

Dynamic Supply Chain Alignment: a new business model for peak performance in enterprise supply chains across all geographies
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Chapter 3 - Building Relationships that Create Value – The Example of the Supply Chain Collaboration Index (SCCI) pp. 67-80
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Introduction

It is well acknowledged that aligning supply chains requires technical competence focusing on the “technical” aspects of the supply chain for example, inventory management, scheduling, warehouse management, etc. However, a critical, often un-remarked requirement is the relational competence of the members of the supply chain. Continuous replenishment supply chains are all about “relationships” as Martin Christopher explains: “*Supply Chain Management is the management of upstream and downstream relationships, with customers, suppliers, and key stakeholders in order to increase value and reduce cost for all members of the supply chain*”.¹ As a result, technical supply chain competency is now perceived only as a “Qualifier” and relational competence is seen as the “Winner”. But, it is noticeable that organisations spend too little time considering the relational aspect of the supply chain. In this chapter we explore the nature of supply chain relationships and the importance of managing them proactively to gain competitive advantage. We will describe the Supply Chain Collaboration Index (SCCI) which is used to build customer/supplier cohesion, to identify problems that undermine teamwork and, to provide metrics for performance measurement, monitoring and continuous improvement.

Collaboration and Partnerships in the Supply Chain

Collaboration in the supply chain means: “*working together to bring resources into a required relationship to achieve effective operations in harmony with the strategies and objectives of the parties involved thus resulting in mutual benefits*.”² The word collaboration generates many emotions; in certain parts of Europe for example “Collaboration” is seen as a negative concept due to war-time experiences of collaborators, where as in the USA it is seen as a positive, enterprising term. Partnership is sometimes used to describe relationships; however this is viewed negatively within certain sectors of the USA due to legislation that stops “partnerships” due to their perceived anti-competitive nature.

In summary whatever word is used may provoke an emotional response but in this case what we are discussing refers to business relationships that generate a win-win outcome, benefiting both parties. Collaboration is the action of working with someone to produce or create something that neither organisation could do alone. Not all commercial relationships are like this and many transactional contracts are long-lived and successful. Therefore, careful judgement will be needed to decide which to devote scarce management attention to (this is after all matching changing customer needs and desires with different supply chain strategies)³. But, in today’s highly competitive world, strategic partnering is becoming much more common than you

think and many apparently 'market-style' contracts have the potential to benefit from better teamwork.

From Functions to Processes

The way we traditionally structure our businesses and organisations can result in an environment where collaboration is difficult to create and maintain. Generally, for large organisations we have specialist departments which are managed independently, for example, marketing, production and logistics. Command and control structures are put in place with perhaps a functional director at its head. However when we consider what a business does in order to fulfil a customer order, every department becomes involved. Businesses undertake processes and processes are rarely done in a single function within an organisation, therefore, how each department works with each other to manage the process and furthermore, to align to specific customers, is critical to the success of the organisation.

The supply chain, which includes all the organisations involved in supplying a product or a service is essentially a process. It refers to the entire process from the extraction of raw materials and ultimate disposal, so the supply chain encompasses all the processes involved in planning, purchasing, making, delivering and perhaps returning and recycling the product after use. For this process to work effectively individuals and organisations must work together and collaborate to make this happen.

Everything we do within the supply chain should be focused on enhancing relationships, so investment in IT should enhance relationships. This may be from a perspective of being able to lower costs and then pass on a benefit to a customer which therefore enhances the relationship. In order to manage we need data, so to manage relationships we need data on how the relationship is performing and the techniques described in this chapter demonstrate one approach to do this. For effective supply chain management, Collaboration is therefore a key success factor.

Creating Win-Win Relationships

To create a win-win relationships there are two key factors that need to develop. The first behaviour is C³ behaviour, a combination of Co-operation, Co-ordination and Collaboration and the second is trust. It has been recognised that for successful collaborative relationships to thrive trust and C³ behaviour are indispensable. C³ Behaviour is seen as being essential to maintain a successful business partnership especially when it is linked with commitment to the achievement of shared, realistic goals. There is generally an evolution that needs to take place. Co-operation is initially required, often in the form of short duration low risk working, which then builds to co-ordinated activity requiring longer commitment and greater working together, and finally collaboration is achieved where both parties jointly plan and define operations and strategy. This is very similar to any personal relationship; initially you may go on a short low risk "date" for example a trip to the cinema. This then may progress to both parties spending more time together co-ordinating their activities, and finally marriage may occur where both parties collaborate!

