Back to business - collaboration as a way of life

At the turn of the century, the business buzzword was e-markets. To many analysts, e-markets were ends in themselves. Electronic entities linking lots of companies would save money and create efficiencies. There were private e-markets, public e-markets, open e-markets, e-market consortia and dozens of other variants.

The analysts were right, though in the enthusiasm to create these new centralised markets, some key business principles were forgotten. E-markets focused on increasing the efficiency of processes, above increasing the quality of collaboration. Whilst the former is beneficial, it is from the latter that true value is generated.

The potential of electronic marketplaces and other new, mainly web-based technologies, will only be fully exploited when they are viewed as a collaborative extension - rather than a replacement - of current business models. The new B2B for e-market enthusiasts represents the principle of going Back to Business. Extending existing value chains to build co-operation, trust, openness and dialogue between partners means an e-market is not only a trading platform but is also part of a larger collaborative value chain.

Collaboration is the key to success in an increasingly integrated business world. In determining how collaboration can best occur, genuine value chain analysis and evaluation is experiencing a renaissance. Principles of advanced planning and scheduling, logistics and e-procurement will combine to build inter-company collaborative value chains. Furthermore, individual collaborative value chains will only emerge where a compelling case for measurable value exists.
The new scale of possibilities

Collaboration has always oiled the wheels of business. Competitors have set up joint ventures where each partner brings something to the party, such as the European aircraft industry’s Airbus project.

Competitors have also set up joint projects to reduce research and development costs, as Fiat and Saab did on the platform for the Saab 9000/Alfa 164/Fiat Chroma/Lancia Thema – four models for half the development cost.

Entire industries have co-operated to establish standards for interoperability. Take the major card payment systems, that worked together to create the global specifications governing magnetic swipe cards in the 1960s and chip card payments in the 1990s.

In every case, the intention was to reduce costs and make organisations more effective in a way that would not have been possible if one of them had tried to go it alone. In many cases, these collaborations were one-offs.

That is going to change because the new technologies liberate organisations to re-visit supply chain principles under a continuously collaborative light. What previously existed as successful one-offs now have the opportunity to be recurring wins within an organised collaborative value chain.
Collaboration as the norm

Virtually unlimited, continuous collaboration is expected to become the norm in many industries. Some organisations will collaborate with their suppliers on a daily basis, with their business partners frequently and even with their competitors regularly. Information will flow freely. Decisions will be made jointly. Rewards will be pooled. Risks will be shared. Industries will be reshaped and companies will change their structures.

This process will take years rather than months and it will not be clear-cut. It will be characterised by a series of small advances rather than a big bang. But it is already beginning to happen.

There will be strong opposition from numerous company managers, especially those who see business as a battle that is fought on all fronts – against suppliers, customers and business partners, regardless of the marketing gloss.

But bit by bit, even the hardest of hard-line opponents will be converted by the simple fact that collaboration will undoubtedly increase the value of their corporations.
Creating value

Collaborative value chains may be seen as dynamic associations of organisations and supply chains. They come together, perhaps for just a single transaction or for a long enduring partnership to provide a seamless pipeline for products and information from source suppliers through to end consumers. This combination needs to be able to act as if it were a single entity. World class collaborative value chains will consist of several key features and functions:

- A number of organisations each with a role to play, from brand owners, product designers, contract manufacturers, through co-packers to fourth party logistics that when combined, provide the solution that the customer is seeking
- Close, deep collaboration with suppliers and customers
- A single consistent set of information, such as inventories, committed orders and forward production schedules visible across the whole collaborative value chain
- Ability to make future commitments, not only ‘available to promise’ but also ‘capable to promise’ with on-line availability, configuration and pricing that takes account of all parties within the web
- Disappearance of the traditional gap between supply chain and customer relationship management and supplier relationship management
- Close to real-time information, a blurring of the distinction between planning and execution systems
- Web-enabled for speed and ease of connectivity, coupled with the capability to use e-markets, if required
- Automated and intelligent exception management
- A focus on maximising profit, balanced with the need to ensure continuity of supply

The benefits of collaborative value chains will become obvious in various ways across different industries. A few current examples show the potential.
High technology

The high tech sector has been the innovator in deploying leading edge collaboration techniques, with companies such as Cisco Systems investing in a variety of e-hub and portal solutions to connect with their trading partners.

