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E-business – a look at strategy

History Lessons...

Let's have a look at the history lesson: It was the British who invented the tank. But then they learned first-hand how awkward and unreliable those first "applications" were. And they have lost much of enthusiasm for it. The Germans – on the other hand - knew perfectly well how a soldier felt being attacked by the steel covered, fire-spitting beast.

And they developed not only great product (pardon- weapon) on a great scale (was it markets share?) but also superior (business?) strategy.

With a clever use of complementary 'products and services' (air force, paratroopers etc.) their global strategy threatened much stronger 'competitors'.

Does it come to a surprise that one of them – Russia had had not only much bigger market capitalisation (oops – population) but also a superior product? Yes, in 1941 Russian swift T-34 and heavy KV were *better products* than German *Panzerkampfwagen*.

The lesson?

Firstly, if you want to stay competitive, your new groundbreaking technologies cannot be abandoned – or even pushed onto a backburner. Secondly, to succeed it is also not enough to develop competitive technology.

Those companies (and countries) that will not only accept that but also develop and implement appropriate e-strategy (as well as complementary products and services) will be the big winners of the accelerating competition race.

It has been recognised in the e-commerce literature three key drivers were the focus:

- Cost reduction - due to client's self-service and error reduction that was the plague of manual systems;
- Speed – achieved due to connection of various, till now separate systems
- 24/7 data and service availability – due to automatized e-systems (Gates, 2000, Kalakota and Robinson, 1999).

E-business - where are we?

*The horse is here to stay,
but the automobile is only a novelty, a fad!*
- investment advice given to the Henry Ford's lawyer in 1903

We are at the beginning of a new era. It is the author's belief that the modern e-technologies will change the way we live and conduct business as much as the invention of the car did.

Slightly changing Clarke's /1998/ definition we can define e-business as a "*focus on conducting business with the assistance of the electronic telecommunication media*". It implies that it is only a development stage, and once e-business is generally accepted and implemented the focus will not be needed any more¹. That coincides, for instance, with Moussi and Davey's conclusions /2001/.

The electronic telecommunication media I would include (in particular) the Internet, WAP technologies and incoming TV-based data transmission. Quite possibly the list will never be completed. This means, that while current e-business practices are likely to become part of everyday business, amazing new technologies will come and present us with new opportunities and new challenges.

¹ Or maybe it will?

The e-potential is enormous. Equally enormous was however, the disappointment of thousands of investors that saw their stocks plummeting, and hundreds of companies that did not see ‘e-promises’ not being delivered.

It has been estimated for instance that “less than 50% enterprise wide CRM initiatives will generate a payback by 2004” /Gartner, 2000”/

Many highly acclaimed e-ventures have folded, for instance US ‘Webvan’ discussed briefly later and Australian “WinePlanet”. Others like the famous ‘Big Three’² venture Convisint /Meredith, 2001/ have enormous problems.

The problem is not limited to e-commerce – it is an industry-wide problem. Paul Strassman in his book “The Squandered Computer: Evaluating the Business Alignment of Information Technologies” demonstrates there is no correlation in spending on computers and profitability! Whatsoever!

Some of those problems (in the area of e-business) can be attributed to the “gold rush mentality” among investors. This is a story that repeating itself again and again: from the “tulip crash” of 1637 in the Netherlands, through the real estate crash of the eighties to the boom and bust of the ‘Asian Miracle’.

Some of them however are clearly results of bad business design. It would be hard to find a more “to the point” case, than the arguably most powerful organisation in the world – the Pentagon.

As reported by the *Entrepreneur’s Edge* /Edward Lowe Report, 2001/ the Defence Logistics Agency implemented a computer system, which plainly ‘accepted an offer if it was no more than 25% higher than the agency previously paid for the same item’. As a result, suppliers learned to keep raising prices in smaller steps...

The other side of the coin is that the success of Microsoft can not really be attributed only to Bill’s computer genius.