Trust is a keystone of business-to-business relationships. There appears to be a consensus that trust integrates micro level psychological processes and group dynamics with macro level institutional arrangements or more simply that it encapsulates dispositions, decisions, behaviours, social networks and institutions. Trust enables co-operative behaviour, promotes improved relationships, reduces harmful conflict and allows effective response in a crisis. Trust requires risk (a perceived probability of loss), uncertainty (over the intentions of the other party), interdependence (where the interests of one party cannot be achieved without reliance on the other) and choice (alternative options are available) as essential conditions. Others see trust as being 'caused' (e.g. by previous good experience, institutional reputation, and commitment) and affecting factors such as openness, reliability and honesty. A more general assessment suggests a combination of all these elements in a richer interaction between parties which sometimes requires a leap in faith to achieve but, the result is the creation of a reservoir of goodwill and the incentive to go the extra mile. In conclusion, there is little doubt that repeated cycles of exchange, risk-taking and successful fulfilment of expectations strengthen the willingness of parties to rely upon each other and, as a result expand the relationship, in effect producing a virtuous circle that can be developed and promoted. The alternative, untrustworthiness, may precipitate a downward spiral of conflict leading to diminished operations or failure. It has been found that over time, trust supported by credible actions is likely to establish a virtuous circle of ever-improving business-to-business relationship performance. Three generic levels of contribution of trust and C³ Behaviour to a business relationship have been identified:

Win/Lose or Lose/Win: defensiveness, protectiveness, legalistic language, contracts that attempt to cover all the bases, are full of qualifiers and escape clauses and, where the atmosphere promotes further reasons to defend and protect.

Compromise: mutual respect and confrontation avoidance, polite but not emphatic communication, creativity suppressed.

Win/Win: synergy, high trust and sincerity produce solutions better than the sum of the contributions, participants enjoy a creative enterprise.

The correlation between these factors is shown in Figure 2.1.

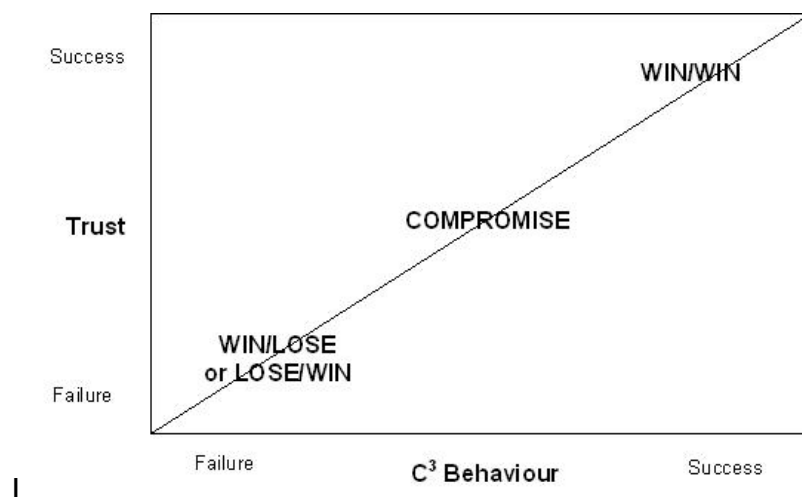


Figure 2.1 Correlating Trust and C³ Behaviour

If organisations work together on small projects (co-operation) trust is developed which enables organisations to feel comfortable about working more closely in other areas (co-ordination) and then finally having the confidence as high levels of trust are developed to “collaborate” and jointly plan both strategy and operations. Furthermore, research has found that when high levels of trust and C³ behaviour are present a spiral of success is generated as shown in Figure 2.2. It is then possible to measure how well a relationship performs on each of the five dimensions within the Spiral of Success. By doing this, organisations can then develop approaches to collaborate more effectively.

