

Connect global networks for innovation and business enhancement

Paul Defourny – November 2006

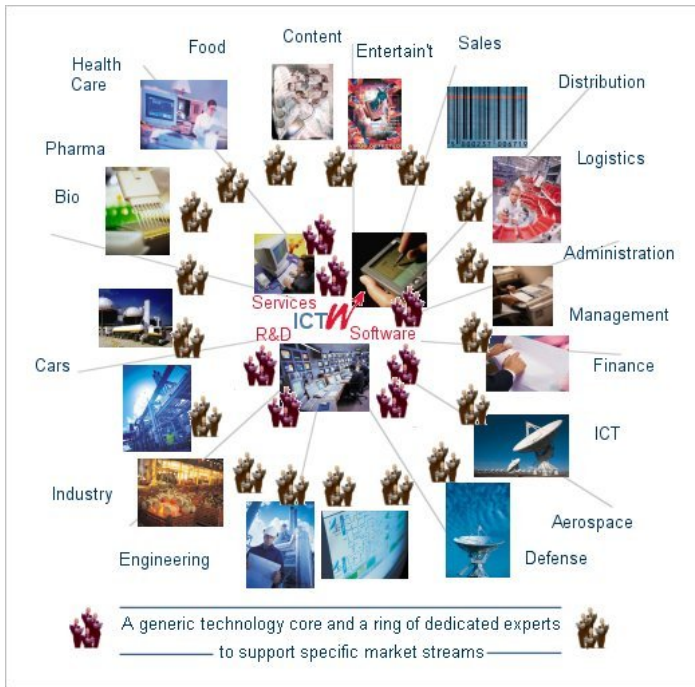
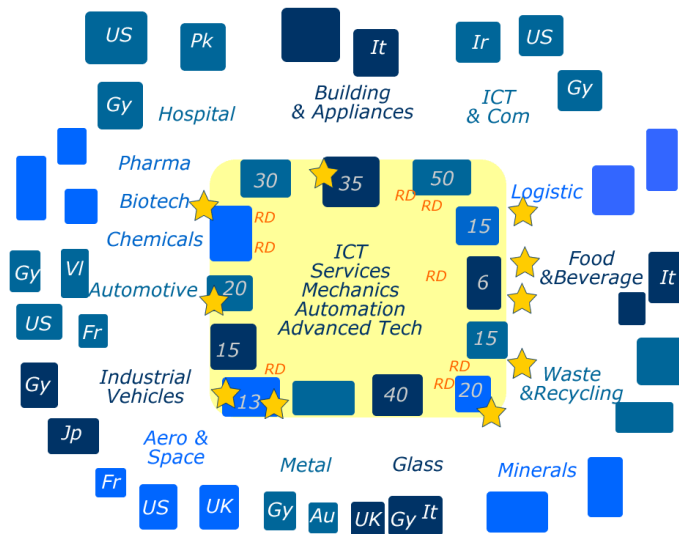
Step 1: building cellular mapping

A cellular design helps understanding the global economy structure and the complex mainstreams interconnections¹.

On this kind of map, the neighborhood business mainstreams that are connected to worldwide markets are drawn as radial expansion forces that act within a unified global business space description.

In each stream, the cells indicate specialized relationships and influential business spaces.

The visual frame is not a unique and universal picture but the translation of the real knowledge and major client's mainstreams that influence de facto the actual and future business of a given company or group. It allows prioritizing strategy directions within a proprietary holistic view. The map is like a chess game where one can locate key people, organizations and suppliers that may enhance cross fertilization for technology and market development.



The economy global data are used for building and revising the global figure, while a company experience allows locating particular opportunities and threats potentials.

Particular cells and their relationships emphasize where incremental innovation might be most probably inferred and how given road mapping can drive new practice diffusion however operating within large and diversified market segments.

Exploring the adequate cells helps also to concentrate on the highest probabilities of discovering unknown business opportunities and profitable technology transfers.

External acquisition and expansion strategy can also be evaluated according to scenarios of interconnected business streams and far end worldwide interactions.

Keeping up dating major changes within adjacent business streams may enhance anticipations of the opportunities, threats and risks that rely upon cascading interconnection between business segments.

Step 2: Managing evolution within uncertainty

Creating effective new knowledge is based on combining the two unit cycles of exploration and consolidation².