Lotus 123, then Quattro-Pro had a better spreadsheet; ‘Windows’ was just imitation of *Apple’s* solution, which in turn originated from Xerox’s Palo Alto Research Centre /Wallace, 1993, 1998/. And Netscape *used to be* a much better Internet browser!

It’s the business skills and negotiation skills that drove Microsoft to the position where it is now.

James Wallace, author of Gates’ most comprehensive biographies characterises Bill (in the age of 21) in the following manner:

‘The skinny kid with the dandruff and uncombed mop haircut not only understood software; he was a brilliant negotiator.’

Education for e-commerce commerce practice

“Specialists who never look beyond own domain are apt to see things out of true proportion; ... they work away at the details of old problems which have lost much of their significance and have been supplanted by new questions rising out of new points of view.”

Alfred Marshall *Principles of Economics* 1920.

So, a brave new e-world is coming. But - are we prepared for this revolution? Are universities providing appropriate education in this respect? Conference organisers are asking: *how should we be defining future directions?*

In my opinion the answer depends upon the fundamental question: *Whom do we want to educate?*

Do we want to produce *employees* for the IT industry with the best job prospects’?

Let’s leave alone for a while (but please keep that at the back of your mind) the notion of “enlightened citizens” – which used to be *The Mission of Universities*.

So – let’s just be practical.

What about creating *entrepreneurs* and *employers*? Captains of industry? What about helping people to understand the nature of e-business so that they can be enlightened *investors* /Kiyosaki, 1999/

² i.e. GM, Ford and Chrysler-Benz

While educating IT professionals: wouldn't it be wise to devote more attention to the business education of IT professionals, so that they will know better *why* they are doing certain tasks, and will *understand* their *context* and *implications*?

So that we can avoid Pentagon-like blunders and have some Australian Microsoft-like successes.

The Holistic Approach – the “Portal Model” explained

Imagination is more important than knowledge
- Albert Einstein

The notion of the concept can be presented in a metaphorical picture of a portal.

In the author's opinion it is changing technology that opens new opportunities, that leads us to new levels. (Contrary to what some sales people argue, who claim that they are *totally* “customer driven”.)

Without visionaries and inventors we would not be able to even contemplate the benefits of aeroplanes, telephones or computers³.

It is business however, that gives those opportunities final shape and meaning.

Therefore various business disciplines (like accounting, marketing and management), approaches and techniques (Just in time, Total Quality Management, Value-Analysis, re-engineering etc.) are forming the building blocks of the structure.

Building blocks although presented in no particular order *do* support each other: eliminating any of them can prove to be fatal for the whole construction.

Finally, “creative win-win design” is located at the top as a keystone: it keeps the whole structure together.

It is the win-win design that should provide clear vision for the benefits of the business and its clients (or partners).

The Holistic Approach – the “Why” and “How”

What do IT students (future and current professionals) need? Assuming we want to see them not only in the engine-room but also at the helm?

Quite possibly not all of them need another degree or detailed knowledge of all the business disciplines. A well-structured subject would be enough to lay the foundation for understanding e-business issues, and first of all to inspire *imagination* in this area.

The aim would be to allow students to get a grasp of main business concepts: theories and approaches.

Therefore, the subject would include key concepts for traditional disciplines that develop fundamental understanding of business issues and give future IT professionals “feel” for business. This would allow them to communicate effectively with managers and business people. It would also give them a better chance to effectively perform entrepreneurial roles.

We need to show how ignoring key principles of various disciplines can result in a business disaster, while – on the other hand – their application can provide great benefits.

We will not be able to draw clear demarcation lines allocating methods and techniques to particular disciplines. That's not the point; *Just In Time* methodology for instance can be claimed as a technique of management, marketing and logistics. The point is, that future captains of the virtual navy have to understand those methods; i.e. where the benefits are derived from, and what are the limitations of particular methods.

Our job on the other hand is to strive for development of a highly practical, yet well founded and imagination inspiring “mini MBA”.

³ Overexcitement with technology could be dangerous too; for instance overloading with flashy graphics is one of the most often nominated faults of webdesign.