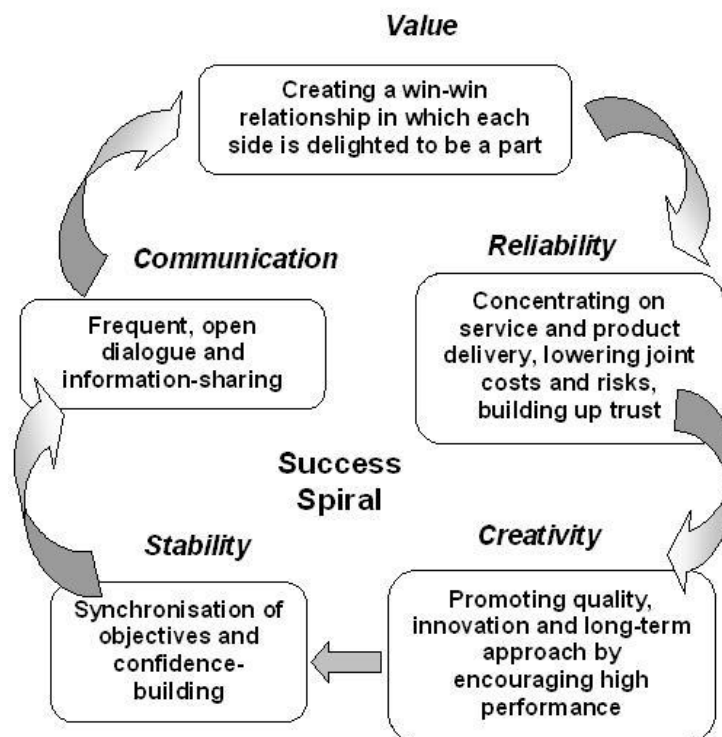


Figure 2.2 The Relationship Success Spiral

In the following section we describe a methodology that can help organisations enter this spiral of success and achieve the benefits of supply chain collaboration. There are other analytical tools available however for the purpose of this discussion we will focus on one technique, the Supply Chain Collaboration Index (SCCI) that has proved particularly effective in helping organisations gain advantage from their commercial relationships.

The Supply Chain Collaborating Index

What is SCCI?

The Supply Chain Collaboration Index (SCCI) is a method to analyse and diagnose collaborative business relationships, both between organisations or within a single organisation. The purpose of the analysis is to identify opportunities for improvement. It uses a scientifically designed methodology that provides an objective, independent performance evaluation of collaborative relationships. As a

diagnostic tool it reveals important relationship efficiency issues and allows improvement targets to be set. It can be used as a strategic relationship portfolio management tool to understand the performance characteristics of an organisation's operating divisions, a consortium of organisations working to a single aim and, between an organisation and a number of customers or suppliers. Two types of report can be generated: a high-level Barometer that offers 'a quick look' at a relationships' performance and, an in-depth diagnostic, known as the Partnership, which produces enough detail to allow a change programme to be initiated. SCCI has been used in a large number of public and commercial organisations, including Defence, rail, construction, automotive, manufacturing, retail, agriculture and, the food and drinks industry.

What are the benefits of using SCCI?

SCCI produces a clear understanding of the complex interactions between organisations. It allows managers to identify good and bad practice areas so they can be strategically managed. The in-depth diagnostics pinpoint and benchmark key performance issues which allow negative and costly trends to be reversed. The recommendations specify the joint business improvement measures needed which reduce time to get change programmes underway. The process mobilizes joint support for change by removing emotion and concentrating on problem-solving. It allows the strategic high ground to be taken to strengthen relationships so that fire fighting becomes unnecessary. This encourages a focus on continuous improvements in effectiveness and the meeting of standards so that partners can concentrate on long term value for money rather than short-term satisfaction of the contract 'small print'.

When is SCCI used?

The occasions when SCCI might be used to improve relationship performance are many and varied but cover a spectrum from 'rescuing' problem supply chain relationships through to a partnership-building exercise prior to deeper business involvement. SCCI will energise and sustain an ongoing business improvement programme and, it will establish the baseline for improvement initiatives at individual relationship and portfolio levels. It will measure progress regularly over time as a governance initiative and can be used to satisfy stakeholders such as bankers, the Group HQ or possibly a government agency looking for proof of collaborative performance.

What does SCCI measure?

