

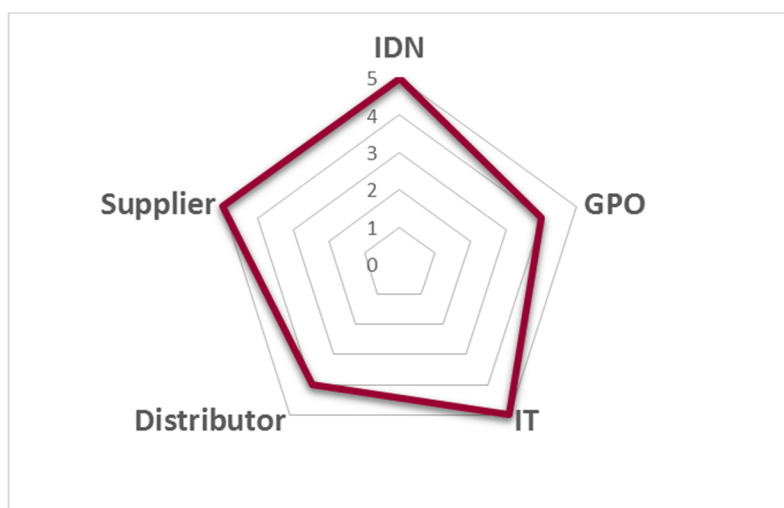
MAKING THE CASE FOR HEALTH SECTOR SUPPLY CHAIN INTEGRATION

Fast Tracking Supply Chain Research to the Healthcare Industry

April 2014

Health reform has touted clinical integration as critical to improved health care system performance. Mergers, acquisitions and affiliations continue to bring together fragmented and frequently competing entities to achieve clinical and operational efficiency. Necessary for clinical integration is reduction in fragmentation and the integration of supply chain entities that support the provision of care. The need for this improvement is reflected in scrutiny of buyer-supplier relationships which, in the health sector, have frequently been depicted as “strained.” This edition of “Fast Tracking Supply Chain Research to the Healthcare Industry” brings together learnings from other industries and offers lessons for the health sector.

Market competition has evolved from rivalry between firms to rivalry between supply chains. Achieving integration with supply chain peers requires a significant investment of human, technology and financial resources. To maximize return on such investment, organizations must carefully consider their desired partners and the road towards integration, without overlooking the potential risks that may accompany such integration efforts. Perseverance in integration efforts is critical since the benefits may not directly reflect on the bottom line in the short term.



How does supply chain integration affect firm performance?

A study was conducted to map out how different types of integrations affected various performance dimensions. While it was not clear whether integration had a direct impact on firm revenue and cost savings, but significantly improved performance in terms of innovation, customer satisfaction and delivery.

(Leuschner et al., 2014)

What is the process involved in supply chain integration?

Case study research examined the stages and triggers of buyer-supplier integration. It was found that integration grows through a succession of inter-organizational initiatives, often starting with logistic responsiveness initiatives, and moving towards by knowledge exchange initiatives and shared resource initiatives.

(Vanpoucke et al., 2014)

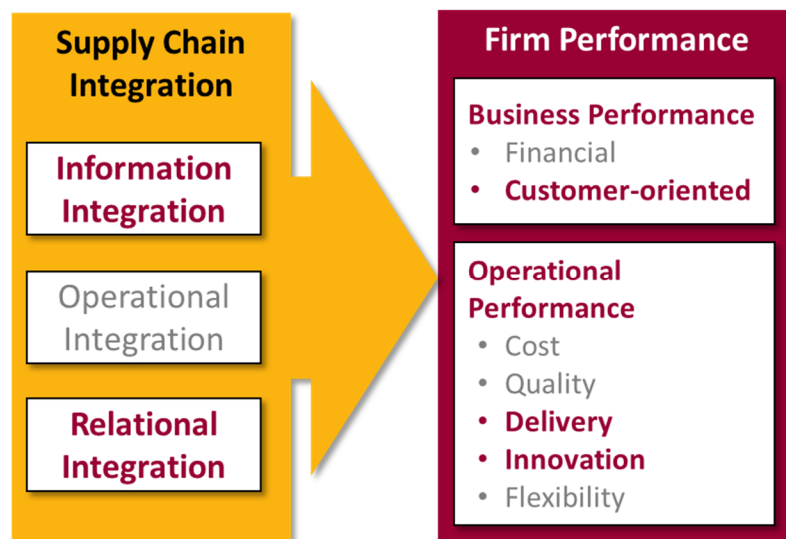
HEALTH SECTOR SUPPLY CHAIN RESEARCH CONSORTIUM

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LINKING SUPPLY CHAIN INTEGRATION (SCI) WITH FIRM PERFORMANCE

ARTICLE Leuschner, R., Rogers, D.S., Charvet, F.F., 2013. A Meta-Analysis of Supply Chain Integration and Firm Performance. *Journal of Supply Chain Management* 49, 34–57.

