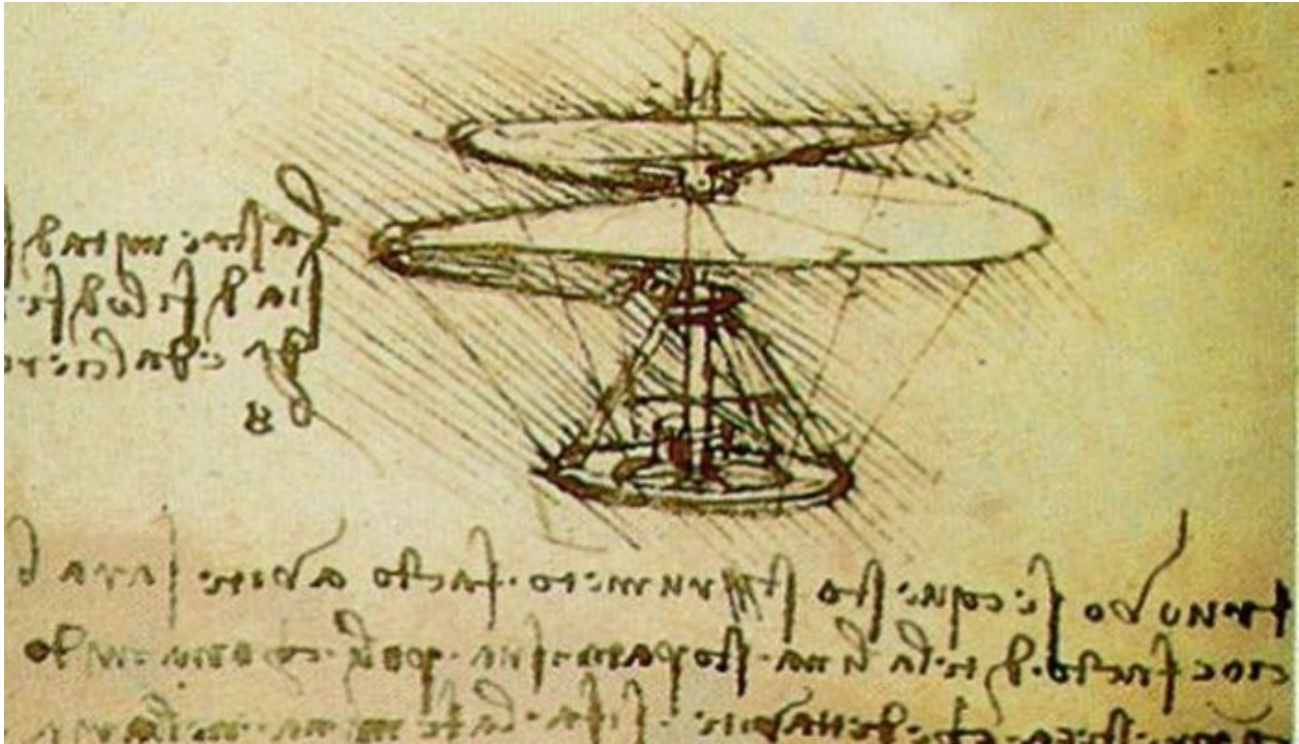


Addressing complexity with innovation

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Published on January 30, 2016

Introduction

Innovation is nothing else than addressing complexity with a simple but not immediately obvious idea, an invention. Innovation easily happens once there are someones that could communicate among different organisation functions and across hierarchy. Disruptive innovation hardly happens without these conditions.

Innovation is based on a continuously reiterated process which aims to help people to acquire a broad vision of what company is doing and about existing but unveiled opportunities to explore. This is only the beginning part of an innovation: innovators are like bees, they travel around to cross-pollinate minds with ideas and information collected by others people around. It is the opposite of micromanagement and perfectionist attitude because strict rules, roles and procedure shutdown creativity.

Today companies are complex systems

Complex systems like today companies are divided into divisions, teams, roles and tasks. *Dividi-et-Impera*: dividing in order to address complexity. However once a system is divided in subsystem lacks of intercommunication. Information and metrics goes up then directive goes down. Each company hierarchy information goes up, more abstract becomes. Directives go down and as much as they travel as much they are going to be interpreted and cast into what the people think locally. Even company vision is fully embraced, most of time is too much abstract to be cast into any single action. Action needs a plan (map) and a micro-vision (compass) which is the company vision casts into a plan (oriented map).

A lack of cross skills profiles

Today companies lacks of people with technical and business education able to move around divisions and teams in order to report relevant information and find anomalies between metrics and their real meanings, between directives and their implementations. Our bodies (structure) have not only control (brain), feedback (nerves) and others subsystems (organs) but also an immunity system that constantly operates on small scale to prevent things goes wrong before it would too late for fixing. Similitude with nature is not accidental, despite you believe in creation or evolution, something great happens in nature. Something that is definitely more advanced than our way of managing complexity. So, imitation is a good approach.

Ideal profile of an innovator

Ideal profile for this job has three main characteristics.

- People who choose to study sciences usually do it for curiosity and their creativity skills resulted good enough for that kind of education. They have been trained to manage technology, to cope with complex systems and with environments like those in nature. Moreover they received a strong education in statistic which make them able to discriminate an accident rather than a relevant anomaly. They received a wide mathematics education in order to cope with numbers, models and trends.
- People who have a good and vary working experience in many companies of different sizes and fields: electronics, mechanics, information technology, biology, etc. because diversity stimulate creativity, new ideas and new approaches.
- People who got a business education and being able to understand and cope with the main concepts about accounting, administration, project management, marketing, sales, client support, etc.