A few examples that follow present cases that seem to fulfil the above-defined expectations.

Example one: logistics not understood

“Physical movement of goods has to be properly organised”

Not only ‘dot-com’ start-ups seemed to ignore logistics in the first stage of the e-commerce boom – as explained in an article under the meaningful title “Dot-coms discover logistics” /Keenan, 2000/. Even experienced retailer Toys “R” Us was fined \$350,000 by the US Federal Trade Commission because of a breakdown of its order and delivery system /ibidem/.

What went wrong? In many cases it (logistics) was just not there; in many others the implemented system was not prepared for a sudden uptake of orders (for instance Christmas rush of 1999 /Dempsey, 2000/

Example Two: management principles violated

“Unity of command principle”

“Covisint” – the child of Ford, GM and DaimlerChrysler has cost them over \$US 170 million, and is now burning through around \$US 12 million a month. When the plans were made public in February 25th, 2000 insiders predicted it would be open in 90 days. Claims ‘Nobody will be better! Nobody will offer more to everyone!’ were heard.

“Fourteen months later – says Meridith /2001/ - the B2B exchange is floundering and has no hope of living up to its hype”.

What went wrong?

“The camel is a horse created by a committee” says the managerial proverb. Indeed – the whole project was riddled with constant power struggles and unwise compromises between the Big Three itself, their favourite IT companies and their consultants.

Example three: systems thinking ignored

Webvan was an on-line grocery home delivery system with big names behind it. Founded by Louis Borders (creator of the global book chain Borders Group), had as its CEO the former star of Andersen Consulting. In just over a year Webvan spent \$US 800 million trying to lure people to use their shopping system. The results were far from expectations: with market capitalisation of \$US 15 billion they were collecting revenue in the range of \$US 4 million!

What went wrong?

According to professor McAfee from Harvard University it was a case of “the basic error of assuming that the speed of behavioural change is somehow linked to the speed of technological change – and its not.”/Quinlivan, 2001/

(The author confesses to being guilty of overestimating the take-up rate of e-commerce among small businesses too...)

Example four: Harley on the track

Harley-Davidson, which since 195 has transformed its logistics and operations with a great success is approaching new horizons with a similar focus and clarity of vision.

Gerry Berryman, a diligent student of Japanese methods applied their managerial concepts and the philosophy of deep, long-term strategic alliances to transform HD managerial practices and their relationships with suppliers.

Results are impressive: product development time has been reduced by 30%; number of defects per one million fell from average 10,000 to just 48 and costs of materials were reduced by \$US 40 million.

Importantly, in the light of promoted ‘win-win’ approach ‘*cost reduction is encouraged through innovation and efficiency rather than by squeezing margins of suppliers*’ reports Forbes /Sullivan, 2001/.

For instance, suppliers’ involvement in design saved about \$50 a bike when one of them suggested to re-route water in the liquid cooler engine, and to simplify the design.

The same proven tools and approach is being applied while using new e-technologies as a leverage.

The new technology is meant to make it easier to involve all suppliers in the design and planning process, while allowing ‘*to cut back on communication time s and administrative trivia*’.

The new website (www.h-dsn.com) allows suppliers secure access to 6 months billing history, find detailed information on a wide range of issues like packing, shipping details and quality assurance standards. 'At www.hdnet.com Harley dealers can log on for technical tips, service bulletins and sales information. ././ [they] can also place orders, research bike's service history and find, for example a replacement headlamp for a customer's 1995 Fat Boy'.

A real-time access to detailed order and inventory data is provided.

Expectations (as always - one can say) are big: less defects, quicker development, cost savings. Nevertheless, various benefits already can be identified. For instance, the payables department reports a 90% drop in the number of phone calls since the new integrated system was implemented /Sullivan, 2001/.

1. And Harley-Davidson sticks to the 'win-win' philosophy, denouncing a possibility of the use of a 'reverse auction' method. 'It doesn't fit our strategy. You can have these big, quick wins that have an immediate impact on the bottom line, but it would destroy the trust we build into our supplier relationships, and that would put quality at risk' /ibidem/.

