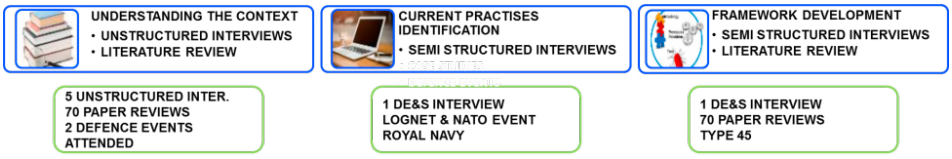

Fig 1: Methodology flow

- Understanding the Context

The preliminary stage of this research involved conducting a comprehensive literature review. It has been done using scientific sources such as journal articles, conference papers and books. A database of relevant articles has been developed using Science Direct, Scopus and Google Scholar. The keywords identified up to this point in the research are: information asymmetry, information sharing, industrial relationship and information management. For each keyword a list of articles has been chosen. A list of inclusion and exclusion criteria was set in accordance with (6) which includes:

1) The inclusion criteria are: Clear article? Methodology? Date after 1995? In scope?
2) The exclusion criteria are: English language article? Information Asymmetry? Before 1995?