The twin trends of dis-aggregation of the high tech value chain, and the accelerating phenomenon of outsourced contract manufacturing, have created networked value webs with many different parties involved in bringing products to the customer. Whilst creating enormous value in their own right, these trends have significantly multiplied the supply chain challenges for high tech companies in an already volatile environment that demands rapid response to customer demands. In this environment, integrating your trading partners more closely into your ecosystem is critical to competitive advantage and, in cases, for survival.

In some technology sub-sectors, like telecommunications, the e-hub phenomenon has extended well beyond the OEM's (Original Equipment Manufacturers) connecting upstream with their suppliers. In addition to this upstream collaboration, telco operators and OEM’s alike are turning their attention to how they can manage their entire value chains more effectively. Collaboration is taking place in everything from handset demand planning and supply replenishment, to the product and services supply chains associated with new network builds and capacity extensions. In other sub-sectors like personal computers, the starting point for web enablement and connectivity was the customer. As is well known, leading companies like Dell and Compaq employ sophisticated product configuration tools at the customer interface, and these customer self service and sales force solutions are fully integrated with customer and supply execution capabilities.
Consumer goods

In consumer goods the early hype has centred around CPFR (Collaborative Planning, Forecasting and Replenishment). Some high profile pilots are underway between big retailers and branded consumer goods companies to prove the concept and calibrate the benefits. Here the spotlight for delivering benefits is being shone brightly on managing the thousands of product promotions that take place every day. Overproduction of promoted goods leads to inventory problems or needless expense in re-packing excess supplies. Under-production leads to embarrassment and disillusioned customers. Optimum production can only be achieved if sales forecasts are exchanged in advance and then rapidly updated as soon as the first, second and third days information is available to the factory’s production planners, allowing them to adjust runs according to the promotion’s success – effectively vendor-managed inventories.

Collaboration doesn’t stop there. Large retailers are demanding that their branded suppliers trade with them through fully integrated e-catalogues. This has the potential to take significant cost and stress out of the relationship between retailer and seller. Other consumer goods companies, e.g., in the global drinks industry, are using the web to collaborate on forecasting and planning with their network of international distributors. Others again, are using the web to bring new pack formats to market faster working closely with their suppliers. Whatever the initiative, B2B is cutting its teeth for real in this industry and, slowly but surely, the leaders are reaping the early rewards.
Automotive

Today’s car industry is becoming increasingly customer centric. The major car manufacturers are transforming themselves into VBE’s (Vehicle Brand Enterprises) where their focus is on the external customer. This transformation will enable customers to configure vehicles to their precise specification and have them built or allocated from specialised stock in a lead-time of days rather than weeks.

To achieve this paradigm shift and simultaneously to improve their margin performance, the VBE’s are embracing collaboration as a way of life. Suppliers are expected to form networks around VBE’s that will share vehicle design data across the whole vehicle lifecycle from concept, to in-service support and even end-of life certification. Design will be done concurrently around the world, twenty-four hours a day, seven days a week, thus dramatically reducing lead-times and design costs.

Collaboration is fast becoming a reality thanks to the availability of new technology both in collaborative applications and in the development of e-hubs such as Covisint, which can provide communication standards and act as ASP’s (Applications Service Providers) over the web. A main beneficiary of all this collaboration will be the customer, who should receive improved product and service at lower costs than ever before.
Pharmaceuticals

After a period of intensive global consolidation in this sector there is now a real drive to shift away from vertically integrated and regionally autonomous structures. Sector leaders are experimenting with therapeutic or product aligned structures which demand a new approach to management based on collaboration. In drug development, collaboration is becoming a fundamental mindset for speeding up the pipeline and getting potential blockbusters from lab to market in the shortest possible time. This is achieved by integrating objectives, sharing data and making decisions across a diverse group of scientists, pharmaceutical engineers, clinicians and regulators. The need for collaboration extends back into research where alliances and partnerships are fundamental to feeding the new product development pipeline, through to product launch, where the positioning of new brands requires greater global agility and integration than ever before.