Negotiation Skills for e-Business Success

Two key, distinctively different types of negotiation skills necessary for e-business success seem to emerge:

- 1/ the ability to come up with a "creative win-win design" that maximises customer value and at the same time is beneficial for the company
- 2/ the ability to enter strategic alliances that maximise growth opportunities for the company.

Creative win-win design

Creative win-win design should provide a clear vision of the benefits for the business and its clients (or partners).

It sounds very simple but it is so often being ignored. Even authors of a highly respected and thoroughly recommended book "e-Business: Roadmap for Success" /Kalakota, Robinson, 1999/ were not able to avoid it. In one of their examples, they present 'an ideal picture of e-business'. In this dreamed model a customer visits the company's website and forwards their expression of interest. Then *within a minute* they receive a phone call from the company (sic)!

OK, this would be a great service experience – but why should the company have to waste the opportunity to *automate* the inquiry and to apply cost-saving self-service? And, finally – how much would it cost to provide this kind of readiness? Especially considering the high costs of human labour in Western countries⁴?

I am confident that the idea of a win-win game is present in the back of the heads of every creative business strategist. Bovet and Martha /2000/, for instance, in their search to "unlock hidden profits" (i.e. for **company's benefits**) ask businesses about **clients' benefits**: "*would a value net differentiate you from the competition?*".

Tom Woodard of KPMG /Bovet and Martha, 2000/ among many others, highlights **mutual benefits** of B2B marketplaces: buyers gain easy access to sellers, sellers affordable reaching buyers, buyers being able to compare attributes of products quickly and easy – dramatically reduced transactional costs.

In practice, however this principle is so often forgotten it is worth to spell it out. Anyone who has experienced the pain of waiting long time for an operator being forced to listen to the repeated message "we value your time" can see the point.

Professor Robert Widing of Melbourne University tells */ a story that illustrates beautifully the point, and – in my opinion goes to the heart of the matter of inadequate results of CRM applications.

(Hint for non-Australian readers: the public opinion in Australia in general is very negative towards the banks. In the nutshell we see nose-diving standard of service and growing profits of all major banks.)

⁴ Although some companies are circumventing this problem by locating their call centres where labour is cheaper – for instance in India

“ Just a few weeks ago I received a call from my bank. It’s employee introduced himself as ‘my personal banker’”. Great – I thought. Now I have an opportunity to get all these things of my chest.

But no – he went straight to selling me some investment products.

At this moment I responded with the most basic question you would find in a marketing fundamentals handbook: ‘why I would buy more from you if what you do now is so bad?’⁵

The win-win principle has to be treated as the compass for the business design – or else it is too easy to forget about it in the rush of everyday business dealings (see for instance “ cent wise but dollar fool” - Orr, 2001⁶).

Building strategic alliances

The second crucial negotiation skill for the new economy is the ability to enter strategic alliances that maximise growth opportunities for the company.

One factor of the growth strategy is *learning* from your partners (and access to their technology), the second is the ability to leverage your strengths on the partners’ potential.

Successful companies use both.

Let’s look at the story of Microsoft and at relative newcomer Siebel.

Gates the Negotiator

The Microsoft story started (basically) with the licensing agreement with IBM for the MS-DOS system (which Microsoft had to buy from another developer). The licensing agreement allowed Microsoft not only to take advantage of the “Big Blue” scale and (those days) dominant position (and become a standard). It also allowed Microsoft to sell the operating system to other customers, thus creating a foundation for future world domination ⁷.

Later IBM realised that they gave up too much territory too easily. Bill Gates managed however to convince the IBM’s Vice-President to stick to the original arrangement /Wallace, Erickson, 1993/

The second critical moment and future-shaping event took place when Microsoft Corporation realised that it was falling behind Apple Computers.

This time Gates managed to convince Apple’s Steve Jobs to form an alliance (supposedly against IBM – which at this stage still had an enormously powerful position.)

