



The re-definition of expert knowledge in e-entrepreneurship

A study on the sense-making of success and decision-making amongst e-entrepreneurs in the wake of the dotcom crash

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The dotcom crash aftermath presents new challenges to successful business and decision-making in e-entrepreneurship, the implications of which can be better understood by looking at the changing meanings of expert knowledge and of business community. Using a snowball sample of 42 entrepreneurs, who started a small business in the wake of the market collapse of high-tech firms on the stockmarket¹, or 'survived' the latter, this research aimed to draw attention to the changing sense-making of success and decision-making across small new-economy service and solution companies², which influence and re-structure the ways in which knowledge is accessed and used jointly as well as the ways in which businesspeople relate to one another and thereby define their sector. In particular, the research endeavoured to explore how these characteristics differ from the experiences entrepreneurs had previously during the 'dotcom boom' or outside the e-business sector.

Based on the results, it is clear that successful entrepreneurship in the dotcom-crash aftermath does not merely mean 'back to business basics', mainly because e-business presents itself as a fast-moving, highly uncertain and unknowable and unpredictable context (Weick, 2002). More specifically, this context was referred to as to be anticipated generally, yet, the specifics were unpredictable. The dotcom crash had rendered reference systems for success such as turnover or shareholder value irrelevant. Although the dotcom crash was seen as a positive turning point for opening up the business sector to a new generation entrepreneurship, it left behind a business sector without a reference system for success. Nonetheless, respondents were giving less significance to low predictability in that this could potentially hamper success, presumably because entrepreneurs are more accustomed to starting a new firm being an uncertain venture as such. Rather, the fact that it was so hard to obtain knowledge was perceived extensively as the main challenging variable to success. It is worth quoting an interviewee in this respect:

'There's no place to get knowledge any more and ... you might think, oh, the government might know or Bill Gates will know or BT will know. Or the University of Oxford will know but nobody knows. And you've got this ... wave of everything becoming faster and faster and faster ... and you falling further and further and further behind... and so um, there is no point in going to university any more. It is good to have a debate there but it's not really gonna address how to do business.' (respondent 25 when asked what determines his decisions)

¹ Referred to as the dotcom crash.

² Based on Whinston's et al. (2001) taxonomy for sub-sectors of Internet enabled business, this study concentrated on those e-business firms that involved 'knowledge jobs' (Atkinson & Gottlieb, 2001), that is, firms operating in Infrastructure, Systems and Solution services and Internet Intermediaries & Knowledge Services. Thus, the e-tailing sector was out of scope.

In this context, values of acquiring, accumulating and owning knowledge were challenged and clashed with traditional values inherent to entrepreneurship, above all the notion of being or becoming an expert in a niche market. While the non-traditional concepts of entrepreneurship, which motivate starting a firm or being self-employed, such as the flexibility at work and the less hierarchical managerial structure in small firms seem to suggest a 'natural fit' of entrepreneurship and young sector of e-business, the findings suggested that entrepreneurs were in the process of having to re-negotiate working values.

This was not merely due to the dotcom crash, but more centrally due to a clash of values related to how expert knowledge is understood in entrepreneurship and in e-business. This is evident in the fact that especially those entrepreneurs who had started a business after the dotcom crash and who identified success in e-business with 'creating real value for clients', were describing it as difficult to be able to offer services through a special knowledge in a niche. This was represented in opposition to the dotcom boom concept of being mainly concerned with raising image of a firm around a special knowledge or content or 'dealing with firms and being involved in raising firms'. The reason why they 'succeeded' with this strategy was because successful knowledge-provision was measured on the basis of a firm's value on the stockmarkets. Now that entrepreneurs are concerned about 'real value', that is, success judged by clients, this strategy concentrating on a 'unique' expert knowledge fails. Especially, the entrepreneurial concept of knowing meant traditionally knowing in isolation: finding and protecting a unique knowledge in a niche market. The latter clashes with the fact that in e-business knowledge is rendered highly short-lived and available to everyone anytime-anywhere.

Hence, the second generation of entrepreneurs in knowledge-related jobs is faced with a stark challenge of what 'making a difference' related to expert-knowledge meant before the dotcom crash or outside e-business.

Qualitative research methods allowed exploring this meeting-ground of values, of entrepreneurial and e-business related values, in more detail. This was especially necessary, due to the fact that networks had emerged as playing a central role for knowing how to navigate the unpredictable and complex context of e-business.

