What ever happened to e-markets?

Where did they come from?

In 1997 the first seeds of a new business entity, the **e-market**, were sown. The e-market was seen as the next evolutionary step from using the internet in individual company value chains, to creating electronic marketplaces that linked value chains together. An e-market would bring multiple buyers and sellers together, delivering increased value at reduced transaction cost. Fortune in November 1997 stated: *"These new markets will be similar to today's stock market or, more aptly, the commodity futures market….Internet technology will soon allow for the creation of competitive, anonymous markets for many industries."*

In 1998, along with the massive US growth in e-business, the early tools and thinking for e-markets began to be delivered. Computerworld commented in November 1998: *"E-markets are becoming not only the new battlegrounds for market-share dominance, but also the new locus for business activity."* Work was ongoing in the technical community to move forward the thinking and the enabling tools: *"For new e-markets to function, we need web-based distributed-computing environments where agents from virtually anywhere can conduct business interactively and dynamically... The web is the ideal platform for such e-markets."* (Dr. Dobb's Journal November 1998)

The early buds

In 1999 the pace quickened. Forester Research later estimated that more than 400 e-markets were launched in 1999 and predicted that trade through e-marketplaces would reach $1.4 trillion by 2004. Gartner Group estimated double that. On the same day in November 1999 Ford and General Motors each announced the creation of e-markets for their procurement operations. In the first half of 2000, major e-market announcements were as regular in the press as the early buds of spring. On February 25th 2000, Ford, General Motors and DaimlerChrysler announced that they would combine their separate e-markets. What would eventually become **Covisint** would handle much of the joint $240 billion in purchasing of the three automakers. This was swiftly followed by the retail e-market **GlobalNetExchange** (Sears, Carrefour) by the aerospace e-market **Exostar** (Boeing, BAe Systems et al), by the Airlines e-market, **AirNewco**, by the Electronics e-market **e2Open** (IBM, Hitachi et al) by the Tyre e-market **RubberNetwork**…. and so they came. Activity and investment in smaller exchanges was even more frantic. Here is a sample of the amounts raised by IPO in the USA during January 2000:

5/1/00 - BuildNet (construction) raised $104.7M

11/1/00 - NTE (transportation) raised $53M

20/1/00 - Celarix, (transportation), raised $45M

25/1/00 - Carparts.com (automotive) raised $42M

26/1/00 - USBid (electronics) received $10M

27/1/00 - NetVendor (electronics & automotive) raised $12M

A hard frost

The bursting of the dot.com bubble in April 2000 was a hard frost for many emerging propositions, but still announcements continued. By the middle of 2000, there was already perceived saturation in some industry sectors - the steel and chemicals sectors each had 3 significant e-markets. Cautionary noises were being heard*:*

"Every day I get a call from another dot.com company starting up an online auction site or exchange" said a senior analyst for Gartner Group.

"There's a gazillion of them. Venture capitalists are funding anyone with a business plan who can breathe", said a senior analyst at Forrester Research.

But the industry was racing up the curve and had little time for the doubters. The top and the down-slope were closer than anyone had realised and the fallout began. Now as we stand in 2001, a sense of failure permeates many in the e-business community. Many markets are still in name only, turning over little, others are still no more than press announcements and PowerPoint charts. A Forester Research survey of 50 e-markets in April 2000 found that 68% were closing 100 or less sales per month. A number of e-markets have simply failed, including major ones: CoNext, a buyer consortium of powerful buyers including Bethlehem Steel and Eastman Kodak was among the first to close its doors in 2000; Chemdex, one of the first pioneers, closed in December 2000; Dell closed its marketplace in January 2001, citing a lack of business; Chevron closed its oil and lubricants marketplace in February 2001 after 6 months, without a single sale. Other e-markets are still being developed, but much more slowly than initially planned. There are some big questions to be answered:

Was it all hype?

Were the expectations unrealistic?

What's happening now?

The quick answers? No. In many cases, yes. A lot.

