FORCE TRANSFORMATION:
SHIFTING POWER TO THE EDGE

Concepts that have been developed for the private sector to manage business relationships can also have significance to the military. In particular, the new ways in which businesses interact for mutual benefit are relevant to our vision of net-centric capability. In the United States Department of Defence (US DoD), such concepts are being applied for the purposes of horizontal fusion and arrangements that assist to align operational missions, capabilities, C2 and information.

Over the past decade the concept of value chains has become a key business approach. Value chains are typically associated with supply chain management, but are also applicable to broader relationships within the organisation. They also have applicability to the organisation's external relationships. Classically, the service provided by each supplier needs to add value up the chain. Thus, just as the end consumer has choices as to the value he or she wants from products or services (the quality and type, as well as the cost), similar relationships and choices exist throughout the value chain. As each organisation's strategy may differ, it is reasonable to expect that suppliers' services also need to be differentiated.

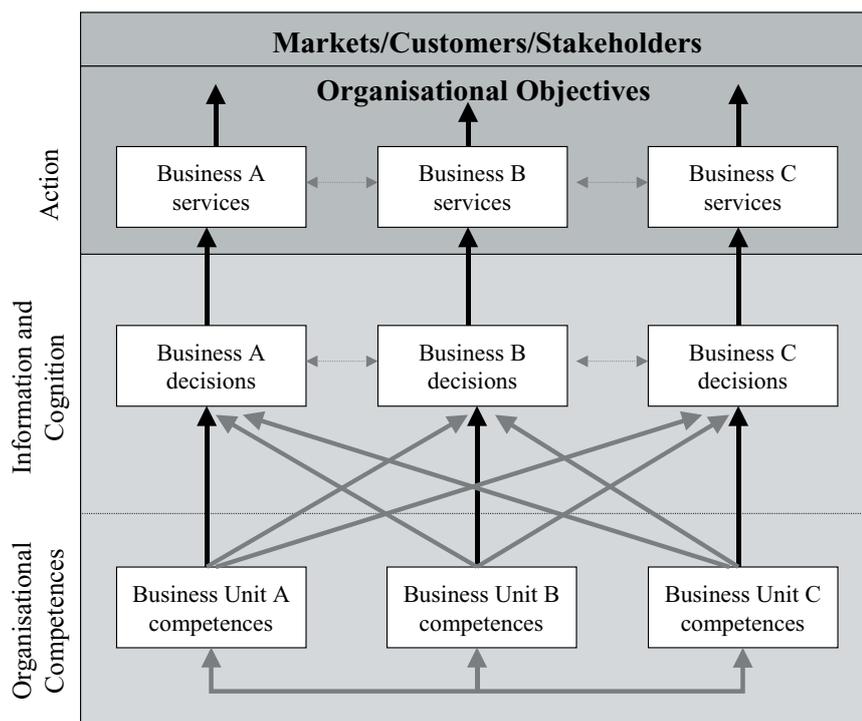In the private sector, the value chain concept has been transformational in three ways. First, it has enabled organisations to work backwards from their own outputs to refine the value expected of their suppliers. Second, it has enabled businesses to analyse their relationships with other firms to optimise their market strategy, position and profitability. Third, it has prompted the development of business networking, in which the relationship and management of value is shifted to the parts of the organisations responsible for providing or receiving respective services. This concept, also known as edge networking, represents a decentralisation of decision-making that might seem to conflict with the requirements for good governance. Yet there are examples of success in such decentralised arrangements, used in conjunction with central governance oversight.

From a military perspective, the benefits of value chain and business networking concepts in the private sector have not been immediately obvious. The value chain approach can be applied to the needs of warfighters in different operating environments, and could be extended to comprise not only logistics but also other supporting capabilities such as information system and ISR support. In ISR terms, this equates to a shift from a broadcast (or push) to a user defined (or pull) approach. However, the benefits of tailored services need to be balanced with the synergies and economies of a standardised approach, thus not all value chains within the military environment can be optimised.