Innovation tailored education

Lacks of similar profiles is a huge missing in today companies organization. Those whom saw an opportunity in this, developed some specifically tailored education programs that differ from MBA. Education about innovation is focused in delivering business related concepts to technical skilled professionals in order to create a bridge between financial and administration and technical managements.

Administrative and technical people are used to co-operate but they strictly work under their own perspectives because they are under the review of their peers and their own managers. This is the division we are speaking about. Even if they have the same vision, they cast it into different point of views which usually conflicts and a mediation may be reached in many different ways, depending on the company habits. People do not like conflicts and they are used to find an agreement. An agreement that makes people comfortable and which is usually not the best for succeeding in a fast changing and high competitive market. For example, plain consensus will drive people to happily work but not working on the best possible solution because innovation usually lacks of initial wide consensus. Top-down decision may lack of relevant details about how real things work. So, a great vision with a sub-optimal implementation could miss the goal as well because the high level of competitiveness.

Developing a corporate culture about innovation

When we are interested in bringing innovation in our companies, we may wonder how to deal with this organisation change. There are two main ways.

- Choose someone working in our company and educate him/her. S/he already knows the company and the people working in. However this approach will take few year before s/he get fully in the role. In order to have a good chance to succeed we need to educate more than one at once. Many tries to grant that at least one get the right way in the scheduled time frame.
- Hiring someone that fit the bill. S/he will take few months to get in the role but you have to find him/her. Fortunately, S/he could help us in developing innovation culture among others people in our company.

In both cases but especially in the second, we have to carefully introduce the new role among employees otherwise they will not understand what is going on. We are not simply adding a new colleague with uncommon set of skills but we are going to make a real change into company organisation. We need to keep it in mind. Because as soon as people will realise that something huge is going to change, they will going to resist especially if they were not properly informed. There is no any soft-skill the innovator could relay on to cope with this, if company fail to inform people. Innovators are not wizards, they cannot make miracles and people will not embrace changes if company did not assured them about it.

If you are interested to know why middle level leadership is not the panacea then you may worth reading "[The dark side of innovation: why top managers should care?](#)" post.

Hiring or selecting the right candidate

Human resources are the first division should be informed about what is going on because otherwise they are going to recruiting someone that is supposed to deal with conflicts, leadership and management. So they will add to the hiring profile another requisite which is dramatically not required and, in any case, does not work as expected. Increasing requisites more than those are strictly useful, exponentially increases the probability to not find anyone. The role of innovator is not to address conflicts, manage or lead people but to collect relevant information and present them to a panel of different shareholders in order to let them to make the best choose. Moreover, s/he should avoid to get personally messed up with the proposed idea. The enthusiasm for a role is a pretty different thing than supporting our own idea especially if the idea is a game-changing one. When the game is going to change a strong leadership may arises more conflicts than a shy and more politically oriented personality. On the other side, a lack of leadership could bring nowhere.

A practical example of driving innovation

Marketing found a new business opportunity in a field nearby a developing product. Technical report that a huge change in product specification will break the current design and slow down the developing process. Administration claims there are not enough budget to start a new brand project and meets the stockholders expectations. Sales support the idea to enter in the new market but quickly, before competitors get in and collect the early birds. Innovator found that 60% of relevant needs and 40% of minor needs could be addressed inserting few new features into the existing project without change the initial design and with acceptable effort and budget. A product that will fully satisfy only the 24% of end-user will be a flop because the bad reputation it will gain and it will risk to jeopardise the entire brand but he/she found that 90% of that 24% market could be clearly addressed by marketing which is about 20% of the whole market and this segment is mainly constituted by early-birds adopters. S/he develops an executive presentation to share relevant facts to a panel of diverse decision makers plus a technical proof of concept that exemplify how to implement it within the current design and the on-going project. Then s/he let others professional do their own job in making it happens included the option of differentiate the same product/brand in the two markets or going with the same product (2 in 1) trying to exploit the synergy between the two. S/he avoid to use his/her personal skills to push forward the idea. It is not his/her idea, it is a presentation of facts that should be evaluated for the good of the whole company: "*feel free to discard or embrace it*".

Conclusion

Innovation is nothing else than addressing complexity with a simple but not immediately obvious idea, an invention. An innovator would find a way to address a complex matter and to present a viable proof-of-concept and then let others people doing their own job in order to implement the new solution. The focus should stay on the idea and related opportunities rather than single persona contribution or worse in some sort of creativity challenge among the staff. A distinction among roles is fundamental to avoid that people will get personally emotionally involved instead of motivated.

Human resources should be informed that for innovators the their leadership and soft-skills usage do not follow the normal rules but a main different one. They use their soft-skills to keep each relevant person interested in the argument and going on presenting facts, facts, facts until the others people are not self-convinced that those facts are relevant. So, innovators need to keep pushing facts in a neutral way but not pushing onn the people. Motivation arises later, after the challenge has been accepted.

Managers whom really care to introduce innovation as a controlled process should keep in consideration that people fear changes, so fear innovators. Fear could be properly addressed informing employees what an innovator is and is not, what an innovator does and does not. Especially, informing them that they will not going to loose their influence because innovation

process will change the way in which information will be shared among the company and not how the decisions will be taken. On the other hand innovators should be free and feel free to present any kind of idea, as a part of their own role: proposing stimulus.

Some people could enthusiastically embrace a new idea but others could desperately resist and in a diverse panel of people both reactions usually arise. Moreover any slight positive or negative personal feeling will be instinctively multiplied by the impact of the change perception. Preparation is essential and the company should do its own part of homework beforehand.