Collaborative approaches are already yielding benefits in terms of time to market in drug development and reduced cost of “just in case” inventory staked along the supply chain. The challenge is how to maximise the benefits by focusing on the key areas of value. For example, in a recent deployment of collaborative planning solutions we helped to identify significant inventory savings and massively reduced the global planning cycle time. In an industry heavily dependent on sharing data and managing complex technology, collaboration has to be integrated into the culture and business processes for impressive growth to continue.

The advantages of co-operation are plain. Collaboration will gradually become a way of business rather than a series of one-off projects as it has extraordinary power to solve problems and exploit opportunities. Collaboration in one area will bring to light opportunities for collaboration in another.
Reaping what you sow: the implications of collaborative value chains

The development of effective collaborative value chains will not be an overnight project that provides instantaneous results. Companies will need to truly communicate to realise collaboration benefits. The implications of the evolution to collaborative value chains are fundamental. There will be new guiding principles for the design of processes, organisations and technology. The collaborative value chains core competencies become:

**Connectivity – plug and play**
In an environment where you don’t know with whom, or when, you will need to collaborate, the ability to connect across organisational boundaries will be a critical success factor. Creating open collaborative supply web processes, organisation and technology is the goal.

**Mind set and trust**
To operate in a supply web, organisations will need unprecedented levels of trust – sharing information and depending on other organisations to fulfil customers’ requirements. This could go as far as allowing your trading partners to re-plan your operations. This is a world far beyond outsourcing warehouses or double-guessing your own sales department’s forecasts.

**Data and content**
To be able to operate in the supply web environment requires a common language. To achieve this, the ability to translate data standards and content into commonly understood formats is vital.

**Systems**
Organisations need to be able to use the Internet for their connectivity and be able to optimise the supply web seamlessly across organisational boundaries and legacy environments. This puts a critical emphasis on those systems that extend beyond the enterprise – beyond ERP (Enterprise Resource Planning).
Internal optimisation

ERP was introduced because it helped to create transparency within a company. Its implementation designed to break down functional walls and create organisations driven by processes that were controlled, and improved, by staff who worked together for the common good. ERP can also be seen as a means of internal company optimisation that is an essential precursor to collaboration.

Much was achieved, but the potential of ERP was rarely realised fully because it was seen in most companies as a technological project. As with e-markets, technology is merely the enabler. The real issue is getting people to think in different ways and use the technology to co-operate with each other and create better processes. The human factor is the important one, a point taken on board by the current generation of standard-setters.

Everything connects

Complete, authoritarian direction from a central point will then be counter-productive because everything connects. If the information held by all the participants in a value chain is not shared, the resources cannot be optimised – and the chain becomes less effective.

A large company preparing for collaboration will need to conduct a thorough examination of the design of its private hub – the technology that links its internal systems with those of its business partners. Private hubs are more than routers and switchers. The best examples contain data stores, data mapping functions and translators that match information coming from different sources, using different specifications. This allows users to access the information they need, in the format they require.

Many companies will start their collaborative efforts by building on existing experience with electronic auctions and tendering. Electronic hubs can automate the process of comparing tender responses that comprise hundreds of pages, speeding up the process of choosing suppliers, bringing new thinking into product development and reducing time to market.
In concert with the business planning aspects of collaboration, organisations will need to plot their future IT needs. Judgement as to how these needs will be integrated into current systems and how they can be implemented to take account of predictable advances in technology, such as integrating mobile access with private hubs and internal systems, will be important.