The right hand loop is more inwards oriented and best driven by assets and resources standardization upon what exhibits the best profitability and by the peer reviews that reduce the diversity within a narrow set of best practices.

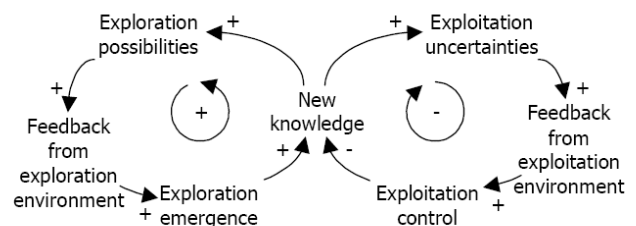


Figure 4 - Positive and negative feedbacks in new knowledge creation

¹ Cellular mapping has been experimentally created as an extension of the « value chain » and the « cluster model » that have both been introduced by Michael Porter. The cellular mapping consists of an extension of those concepts within a multi variant, redundant and non linear organizational space (Paul Defourny). Further investigation has shown that this approach complies with the concept superposition of otho-modular lattices as introduced by Birkhoff and Von Neuman.

² Figure 4 out of Annick Castiaux – « Inter-organizational learning » – International System Dynamics Conference – Oxford July 2004

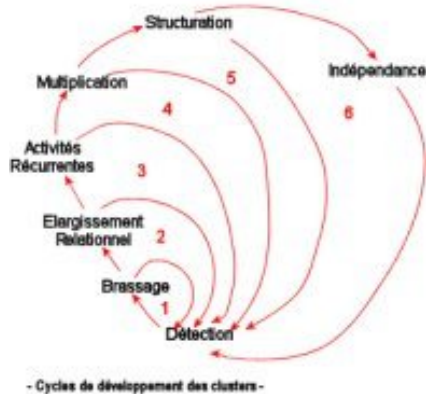
The left hand loop is more outwards oriented and best driven by complementary experiences, streams end user diversities of experiences and emerging non standard usages.

Care must be handled to keep the exploration/consolidation ratio at an appropriate level to maintain both a required exploration level and a profitable return out of it. In reference to the above paragraphs, the process can be seen as an appropriate balance between peers' interactions for innovative profitability and non peers' interactions for innovative sustainability.

By recording both exploration and new opportunity acquisition via cycle time units and frequencies, one can organize planning and reporting within the cellular map such that correlations and efficiencies can be assessed.

Reporting the exploration densities and the new opportunities acquisitions within cells will ease up dating the global business vision.

At the start of exploring an unknown business cells or segments, an understanding of the exploration process (see figure on the left) must be gained and road map must be designed. The consolidation phase being at this stage mainly a non predictable stochastic process, it requires that runway lights are switch on to avoid an endless hope of take off and to induce booking for an another destination before the budget has gone.



Both exploration and consolidation cycles sequences can be embedded within a systemic³ schema where one can plan and survey the reach of threshold and the efficiency in a statistical manner.

By estimating and reporting costs, times and required returns for each phase or successive cycles, investments and risks can be gradually surveyed and regularly handled as singular apprehensible "go-no go" decisions.

Step 3: Refactoring development directions and identity by marketing and communication

The experience shows that the conjunction of steps 1 and 2 enforces the emergence of a simplified streams set description that might be recognized by both the operational forces and the market. Even in the standard situations "we service any client type", we have seen the potential to group clients within a limited set of characters and to translate the complexity into a "still-global but understandable" coherence of synergies.

This allows grounding the implementation of a more efficient external and internal image and communication about where the group is going, based on clients own referential environment and expectation. It helps to focus more efficiently the development and training on the adequate internal attitudes and drive the soft skills and cultural learning that ease creating client's relationships that makes a differentiated competitive identity.

Once the main development streams that best leverage the internal assets and resources have been identified, it becomes also easier to locate external actors that may contribute to streams development and new products or technologies introduction and expansion.

Today's business being interconnected, the refactored map eases to detect and assess the adjacencies that are proud to provide with new requirements, with innovative solutions, business synergies or cascading effects.



It helps a lot to maintain a particular attention to those actors that are at the interface with the end-user and with the usage environment of the consumer. Because the end-user is within the more versatile cell of the stream, he is the more probable agent to be confronted with new challenges and to infer new innovative responses. Reporting within the network about usages and facts that induced new practices and innovative solutions increases the chance for a big organization to detect new trends and to survey their ability to induce a new stream development.