SCCI measures perspectives, from both sides of the collaborative relationship on the 5 key relationship performance drivers:

- **Creativity** – promoting quality, innovation and a long-term approach by encouraging high performance.
- **Stability** – synchronising objectives and investments in people and infrastructure that build confidence.
- **Communication** – partaking in frequent, open dialogue and information-sharing.
- **Reliability** – concentrating on service and product delivery, lowering joint costs and risks, building up trust.

- **Value** – creating a win-win relationship in which each side gains equally and is delighted to be a part.

Additionally, information on 7 further crucial relationship characteristics is provided:

- **Long-term orientation** - promoting continuity and joint gains.
- **Interdependence** - encouraging joint responsibility.
- **C3 behaviour** - collaboration, co-operation, co-ordination.
- **Trust** - creating good will and the incentive to go the extra mile
- **Commitment** – a belief that maximum effort should be expended to maintain the partnership.
- **Adaption** - willingness to adapt products, processes, goals and values to sustain the relationship.
- **Personal relationships** - generating trust and openness by personal interaction.

How is SCCI applied?

SCCI is conducted through a series of short, on-line questionnaires and interviews with knowledgeable people. The results are given in a business-friendly format and clearly identify problem issues and opportunities to enhance good practice are specified together with courses of remedial action. The SCCI process takes a minimum of 5 weeks. The main stages with estimated timings are shown in Table 2.1.

Stage	Description	Estimated Time
1. Appoint Relationship Manager	<ul style="list-style-type: none"> • On each side, a senior executive who is very knowledgeable about the relationship is appointed to sponsor the exercise in his/her organisation 	Week 1
2. Collect Company Data	<ul style="list-style-type: none"> • Details of the type and size of the businesses, • details about the complexity and length of relationship 	Week 1
3. Planning Meeting	<ul style="list-style-type: none"> • Attended by both Relationship Managers and SCCI staff • Agree SCCI project milestones 	Week 1
4. Apply Questionnaire	<ul style="list-style-type: none"> • On-line 15 minute questionnaire checks Key Performance Measures • Completed by as many people as possible involved in the relationship • Anyone from the shop floor all the way to senior management gets involved 	Week 2-3
5. Prepare and Present Initial Report (High-level Barometer)	<ul style="list-style-type: none"> • Prepare report describing the key characteristics of the relationship (based on the results of the questionnaires) • Benchmark results against a large sample of measured supply chain relationships 	End of Week 3
6. Conduct and Analyse Interviews	<ul style="list-style-type: none"> • present the results • Interview nominated staff – usually 2 per company • No longer than 1 hour, usually by phone • Analyse interviews 	Week 4 -5
7. Prepare final Report (In-depth Partnership diagnostic)	<ul style="list-style-type: none"> • Prepare final report synthesising the findings from both questionnaire and interviews • Report highlights areas of improvement and suggests actions required to enhance collaboration in the relationship 	End of Week 5
8. Conduct company workshops	<ul style="list-style-type: none"> • Results are disseminated within the organisations through workshops • Workshops are led by the organisation Relationship Managers, but may be supported by a consultant 	Thereafter

Table 2.1 The SCCI Process

What are the outcomes?

Two types of report can be produced. A Barometer gives a succinct view of the effectiveness of a relationship. It can be used in a number of situations but usually it provides an introductory performance benchmark where one has not been done before, a means of assessing the performance of a group of relationships such as a portfolio of suppliers/customers or a series of 'linkages' in a supply chain and, as a regular monitoring exercise. It is often a confidence measure used to decide whether more intensive investigation is needed or not.

The in-depth Partnership diagnostic assessment provides both a performance benchmark and statement of the effectiveness of the relationship. It is particularly adept at demystifying a complex, operational relationship and by allowing personnel to 'see the wood for the trees', allows them to concentrate objectively on those actions that will affect the bottom-line. As a joint process involving the knowledgeable people in each organisation, it concentrates minds in an un-emotive manner on improvement and invariably generates the detailed recommendations needed to initiate a change programme with little further study.

Having honed your organisation to focus on effective customer service, SCCI provides the quick, efficient tools to build improve and sustain the key supply chain relationships that deliver value to all who take part in them. Our case study describes how two electronics industry players did just this.