Having been closely involved in a number of e-market projects with clients, some on which I am still working and others which never got beyond a gleam in a customer's eye, I can personally identify with this period. Let me share my own personal experience and that of a number of industry experts and try to answer these questions properly.

Was it all hype?

No. There remain sound business reasons for e-markets where the value proposition is sound. Value propositions which would attract both buyers and sellers. Such as reduced costs in order transactions, in reduced inventory through the supply chain, in giving suppliers better access to customers and ability to differentiate themselves, in giving customers greater selection and price. However many e-market propositions were fanciful at best, particularly those created by entrepreneurial, non-industry based groups. These were focused on one goal: IPO. Whilst they may have been effective at creating compelling presentations and business cases which drew in funding, they were less effective at creating solid value propositions that would draw in sufficient users to their e-markets. However there have been some significant consortia established (e.g. Covisint and Worldwide Retail Exchange) comprising major companies able to drive through some of the changes required to make their markets a reality. There is much invested in these markets (face as well as resources) so they will happen albeit slower than initially publicised.

Were the expectations unrealistic ?

In many cases, yes. For a number of reasons. Some to do with the motives of the partners who launched the market, some to do with a lack of planning prior to announcement and others due to the realities of bringing a number of competitors together and integrating hundreds of different business processes and IT systems. Many companies, IT software providers, Venture Capitalists and industry media emphasised the potential at the expense of over-simplifying the issues. Those more deeply involved in these projects understood only too well the technical and process issues but perhaps underestimated the culture and governance challenges of bringing together a very broad constituency of competitive users. A few marketplaces have developed a more extensive view of the capabilities required and delivered clear functionality and benefit by release, good examples being Global Freight Exchange (GFX) and Volkswagen (VW). As of February 2001 VW had placed 106 orders on suppliers following auctions on its e-market and claimed that each auction saved VW an average of 13% in purchase price (Financial Times (Deutschland) 25/2/01).

What's happening now?

To understand what is happening we first need to appreciate what is required to establish a successful B2B e-market. There are a number of significant issues which need to be addressed and despite what many people might assume, creating a web-site is the least of them.

e-markets key issues

1. Value proposition & Business Model

Early e-marketmakers were caught between two opposing forces:

1. The need to show a compelling proposition that would bring industry users to the market, such as cost reduction for buyers and sellers, increased routes to market for sellers etc.
2. The need to show a good business case for investors, identifying how money was to be made – and quickly.

In most B2B environments, the advertising revenue model was not appropriate with ERP integration being the goal. Instead revenue through a share of the market transactions was the normal model. However the mood in late 1999 and the first half of 2000 was to move fast, get investment and launch, with IPO being the goal. Share and growth projections were hypothetical, often unrealistic and difficult to test. How can you survey enough of your potential users to really know? Anyway there wasn't the time - take too long and someone else would beat you to the market with your idea.

2. Membership & Governance

One key element for a successful e-market is a governance system which is acceptable to its participants. Neutrality is considered to be key to encourage both buyers and sellers to join. Setting up a neutral e-market is akin to setting up a new company. One that is made up of competitors who need to work together. Now you see the challenge. Determining the rules for running the business and using the highly valuable commercial data generated is a major project in itself. One of Covisint's key challenges has been to get the five auto companies and three software vendors (Oracle, CommerceOne, SAP) working together and overcoming the competitive instincts and lack of trust for mutual benefit.

3. Business Processes & IT Capabilities

Naturally the business processes and enabling IT solutions are a key element of the market, specifically to deliver functionality and provide the value proposition on which the market has been sold. A number of e-market packages now exist, including Ariba, i2, CommerceOne, IBM Websphere and Oracle. Whilst these packages will provide the core functionality required, namely: User Registration, Cataloguing, Buyer and Seller functions, Market Management and Reporting, this does not satisfy all the requirements for a B2B e-market. Whatever the software vendors might tell you! This additional functionality has to be provided by the integration of additional software elements. These additional areas include: Integration with existing ERP systems for information on stock, pricing and other information; Supply Chain functionality, Finance & Credit checking.