From an organisational perspective, two major variables seemed intuitive in determining the central role of 'networks' as a new form of organising. The first refers to e-business being an emerging industry implying that entrepreneurship is not yet established enough for individual entrepreneurs or firms to claim traditional role positions. Hence, this is why networks are needed to rely on a larger community to represent and protect a new business community in a changing business context. Secondly, while entrepreneurs came to the e-business sector as experts, the nature of the business context made them novices (Weick, 2002). Networks emerge as provisional settlements and as pre-stages to something more institutionalised in the future from this perspective (Girard & Stark, 2002).

However, when observed from a social psychological perspective on social knowledge and social representation in communities (Howarth, 2001; Moscovici, 1984), it can be argued that success is being re-defined at the moment in terms of which types knowledge are essential to survive as an entrepreneur in e-business. It is the character of the knowledge necessary to survive that necessitated networks as forms of organising. From this perspective therefore networks emerged as providing stability and much more meaningful than merely provisional settlements. They provide organisation of diversity and access to context-related knowledge and at the same time, they function in providing stability and social bonding in communities through their instable, flexible and pluralistic character.

E-business did not render expert knowledge obsolete, rather it re-defined its meaning. No longer can expert knowledge exist or be considered in isolation, in e-business it crucially hinges on a collective – on community. In order to remain successful, the

character of knowledge that can potentially succeed had begun to change. Context-related knowledge was valued as a major form of knowing in order to be successful. At the symbolic level, context-related knowing is presented as constantly seeking new ways of relating, translating and linking knowledges across disciplines, sectors and context-dimensions (Humphreys & Brézillon, 2002), thereby learning collectively and managing relations of interdependency in pluralistic knowledge contexts. Three major factors were revealed in the data in this respect.

- **Knowing in an uncertain and fast-moving business context** The challenge is to obtain relevant knowledge in order to provide that 'real value'. The unpredictable and fast-moving context rendered expert knowledge as extremely short-lived and instable. The need for constant learning and knowledge sharing was attributed both extensively and frequently. This meant first, to gain knowledge about people. Which people were in need of which content in a specific situation and why. Secondly, it also meant knowing where to find the right partners in order to jointly create solutions for specific 'non-routinisable' content needs. Hence, knowledge is crucially dependant on other people and its character is challenging traditional conceptions of market research or marketing as knowledge through 'information-accumulation'.
- **Context-navigation knowledge versus information** Researching and information-gathering in order to make decisions was turned on its head by an unpredictable, fast-developing context. Information-overhead was to be reduced. Knowledge was not to be owned or managed. Rather context-relevant knowledge was to be acquired as one went along.
- **Trust and thinking 'context-specific'** Decisions would have to be made before being able to know in detail what the need was. For instance one would team up with other entrepreneurs according to a shared vision that value could be created for one another, yet the context would not allow for specifying exactly at the outset what the end result of the delivery would look like. Hence trust and learning and thinking 'on your feet' were paramount.

Consistently, networks emerged as open and pluralistic communities enabling access to context-relevant knowledge. Respondents associated networks as knowledge communities to play a central role for knowing how to navigate unpredictable and complex contexts. This was evident in the following.

- **Relating to and accessing knowledges across disciplines and business sectors** Networking was at the centre of debates around successful value provision. Through developing networks entrepreneurs experimented with organising knowledge in ways in which knowledges could be flexibly and quickly re-combined according to changing contexts. Hence, knowledge sharing meant sharing the information of where to link to, who to connect or where to refer to. While firms would still practice their everyday business in distributed firms, networks emerged as knowledge organisations through which one could access connections to knowledge.
- **Changing concept of entrepreneurship** There was not only a great amount of awareness for the need to learn despite one's business experience, but also there was a strong emphasis that entrepreneurship in e-business was different to classic entrepreneurship. Being skilled individually in how to master a project form, in how to codify and to lead one's firms process was seen as merely the basis. Rather, social skills of being able to relate to other disciplines and sectors were associated as crucial.
- **Expertise as a dynamic, context-related phenomenon** Through recognising that collective learning is a paramount part of the process of delivering value, the notion of expertise changed in its meaning from an accumulative idea of static knowledge to being able to dynamically move across contexts and learn through experiencing diversity. This again was a community-generating effect and was responded to by networks providing stability and legitimacy through a shared set of values as a basis for trust. Communities balanced flexibility and dynamism with stability.
- **New types of networking** Since the dotcom crash a new type of network has joined the tradition of business referral organisations. The former are self-generative knowledge communities in which members not only with a shared business interest form an open knowledge community bonded by trust and friendship. They serve to make sense collectively

of changes in the business sector overall, but also define legitimacy and agency of individual firms.