Case Study - 'Adapt, learn and prosper'

The customer is a UK Non-destructive testing electronic equipment manufacturer with global interests. The Supplier is a UK Logistics Company providing electronic parts and specialist kitting services. Their relationship was 10 years old and valued £2m pa. The 2 companies had grown up together and following acquisitions the MDs had decided to step back and appoint new MDs of their core businesses. They also planned to collaborate on a major new product development. An SCCI Partnering Review would provide a performance benchmark and an inventory of management issues that would give the new MDs a clear view of what they were taking over. Both Group MDs believed this relationship was very successful and in the initial brief could think of no problems to mention. As can be seen in the Traffic Lights in Figure 2.3, the SCCI assessment revealed that all was not well. The customer (centre column) was generally pretty satisfied but, the supplier (column on the right) had reservations. It is possible to see at a glance some serious differences of opinion and issues between the parties.

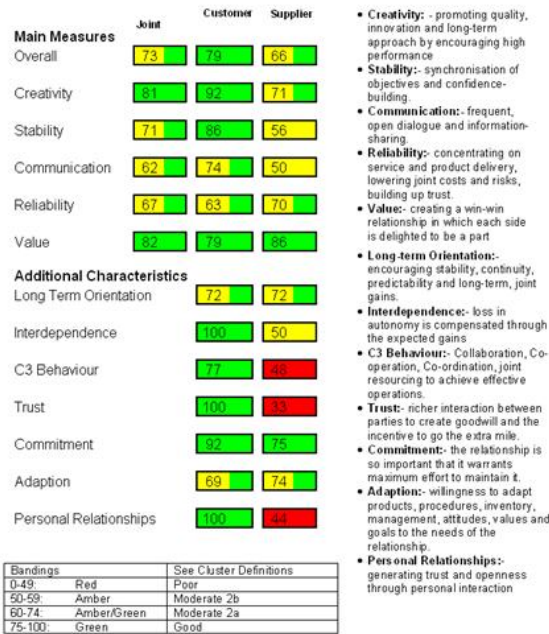


Figure 2.3 Traffic Lights Performance at a Glance

These two charts in Figure 2.4 contrast the customer and supplier in the 5 key relationship performance measures. As well as the grumbling reds of dissatisfaction, note the high levels of 'white don't knows' on the supplier side in the lower chart. The high levels of 'insufficient knowledge' pointed to both poor internal communications on the supplier side and a lack of communication about the customer's intentions.



Figure 2.4 Comparison of Customer and Supplier Key Performance Measures

Figure 2.5 is a 'drill-down' into the operational effectiveness key performance measure. The contrasting patterns of red in the contrasting charts indicated that the logistics supplier was keen to see precision in ordering, forecasting and performance whereas the engineering customer resented being bound by 'red tape'.

Reliability – concentrating on service and product delivery

a The quality of the contract outputs ie. spares/repairs/services, consistent product quality, fulfilled on-time orders, is entirely satisfactory.

b The quality of service delivery ie. delivery times, billing, payment, administration, delivery, is entirely satisfactory.

c The relationship is characterised by a continually improving product quality ethos.

d Problems are solved in a joint, open, constructive manner.

e Such is the goodwill in the relationship, the other party would willingly put himself/herself out to adapt to our changing requirements.

f We trust the other party to act in our best interests.

g The responsibility for making sure the relationship works is shared jointly.

h The other party provides us with useful cost reduction and quality improvement ideas.

i The other party is always totally open and honest with us.

j The other party always does what he says he will do.

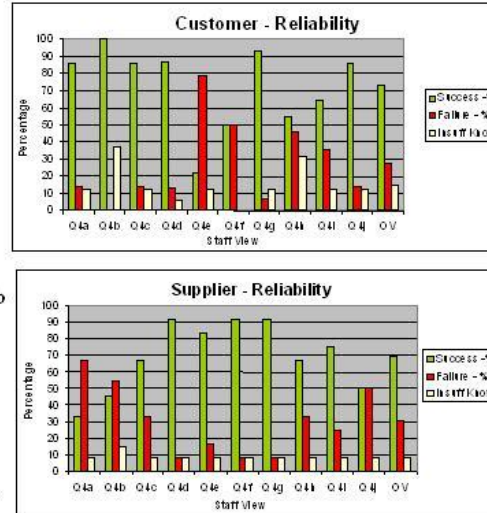


Figure 2.5 Operational Effectiveness

It is a classic case where over time, informal working arrangements had become a liability and, the customer had failed to capitalize on the growing skills and capabilities offered by the supplier. The main issues were as follows:

- No formal or informal contract.
- No common performance measures, quality standards or monitoring systems.
- Informal processes eg. 'no notice' orders for stock, poor forecasting.