Whatever the makeup of the IT solution to provide the required market functionality, the solution must be reliable, responsive, secure and scaleable. Successful e-markets will become a core part of companies' business processes – they must be robust.

4. Liquidity strategy

The volume of trade or 'Liquidity' is the key to a successful e-market. How to generate sufficient liquidity quickly enough is a critical success factor as the law of 'increasing returns' applies to e-markets. Sellers will use markets with more customers which will bring more customers which will bring more sellers and so on. So key to the industry and investor credibility of a new e-market are the 'Anchor' participants. What has to be offered (in the market proposition as well as the governance and equity deal) to get key industry players on board early is key. Also, what marketing, advertising and deals are needed to get users into the market quickly. Many suppliers see e-markets as creating commodity markets where price is the only selection criteria. Many customers see e-markets as being controlled by the large suppliers. Getting both constituencies to come together for mutual benefit is the challenge. The liquidity strategy should determine what functionality (and thus IT solutions) need to be in place early to draw early users.

Many potential participants are still sitting on the fence; 'wait and see' appears to be the strategy of many companies. Users have become wise to the compelling presentation and business plan. They want more than Powerpoint slides. 'Show me the code' and 'show me some customers' are becoming the entry requirement for new propositions.

"Everyone's finding it easier to get the big chemicals companies to pump money into creating an exchange or marketplace than it is to get them to use it," (Tom Harwick, Giga Information Group).

5. Competitive response

A key part of the design of the e-market business plan is to anticipate the likely response from competitors and complementors to the new market and to put in place actions to address them. This is strongly linked to the liquidity

strategy. Major players which can be brought in as market members become a source of revenue rather than competition. If your e-market will disintermediate your distributors, you'd better be prepared for their response.

6. Supplier On-Boarding

Resistance from suppliers has been a factor dogging the growth of e-markets. The absence of standards for catalogue provision and document exchange results in the supplier having to create a series of different point-to-point connections to the multiple e-markets and private e-procurement systems of their customers. From the supplier's perspective, this is a costly nuisance. Although many software vendors now provide a standardised interface for catalogue requisitioning and ordering, they do not cover the full range of transactions (invoices and payments are a gap in the armoury of most vendors). Part of the problem also lies with the market-maker, who has often failed to create a sufficiently attractive value proposition to the sellers, particularly true where the seller is expected to pay a substantial transaction fee to the marketplace.

What happens next ?

As we move forward, slower than expected, but still forward (a recent Forrester Research report estimated that 30% of the chemicals market will trade online by 2005), there are a number of trends already emerging:

- **Shakeout and Merger**

  - To gain critical mass and reduce risk (at the expense of consortia complexity) markets will continue to merge. Many of the rest will go under – some estimate that 80% of European e-markets will fail.

- **Private e-markets**

  - Companies have recognised the benefits of operating an internal e-market for their own value chain without the complexities of forming consortia. This is a low risk starting point

- **Regulatory issues – cartels**

  - e-markets with industry dominating players will have to tread a fine line between business optimisation and restrictive behaviours such as cartels. Expect to see much more tensions between companies and governments in this area.

- **Back-end integration**

  - This is critical to the realisation of e-markets for major users – to enable pricing, inventory and replenishment orders from ERP systems to be linked to the market. Early markets have lacked this.

- **Growth of small users coming on-line**
  - Although the internet has been around for the best part of a decade, cost and performance in many countries for small businesses is poor and a barrier to it becoming a core way of doing business. This is changing and will significantly drive up e-market users.

- **Market to Market integration.**
  - M2M is already talked about – as usual well before the problems of getting individual markets working have been solved – this will increase the benefits to companies as market to market synergies are enabled. This will require common standards for communication so that data and meaning is portable between markets.

- **New IT tools**

  - Moving beyond products and parts which can be catalogued, markets for maintenance and service information, warranty management, Design information, complex product will require new software solutions which are beginning to emerge.

Conclusions

Despite the difficulties and the disappointments, the premise of the e-market remains sound. It will become a fundamental part of doing business by the end of this decade. What we are experiencing now is simply the difficulties of adolescence, not a premature senility, of this new business entity.

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