**Competition between value chains**

As discussed, many business partners are already benefiting from increasingly extensive collaboration.

The software industry regularly tests new products with users through beta versions. Several grocery retailers share point-of-sale data with suppliers. Major telecommunications hardware companies are restructuring themselves to move away from, or towards, product assembly. Entertainment companies are making serious moves to separate the creation of entertainment products from the supply chain that makes products available to the public – on the understanding that products and supply are connected closely and planned together.

Collaborative techniques are expected to be refined to the point where competition will be between value chains and not between corporations. Previously competing corporations will, instead, be exchanging information that helps everyone in their sector to become more efficient and to develop new and better products and services.

How capital markets treat those using collaborative techniques will depend less on the technology involved than on the effectiveness of new working relationships between people who are moving into a world of mutual dependency.
Trust me

Closer collaboration between companies and industries will create the conditions for improved growth, coupled to greater efficiency.

But mutual dependency can only exist if there is also mutual trust.

Suppliers must be assured that they are seen as partners and not as providers to be squeezed. Designers must be seen as contributors to the production process, rather than as people brought in after the major decisions have been made. Department heads must see themselves as belonging to several teams within and outside their companies, rather than as protectors of corporate turf.

That essential trust can only be created if there is a clear and coherent vision of the future – and that vision must be communicated clearly and coherently within organisations.

Boards, executives, managers and staff of different companies must work together, negotiate new functions and understand one another to find the areas that create mutual value. None of this will be easy. But those who succeed will rapidly realise their corporate objectives.
How do you get there?

IBM Business Consulting Services see a journey from traditional supply chain to excellence in managing high-performance, adaptive value chains:

Stage 1: Operational excellence
Operational excellence remains the cornerstone of any world class supply chain.

Stage 2 - Internal collaboration
This involves getting all of the internal divisions, processes, organisations, performance measures and technologies that are necessary to fulfil customers’ requirements to work together. Many organisations that have re-engineered their processes alongside an ERP and APS (Advanced Planning System) implementation are already at this stage, but still many more are not. Surprisingly, this is often the hardest step to achieve and requires the most change management. It is critical to have one’s own house in order before inviting guests in to collaborate.

Stage 3 - External collaboration
It is important to establish one consistent set of numbers that are visible across the organisation, close to real time. In this stage, the organisation will have built processes and technology that will readily enable it to collaborate externally. This could be on a one-to-one basis with dedicated partners or on a many-to-many basis through a private or public marketplace.

Stage 4 - Collaborative planning
Using the processes and technologies to start working with other supply web partners. This could involve supply chain planning, new product developments or developing promotions. This stage can call for a huge change of mindset and requires an unprecedented level of trust and spirit of co-operation.

Stage 5 - Collaborative execution
This is the ultimate step where the organisational boundaries become blurred. One organisation may not only plan but also execute activities on behalf of another. For example, a semi-conductor manufacturer may re-plan the production facilities of its downstream customer based on changes in its own product availability.
There are business benefits and implementation challenges associated with each stage of the journey. The amount of time it takes to achieve each stage (and how long an organisation remains at each stage) will be an individual decision based on the issues it is facing. However, by having the total journey in mind, it is possible to develop a modular approach, making each stage a foundation for the next.

**Conclusion**

In creating a singular platform for business transactions, e-markets served to introduce ideas of working together using Internet technology. Some of the organisations that participated in early e-markets did not realise the expected benefits because:

- the role of genuine collaboration was underplayed relative to the technical challenges,
- there was insufficient focus on calibrating the hard business benefits and follow through to ensure their delivery and
- the trust and culture issues were not actively managed in securing a path to successful implementation.

Collaborative value chains have emerged as the natural extension of supply chain management and e-market concepts. Successful collaborative value chains will recognise the need to go Back to Business, integrating ideas of collaboration and value chains. Most importantly, collaborative value chains deliver greater customer value for a smaller delivery cost.
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