“There is evidence that SCI leads to higher firm performance, in general; however, managers should not expect quick payoffs from their integration initiatives, like cost savings and quality improvement, but it is more likely that longer term, more durable performance gains can be obtained.” (Leuschner et al., 2014)



STUDY'S INSIGHTS

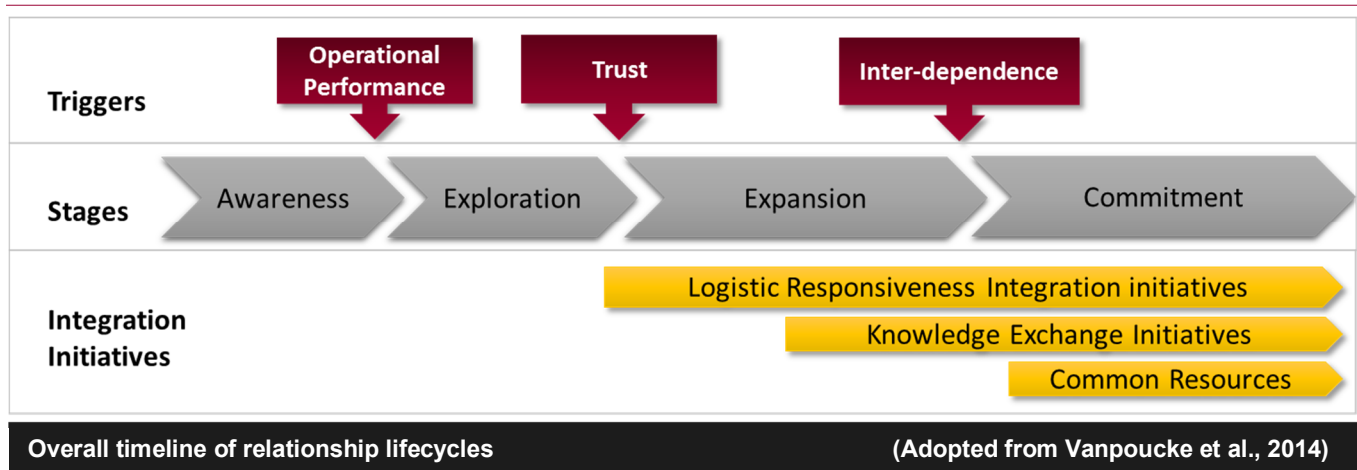
- ◆ SCI showed a positive impact operational performance, in aggregate. However, delivery and innovation subcomponents were the most strongly impacted by SCI.
- ◆ SCI creates opportunities for process innovations in the daily inter-firm transactions, which contribute to the larger integration effort.
- ◆ Cost improvements were only weakly impacted by integration, highlighting the significant resource commitment, which may offset any short term cost savings.
- ◆ Operational performance may be a precedent to successful integration rather than an outcome of it, which is also proposed in Vanpoucke et al.'s study (2014) on the opposite page.
- ◆ Non-significant associations between SCI and performance may be a result of the high variance in the data, being pooled from multiple industries and time periods, suggesting a need to study SCI in the health sector.

Research Framework and Findings

PREMISE Supply chain integration publications in peer-reviewed journal articles from the past 20 years were reviewed and aggregated to examine the relationship between SCI and firm performance.

FINDINGS There was strong evidence supporting the notion that supply chain integration leads to higher firm performance. It was found that all three types of SCI (informational, operational and relational integration) held benefits for firm performance. Operational integration showed the weakest association with firm performance among the three.

The financial aspect of firm performance (as measured by revenue generation) was only weakly associated with SCI. This is not surprising, considering that SCI is more closely associated with efficiency and innovation, which may not have a direct impact on a firm's bottom line.



THE EVOLUTION OF INTEGRATION IN BUYER-SUPPLIER RELATIONSHIPS

ARTICLE Vanpoucke, E., Vereecke, A., Boyer, K.K., 2014. Triggers and patterns of integration initiatives in successful buyer–supplier relationships. *Journal of Operations Management* 32, 15–33.

ACTION ITEMS

- ◆ Develop a template and metrics to monitor your buyers/suppliers and joint initiatives.
- ◆ Know what stage of integration you're at with your buyers/suppliers.
- ◆ Consider both potential benefits and risks when assessing which relationships to invest in.
- ◆ Choose the type of initiatives and level of inter-dependence that fit with the current stage of the integration cycle.

PREMISE Qualitative research explored how buyer-seller relationships evolve over time, identifying the life-cycle stages, triggers and management practices in long-term inter-organizational relationships.

FINDINGS The evolution of supply chain integration follows a lifecycle consisting of four main relationship stages: Awareness, Exploration, Expansion and Commitment. Advancing through the stages requires different triggers at the different stages: *Operational Performance* triggers the exploration, *Trust* triggers the Expansion stage, while *Inter-dependence* triggers the Commitment stage.

The integrated initiatives between parties followed a pattern: starts with initiatives for logistics responsiveness, followed by knowledge exchange initiatives and finally initiatives to increase the use of common resources.

Buyer-seller relationships develop at a different pace depending on the emergent opportunities. Both formal and informal mechanisms are required for a successful relationship. However, as the relationship matures, more informal governance mechanisms are used.

How well do you tolerate inter-dependence?

What are your perceived risks to integration?

HEALTH SECTOR SUPPLY CHAIN RESEARCH CONSORTIUM (HSRC-ASU)



About the Health Sector Supply Chain Research Consortium (HSRC-ASU)

The **mission** of HSRC-ASU is to provide actionable research to develop best standard practices for the health care supply chain that reduce risk and cost and to influence policy.

Our **vision** is that HSRC-ASU will be the thought leader for education and research and the strategic resource in health care supply chain.

We bring together clinicians, distributors, group purchasing organizations, hospitals/IDNs, information technology companies and manufacturers.

About this Project

The HSRC-ASU was tasked to develop a channel to “**fast track**” the transfer of knowledge from the latest research in supply chain management to the healthcare industry. HSRC-ASU selects and reviews relevant research published in top-tier supply chain management academic journals, and then provides a summary of the research to provide practitioners with useful insights.

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