Entrepreneurs were probing and testing with various different formats of these networks. The results suggest that this process was taking place via a changing notion of community. Although one might argue that trying out new forms of organising is 'normal' in a novel business sector; when compared with other business types in e-business sectors, it can be argued that it rather manifests an essential organisational characteristic necessitated by the new character of expert-knowledge as context-related.

The shared characteristic of the various new network formats was that they were organised by principles of lateral accountability and formed the foundation for distributed business practice in that they anchored working values and diversity in shared reference systems. These reference systems provide legitimacy, trust and social bonding in community and on this basis agency to small firms. In addition these knowledge communities enabled learning amongst multi-disciplinary agents.

The principle of lateral accountability let networks resemble what has been phrased as 'heterarchies' by Girard and Stark (2002), meaning organisation of diversity among distributed agents and their small firms.

'Heterarchy represents a mode of organizing that is neither market nor hierarchy: whereas hierarchies involve relations of *dependence* and markets involve relations of *independence*, heterarchies involve relations of *interdependence*.' (Girard & Stark, 2002)

Networks that organised themselves in open-access, 'self-generated' knowledge communities both online and offline worked with diversity as central design element for success. It created room for ambivalence in relationships and openness to being able to socially construct new relations each time the social situation and the ambition of a project requires it. The following characteristics appeared extensively across the data.

- **Communities of diversity: organising diversity in an unpredictable context** Diversity in disciplines and business backgrounds as well as the joint presence of opposing tendencies in business approaches had functional value: the knowledge communities provided for flexibility through allowing for ambivalence in knowing rather than summarising and thereby averaging knowledge. In this sense openness to diversity of knowledges let networks resemble provisional settlements of organisation. This meant being able to change and not having to close and settle meanings as static units. At the same time, this meant the absence of central formal control; rather communities were organised in self-generated ways through shared knowledge interests.
- **Online and offline inter-related** The everyday shapes of this form of organisation hinged crucially on constant exchange and collective communication. Since business practice took place in distributed firms, the online space served the bonding of community by providing tools for temporal and spatial dislocated debate. Online and offline were main dimensions in structuring everyday life in knowledge communities. Community life online and offline had to complement each other and new ways of enriching one space through the other were being developed.
- **Network management: open, low-entry barrier and a shared philosophy** Setting up and running a network was highly popular. Correspondingly, the majority of networks were themselves run by entrepreneurs. Despite the variety in the formats of networks, a common design element was openness of access. While they all had a common purpose and philosophy, openness to new members 'whatever background they come from' was prioritised as a paramount factor in providing for successful networking.
- **Networking – more than hype?** A focus group reinforced that with networks a form of organising had been collectively developed that responded to complexity and diversity of the contemporary e-business context. Networks are both old and new in that the shaping of community and social bonding is being made sense of in new terms. It is not merely that entrepreneurs have once again come together in networks to collectively strengthen their identity and build up the confidence of a business sector, it is rather about networks expressing new patterns of communication and interaction that have functional value for a community in an unpredictable context.

- **Networks as the basis for innovation** Their local and at the same time pluralistic character, their collective values yet independent business practice marks a new form of organising in entrepreneurship that is highly flexible and enables innovation. Innovation and adaptability was here not supported by the diversity of organisations within a population; rather, innovative knowing was promoted by the organisation of diversity within networks. This organisation of diversity was an active and open engagement at the centre of networks in which there was more than one way to organise, interpret, label and evaluate the same activity.
- **Language of translation for diversity in interaction** In networks the language of translation was spoken. This was a language concerned with knowing how to ask questions to learn about previously unknown fields as well as being able to present one's specialist knowledge in the most common language possible. In order to allow disciplined judgement of diverse knowledges and backgrounds, people used language consciously in such a way that it became shared responsibility to understand and to convey knowledge transparently.

This idea of networks creating business community was functional in terms of another meaning context: this was the agency of individual entrepreneurs and the recognition of the sector of e-entrepreneurship in relation to other sectors and the government. Firstly, the dotcom crash had damaged the image of e-business, specifically entrepreneurs operating in the sector. Entrepreneurs have to face the negative public perception related to 'dotcoms'. Secondly, governmental policy for support in entrepreneurship is mainly targeted at individual personality-traits of success. The fact that the main trigger for e-entrepreneurial success was seen as supporting business skills and individuals' entrepreneurial ability to lead a firm left the 'aftermath entrepreneurs' feeling misunderstood. Not only does this perception not recognise their general expertise in business, but also does it neglect the changing characteristics of the business context through targeting solely individuals.