The alliance gave Microsoft access to the key technology that was the cornerstone of Apple’s competitive advantage: user friendly pointing device (the mouse) and ‘drop-down’ menus.

The third great deal Microsoft made with its customers was with it’s work on the Windows 98 testing. As the adventure with Windows 95 showed, computer programs become much more complicated, including much more lines of code, providing therefore, many more opportunities for mistakes. In anticipation of that a “Beta” pre-release version was created and freely distributed (mostly among computer programmers). They in turn were asked to provide Microsoft with information on identified faults. 200,000 distributed copies gave Microsoft estimates millions of free testing hours. It has been estimated that in this project Microsoft customers contributed an equivalent of 2 billion dollars to the Microsoft Corporation /

One could argue that Microsoft was built to a bigger extent on clever deals, than on technological excellence. Exaggeration or not, it is another story. But it was definitely an important factor of creating Microsoft’s position.

Siebel Systems Story

Just a few years ago Siebel Systems (est.1993) was a start-up. In 2000 it had \$US 1.8 billion of annual revenue. Siebel’s alliance program launched in 1998 had five partners: Accenture, Microsoft, Compaq, PricewaterhouseCoopers and Cambridge Consultants. “The company’s decision to forge

⁵ */ Story told during the information evening of the Master of e-Business course at Melbourne University.

⁶ Orr takes under the microscope practice according to which a client – because of simplistic design - is asked to “pay \$US 200 for shipping and handling alone, even though the shipping cost to the company totals just \$US28.

⁷ Interesting. Some twenty year ago there was a popular prediction in business schools and IT institutions: “in thirty years there will be only two superpowers in the world: IBM and China”. It would seem that IBM lost its’ chances in this very deal.

alliances was simple a question of survival. For every \$1 customer spent on Siebel products, they needed \$7 worth of other products. And services to make it work. “ /Head, 2001/.

The speed with which everything is happening in the new economy does not allow for a traditional “slow, independent growth” strategy. It seems that even in huge (by value) global markets there is only room for a few key players in every segment and type of software. Thus, if you are not at the top quickly you will not make it.

This can explain a much higher growth of e-alliances (103.5 percent a year) in comparison to traditional alliances (14.8per cent) / Earnst, D. *at all* , 2001/

The Challenge: implementation into educational practice

Developing a necessary skill set for IT professionals for the new economy, for them to play active roles as entrepreneurs calls not only for the knowledge component, but also development of an ability to integrate the knowledge, to develop the ability to see the big picture. The practice of management education shows that well selected case studies, supported by proper theory input can go a long way in this direction.

It also calls for the development of negotiation skills. The negotiation skills, however, have much more to do with attitude and human emotions than with individual knowledge that can be easily presented to the individual. (It is a similar story with teamwork skills.)

During work on his Ph.D. thesis, and in his negotiation training workshops the author was conducting the following experiment/learning exercise.

At the beginning of negotiation training session participants were playing a variation of Prisoners’ Dilemma Game⁸ /. The rules are quite simple: two pairs of two teams, having two choices: co-operate not to co-operate. Choices are disclosed simultaneously. After 8 rounds results are analysed and almost invariably everyone agrees “yes, in the long run it is much better to co-operate.”

Then we do a lot of different activities, experimenting with and analysing various aspects of negotiation.

Then, as the last game we play a “Common Lake” game based on “the Commons Game” developed at the University of Pennsylvania. This time rules are more complicated: six or eight players, seven different choices. The game has many more rounds (theoretically unlimited), the longest game reached 47 rounds.

Essentially, however, the dilemma is the same: co-operate or not! Just like in the PD game - if both teams co-operate they both gain; if not they lose... If however one party behaves co-operatively, and the other does not the non-cooperating gains all the benefits, at the expense of the other...

The author has been using this game with 124 groups of players from various countries. About 52 groups were students, the other 72 managers participating in training sessions.

Some of the groups (around 43%) find a way to co-operate, some don’t.