Focusing on reporting end users practices and their contextualized evolutions is particularly helpful to guide the R&D experts who otherwise tend to focus on their own field of interest either have only an idealized image of the streams end's needs.

Wherever far or close you are in the supply chain to an end-client, the experience shows the end-client mouth will activate extremely powerful new communication channels and tactics as well as internal business development strategies and human resources training schemas or targets that will naturally address the collaborative networks set up and the "non invented here" syndrome.

For illustration to implement such a communication, the final-users and his attitude may be physically reflected in the technical and marketing documentation. Any information sourcing and web broadcast may focus on leveraging the consumer's wealth

³ Systemic thinking refers to handling the dynamics of business via cycle's suites. This approach that mimics the Hamiltonian dynamics has been illustrated in the focus of business management by P. Senge in his seminal publication "The Fifth Discipline - The art and practice of the learning organization"

fare progresses or advantages that leverage particular products and services streams. People meetings and training seminars might be initiated from connectors and mavens⁴ that are influential within their user's community.

We observed that a factual and regular short reporting of relevant achievements at the end-users premises has generated a positive and appreciated collaborative-challenging gradient for top executives and managers even though they were keen to remain strong individuals and aggressive competitors⁵.

The experience showed also that one can leverage within a group the individual willingness of nearly any human being for a group ownership and commitment. It opened a self demand for knowledge acquisition through communication and human interaction experience and it made people tending to stick upon given brands because their acquaintance with a group of people.

"In practice" insights

The methodology requires the capability to infer a global market understanding and also an appraisal capability for investment and business development opportunity. As such, the method provides the management with a consultancy frame for business evolution and organizational issues.

It recalls also a good command to detect and capitalize intangible operational knowledge and market feedback.

Actually, the method creates nothing but a network of interaction between the stake holders diversified cultures and expectations. It eventually requires a "translation"⁶ capability with a significant global business and social experience and a good interpersonal communication skill.

As a networking activity is not productive per se when only formalized on a socializing schema, it is important for the financial efficiency to ground the deployment mostly upon operational interaction spots. When applicable, a recurrent professional meeting agenda and a training program that is a necessity for up dating the operational resources⁷ are ideal supports that can be designed to infer a non disruptive operational deployment. The method will reward its intrusion by easing to frame the scope of given meetings and training sessions.

To achieve and maintain a sustainable practice and evolution, it is a necessity to allocate a minimum sourcing and a mile stoned agenda that allows a lean but constrained commitment. It is known that soft skills acquisition and people interpersonal communication are important but, without this minimum governance, they will inherently tend to remain a weak and secondary precedence over sales and production for any management and executive team.

Last but not least, it is important to keep in mind that most adults rarely ask for a change or contribute to a group by their own. They mostly reveal such a pro activity in response to an environment experience or requirement.

The first key point is then to keep visible the environment experience that is relevant for inducing an individual self participation to the group expansion or required achievements. The second key point is to reach a point where the actors themselves provide the system with the appropriate experience visibility such that the system may enter a sustainable stage.

It is our experience that this later point of establishing a sustainable systemic process is rarely a primary objective to explicitly adopt widely at the first stage of the implementation. But it is our experience that it has to be a mile stoned target for the management that needs to have an understanding that such an achievement may become an answer to the "adapt or die" challenge.

Noticeable are the capabilities coming out of set up processes that respects the two following points:

- learning by doing: getting actions and procedures experienced and fed back "from and by" the inside of the global network
- sourcing a support: a light logistic support and an experienced sourcing that confirm per se the management commitment, ease the set up phase, keeps the momentum and maintain the efficiency of this "never important" recurrent process.

Providing that they keep in mind operational achievements, that their efficiency is road mapped and regularly evaluated, organizing little things may effectively make a big difference.

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⁴ Connectors and mavens are two of the 3 actor's types that are described as participant to viral new practice diffusion. This term, as well as the contextualization importance are well explained by Malcolm Gladwell in his book « The tipping point – How little things can do a big difference »

⁵ The observation relies upon an experimentation conducted on business space refactored on eight client mainstreams, each of them associating in average twenty independent business units.

⁶ Translation refers here to capability to generate a common enrolment of visions among a network of diversified actors – as per Callon and Latour in their actor-network theory and "sociologie de la traduction".

⁷ i.e. within a evolving technological domain