Hence, to negotiate agency is high on the agenda of e-entrepreneurs; agency in relation to larger business and government as well as the wider public. Ways forward posited by respondents were linked to addressing issues of recognition of the sector. A representation of e-entrepreneurship as a legitimate and independent business sector in its own right was forwarded in strong opposition to judging firms via members of staff and/or amount of investment attracted. What is more, the view that other sectors could learn from e-entrepreneurial business was extensively shared.

- **Small and corporate business** Participants claimed that small and larger business had to develop a relation of mutual recognition of its knowledges. With regard to networks, respondents recognised an already increasing interest of larger businesses in the concept of networks and online communities.
- **Governmental policy** There were two components to a general dissatisfaction with governmental policy on entrepreneurship in e-business. First, there was strong disagreement with the services provided by local support agencies for small businesses. Respondents felt misunderstood by governmental agencies as their staff did not appreciate entrepreneurs' general business experience and had not experienced the challenges of being in e-business. Second, the general aspects of legislation surrounding small businesses were seen as problematic. While regulation was accepted as necessary, it was seen as in need of being designed in consultation with entrepreneurs.

Further research is required in order to understand how the new constellations of knowledges and the perception of agency in interplay with community affect notions of stability of organisation as well as the self-identification of entrepreneurs. This refers to the policy-making procedures regarding the special skills requirements of entrepreneurs in this sector, as well as relevant recommendations for education systems to encourage role models for young people who might be moving into this sector. As can be seen from the results outlined above, self-identification is likely to be far from centred on personality-traits.

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Appendix. Nature of business community sampled.

The selection procedure of respondents used a snowball process in order to sample a 'natural' community of business people. This had two benefits: a) it enabled to learn about the characteristics of the ecology and the players in the target sector and b) it enabled the researcher to 'live' a similar experience that an entrepreneur would have making contacts and starting out in that community. By avoiding to eliminate the social bonds between potential respondents through random sampling, the snowball process succeeded in capturing social themes. Table 1 shows the results from the snowball process: 42 participants were selected. The criteria for closing the sample was time.

The selection of respondents represents a current snapshot of the players that shape the reported debates and themes in the Greater London area. The community sampled marked people linked via several networks that have sprung up in and around London in the last two to seven years.

Size of firm		Interviewee's role in firm	
No. of employees	No. (%)		No. (%)
Micro (1-5)	29 (69%)	Managing Director/ CEO/ President	8 (19%)
Small (6-50)	13 (30%)	Managing Director & (Co-)Founder	30 (71%)
Total	42 (100%)	Financier/ Shareholder	2 (4%)
		Core Team	2 (4%)
		Total	42 (100%)
Business type/ Industry		Participants' business background	
	No. (%)		No. (%)
B2B Systems & Solutions Services	26 (61%)	Large firm/ institution	
B2C Solutions & Services Intermediaries/ Knowledge Services	3 (7%)	Resigned	22 (52%)
Networking organisation	12 (28%)	Made redundant	2 (4%)
Contact Brokering	1 (2%)	Government/ Civil services	
E-commerce/ E-tailing	0	Resigned	1 (2%)
Governmental institution	0	Made redundant	1 (2%)
Total	42 (100%)	Small firm	
		Built up firm(s) previously	8 (19%)
		Built up firm and went bankrupt	2 (4%)
		Graduation from university	6 (14%)
		Total	42 (100%)
Year of starting business		Mode of first contact	
	No. (%)		No. (%)
Until 1994	2 (4%)	Invitation to participate	23 (54%)
1994/5 –1999	13 (30%)	Offered participation	
1999/2000- now	27 (64%)	Message Boards/ newsgroups	7 (16%)
Total	42 (100%)	Newspaper	2 (4%)
		Network	10 (23%)
		Total	42 (100%)
Location of business		Location of interviews	
	No. (%)		No. (%)
London central	19 (45%)	Firm's premises	5 (20%)
Greater London	8 (19%)	LSE	10 (40%)
UK	8 (19%)	Coffee-shop	2 (8%)
Outside UK	1 (2%)	Networking event	2 (8%)
Online/ Working from home	6 (14%)	Business Fair	2 (8%)
Total	42 (100%)	Telephone	4 (16%)
		Total	25 (100%)

Formal documentation provided		Gender	No. (%)
	No. (%)		
Web-site: homepage of firm	41 (73%)	Female	10 (23%)
Web-site: specific site	3 (5%)	Male	32 (76%)
Online publication, article	4 (7%)	Total	42 (100%)
Networking-Profile	5 (8%)		
Offline Flyer / PR material	3 (5%)		
Total	56 (100%)		

Table 1: Characteristics of respondents