What is amazing, though, is the fact, that *not even one group* identified similarities of the problems in the early stage of the game. And it rarely happens that they are able to do that before the end of the game. When the game starts, emotions jump and everyone rushes into the game, and all words about benefits of co-operation seem to be forgotten.

Only in the final analysis they experience a shock. As one of the participants put it: “gosh, how stupid we are!”. And in his voice one could hear – surprisingly – a tone of pride and satisfaction for of achieving a higher level of understanding.

Svenska Management Gruppen (as the author was told by one of the participants) uses a similar technique.

In a TQM training for an ABB subsidiary devoted to group problem solving, they were using one of several popular “survival exercises’. On the last day of the session, when it seems that the participants know already everything about group discussion they have to *act*, and they make all the

8 The Prisoner's Dilemma was discovered in 1950 by Melvin Drescher and Merrill Flood. It has been well-studied in philosophy, game theory, and many other fields, because of it's parallels and applications in everyday life.

mistakes they have previously identified. As the participants reported: ‘*it was like a slap in the face. But it gave us something to think about. And now, in the company when somebody gets too agitated we are reminding them of that training session.*’

The author has had similar conversations with his former trainees; quite often they describe their situations in terms of negotiation games they participated in.

Research proposal

How can we go about the development of content? How can we identify “key concepts”?

In its ultimate form we should be able to provide students with a complete set of key fundamental business rules, concepts, and tools.

Presenting a complete set of business rules⁹ would go not only beyond the scope of the paper, but – first of all – beyond the author’s potential.

Typically, (for instance for a purpose of a business course design) representatives from various disciplines are invited and the whole project is split among the group (usually on the basis of time allocation). This, however, is rather an *eclectic* not a *holistic* approach.

The key difference would be an endeavour to overcome barriers between compartmentalised business schools of thought and disciplines.

Such a task could be attempted in a fashion similar to the “Delphic Method”

A group of respected academics and practitioners would be invited to

- come-up with a proposal of a list of (say - thirty¹⁰) fundamental concepts;
- suggest limits (limitations of those concepts)
- identify reasons (or unreasonable causes) *why* those concept and rules are being ignored in business practice

Pre-selection: who are the “competent judges?”

First, natural difficulty would be that the initial group selection would significantly determine the discussion outcome.

Therefore, the initial group of academics would be invited to nominate candidates *from outside their specialty*.

The “Modified Delphic Procedure”

1. Panel Members (PM’s) will be asked to nominate 7 fundamental rules/concepts from their discipline and 7 rules/concepts from outside their discipline
2. PM’s will evaluate “suitability of ‘candidates’ on a scale from one to seven;
3. PM’s that give the most distant marks to a n item would be invited to comment (anonymously) on their own and also their counterparts opinions
4. Comments would be published on a dedicated discussion board and mailed to the PM’s;
5. “Culling and merging”: to eliminate existing redundancies PM’s would suggest elimination of some items (each asked to suggest up to three items/groups to be merged or eliminated).
6. Items that would get 75%+ ‘black votes’ would be eliminated/merged.
7. From the remaining list every PM will be asked to nominate their own 30 candidates *again from outside their specialty*.
8. In the first attempt the list will be cut down to 60 items, in the second voting to 45,

The third and final stage would have different rules: PM’s would be allowed to vote on all the items. This last voting would give us an interesting proposal for “the ultimate list” of business concepts.

⁹ If such a “complete set of rules” can be defined at all. Possibly not. What we want to achieve, though, is - as mentioned - “a well thought foundation”.

¹⁰ The number 30 is totally arbitrary – it just has to be something that will help to focus attention, help to identify the level of abstraction, and define “rules of the game” for the panel.

Conclusion

In our search for the “Skills Set for The E-Commerce Professional” we should not limit ourselves to things that are easily expressed in words and numbers. Apart from expanding the knowledge horizons of our students we should look for ways to develop their imagination and help to develop the emotional side of the person – and personality.

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