The main outcome of the SCCI assessment was the opening of both organisations' eyes to the quite serious issues that had accumulated over time and which were preventing the partners from co-operating as effectively as they could. The detailed results were as follows:

- Regular, joint planning meetings held to define production schedules.
- Joint product reliability action immediately saved £50k per year on in-house testing.
- Supplier involvement in new product design brought lower cost, improved design reliability, better asset availability, more functionality and shortened time to market from 5 years to 1.
- Customer updated MIS with new, integrated system to improve asset control, marketing and material requirements forecasting
- Over 3 years Customer Revenue up 38.5% Supplier Revenue up 100%

"We are now concentrating on solving the issues rather than shouting at each other"

A Checklist for Managing Dynamically Aligned Collaborative Supply Chain Relationships

Effective, flexible, continuously improving supply chain relationships must be managed positively; this is not something that can be left to the sales department as a secondary duty. Each partner (matrix account manager where an organisation has been structured to face different customer groups) needs to appoint a Relationship

Manager who has the authority to champion the needs of the relationship across the departments within his own firm and, who is empowered to agree the collaboration tactics and solve relationship problems with his opposite number. A regular review meeting of the Relationship Managers and the appropriate senior managers from each firm must meet regularly to consider the following:

- Review performance targets in last period and issue statistics
- Review work/orders in progress
- Review forecasted sales and orders in next period
- Consider and solve problems.
- Actively seek out and initiate process improvements
- Review future plans (including new products) and initiate preparation
- Examine and discuss industry and technology updates
- Identify policy issues to refer to senior management
- Involve other supply chain partners
- Prepare joint communications, information and team-building events for the collaborating firms

The Relationship Managers will also take on the role of identifying the opportunities for their organisation to learn from their partner and ensuring that they bring this to the attention of their senior decision-makers. By establishing a professional relationship management focus in an organisation it will accumulate appropriate skills and knowledge that will improve its ability to partner successfully and 'grow' this reputation in the market⁴.

Conclusion

Competition is no longer between individual organisations but between the supply chains they are part of. The Relational competence of the supply chain members is a critical factor in maintaining competitive advantage and should be seen as the "winning" strategy. Collaborative supply chain relationships invariably represent the investment of significant time, money, infrastructure, IT and know-how. Moreover, such is their impact on business returns that they will strongly influence the shareholder value of an organisation, its competitive position, its reputation and its ability to team-up with successful alliance partners. For these compelling reasons the SCCI relationship assessment tools and similar approaches should be used to regularly measure relationship performance and allow targets to be set to drive continuous improvement.

Alignment Insights

1. If supply chain management is about the 'management' of relationships, organisations need to measure relationships as Lord Kelvin stated "If you can not measure it, you can not improve it". So learn to measure relationships in order to improve them.
2. Measuring performance and correctly managing collaborative supply chain relationships will ensure that the aligned firm will maximise the value that his customers will achieve and the long-term returns that he will gather.

3. Supply chain relationships may be functioning and generating average returns with managers monitoring time, cost and quality. Unless the wider aspects of the partnership including, infrastructure and people, innovation, communication, operations and value capture are measured and managed proactively, super returns will not be possible.

¹ **Logistics and Supply Chain Management: Creating Value-added Networks** by Martin Christopher, 2005, 3rd Edition, FT Prentice Hall.

² **Understanding Collaborative Supply Chain Relationships Through the Application of the Williamson Organisational Failure Framework** by Richard Wilding and Andrew S Humphries, International Journal of Physical Distribution & Logistics Management, 2006, Vol 36, No 4, pp 309-329.

³ **Strategic Logistics Management** by James R Stock and Douglas Lambert, 2001, McGraw-Hill.

⁴ **How To Make Strategic Alliances Work** by Jeffrey H Dyer, Prashant Kale and Harbir Singh, MIT Sloan Management Review, Summer 2001, Vol 42, No 4, pp. 37-431.