Markets/Customers/Stakeholders
Organisational Objectives

Action — Business A services — Business B services — Business C services

Information and Cognition — Business A decisions — Business B decisions — Business C decisions

Organisational Competences — Business Unit A competences — Business Unit B competences — Business Unit C competences

LEARNING

An adaptation of edge networking is emerging within the US military. In the *Power to the Edge* concept, the Pentagon has identified that realisation of net-centric benefits may necessitate fundamental changes to command and control. The power exercised by a force comes from a combination of having correct and timely information to understand the situation, the authority to initiate necessary action and the resources to accomplish the task. Rather than these capabilities being entrenched within hierarchical structures, the US concept is based upon appropriate distribution of information, allocation of decision rights and direct interaction between force elements. Essentially the concept focuses capabilities in the parts of the organisation that need them the most, i.e. those that interact to achieve net-centric capability—the edge.
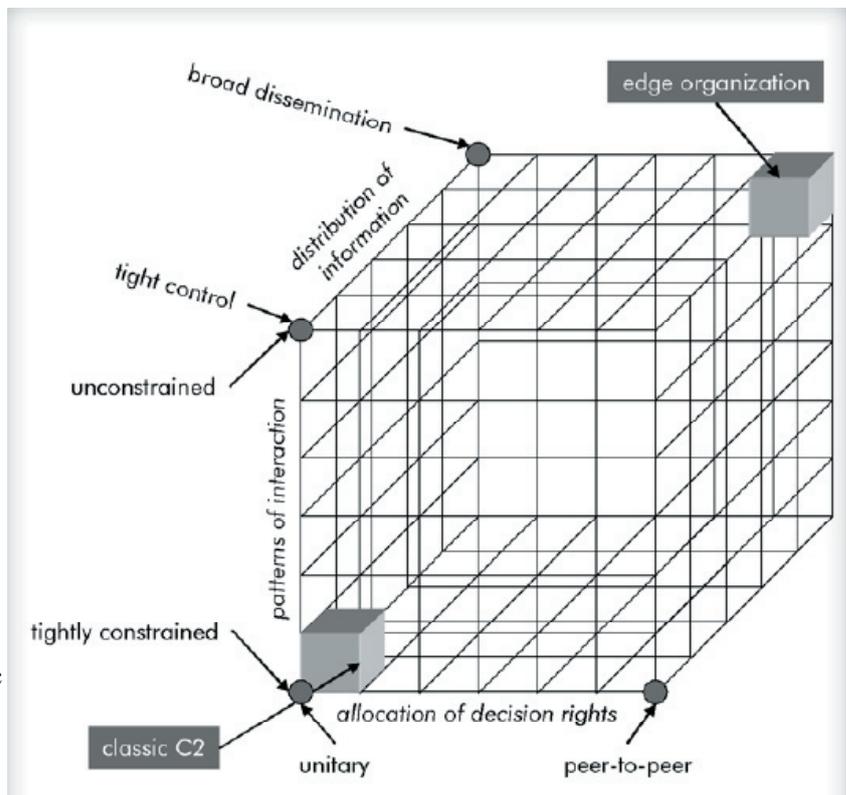
The obvious way of achieving this concept is to empower those at the organisational edge to receive necessary situational awareness information, make decisions and interact directly with others that make up the net-centric force, rather than having to coordinate through the hierarchy. This is known as horizontal integration, which provides benefits of shorter decision cycles, increased flexibility and improved decisions within a harmonised force. This is directly linked to current thinking in the RAAF regarding decision superiority. Such arrangements can also have disadvantages, such as potential violation of the principle of unity of command and the loss of administrative efficiencies and oversight that are a characteristic of a hierarchical structure. Thus, such integrative arrangements might be advantageous primarily in highly uncertain and dynamic operating environments. The US DoD is investigating possibilities that, in the primacy of such dynamicism, flatter team structures might be used rather than traditional C2 hierarchies.

Horizontal integration is a fundamental aspect of net-centric capability within the tactical environment, in combination with vertical integration that caters for changes in command intent and the ability to receive from and contribute to wider situational awareness.

Technical solutions, such as tactical data links between platforms, enable situational awareness and coordinated manoeuvre. These are increasingly being implemented across the range of ADF capabilities under the NCW roadmap. They must be complemented with measures to ensure that these 'edge' capabilities have the resources and authority to effectively act and interact within the coordinated force. Such measures, comprising adjustments to C2, doctrine, training and readiness management, collectively represent the human dimension that is the key to net-centric transformation.

- *Value chains have fundamentally altered the private sector and may have military applicability.*

- *The concept has validity for the warfighter operating in complex and dynamic environments.*

- *To benefit from this concept, conscious decisions regarding levels of decision-making would have to be made.*