

The Innovation Decathlon: Ten Commandments for successful innovation

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Abstract - Innovation and the success of it often have an aura of unpredictability. However it turns out that successful innovation can be organized. We examined twenty organizations which were repeatedly successful at innovation and, to our surprise, discovered a success formula: the innovation decathlon.

Index terms – Innovation, Innovation Management, Organisational routines, Strategy.

I. INTRODUCTION

A few years ago the Dutch Foundation for Management Studies asked for a proposal for a research on the role of management in the innovation process. We suggested focusing on organizations that had repeated success of innovation because most studies until now have focused too much on separated cases of successful innovation. Thereby it remains unclear whether success is the result of chance or smart management. When organizations have repeatedly success with innovation, we can assume that there is some kind of routine within these organizations.

In consultation with our advisory commission, we selected twenty cases in the private sector. For several reasons – among others budget restraints – we have chosen Dutch cases. But the lessons we learned are internationally relevant. Besides the usual suspects in innovation studies – the Dutch based multinationals Philips, Unilever, Shell – we included firms that outperform their competitors in their niche, such as Intervet – market leader in the animal health industry – and Ten Cate, among others manufacturer of the artificial grass for the Olympic Hockey Competition and other sport events. In addition to these technology driven industries we have chosen organizations in the service sector and the creative domain. Also this part of the selection consists of globally competing firms, like Stage Entertainment, market leader in the European musical industry, and MEXX one of the main European fashion firms.

To avoid a scope on large firms only, we also selected small and medium sized firms. To meet with the criterion of repeated success these cases were mainly found in the creative sector. For example museums with a focus on temporary expositions; with a relative small staff they have to renew their offering several times a year. Most of these smaller organizations are relative national oriented, but not all of them. The advertising agency KesselsKramer has clients all over the world and with a staff of forty and fifteen nationalities it is probably the most international firm of all our cases.

We studied our cases very carefully and through a thorough process of comparing commonalities and differences, we came to ten common characteristics of all our cases. These are the ten disciplines of what we call the Innovation Decathlon. It is also interesting to see what was not common to our cases. For example, technological issues were hardly mentioned as success factors. More tricky issues were those related to routines and leadership. It struck us that especially these issues can become pitfalls. That's the reason why we want to deal first with three mental obstacles to successful innovation, before we discuss the disciplines of the Innovation Decathlon.

II. THREE MENTAL OBSTACLES

In order to make innovations successful it is essential to leave behind a few traditional preconceptions. We stumbled across three mental obstacles that have to be dealt with.

Mental obstacle 1: innovation= radical innovation

In many cases only more radical innovations are considered to be 'real' innovations. Moreover, emphasis is also often placed on technological innovation which means that the many possibilities for the further development of successes (new versions, improvements, new styling) are under threat of not being completely exploited. Such 'incremental innovation' comprises, however, the lion's share of innovation. In order to present a broad spectrum of small to large technical and non-technical innovations, we define innovation as something new that has been realized, hopefully with an added value. We say 'hopefully' as success forms no part of the definition: innovations can succeed or fail. The added value will show up from the acceptance by the market.¹ Without added value the innovation has failed. Incremental innovation bridges exploration and exploitation. Of course the distinction between incremental and more radical innovation remains relevant, but even radical innovation does often follow the course of a series of smaller steps. In this sense, we must aim to establish 'ambidextrous' organizations – organizations 'with two right hands' – that embrace both forms of innovation.

Mental obstacle 2: innovation and routine are considered to be incompatible

All the organizations that we researched possess some sort of innovation routine, but only a few of them were actually aware of this. During the interviews, the realisation of this

¹ This is a simplification. More correctly one must speak of the relevant selection environment, which is not always a market. It can be also for example a subsidizing agency or a jury [1].

often gave sudden insights that also led to new ideas. Of course this idea is not entirely. According to Nelson and Winter, who have firmly anchored the term organisation rut in the evolutionary economy [2]. Joseph Schumpeter said already that during the twentieth century big companies had routinized innovation. In sectors like fashion, automotive and the pharmaceutical industry one already knows for a long time that a pipe line of new products is crucial.

At the level of individuals Ohly cs. have shown that strong work ruts don't have to be contrary to creativity and innovation [3]. A feeling of control concerning its own work offers space to think about the renewal of it.

While we studied the innovation literature, we were struck by a passage in Mintzberg on innovative organization, also named adhocratic. According to Mintzberg a sophisticated innovation requires a special form of organization that helps experts from different disciplines to work together in smoothly functioning adhoc teams. The price of this is however a considerable degree of disruption or even chaos and waste; the innovative organization takes its effectiveness thereby from its ineffectiveness. Such adhocracies usually are young organizations or young parts of large organizations. Because – and now it becomes very interesting – Mintzberg concludes “All kinds of forces drive the innovative configuration to bureaucratize itself as it ages. (...) As it ages, the successful organization develops a reputation for what it does best. That encourages it to repeat certain activities, which may suit the employees who, themselves aging, may welcome more stability in their work. So operating adhocracy is driven over time toward professional bureaucracy to perfect the activities it does best, perhaps even toward the machine bureaucracy to exploit a single invention. The organization survives, but the configuration dies.” [4] Mintzberg describes precisely what we call repetitive innovators. Mintzberg considers this as a tragic development, but that does not need to be the case. It is not bad when organizations standardize their successful innovations. That makes them more conservative than they initial were, but they remain innovative. The resulting innovations might be more incremental than radically, but that needs not to be a problem.

Often such organizations create from time to time project teams which function in a manner they worked in the past. Mintzberg calls this alternative of the innovative organisation a ‘temporary adhocracy’. Specialists from several organizations are brought together in a project team which is dissolved after course of time.

In Mintzberg's organization types (see Figure 1) we think that an increasing number of organizations meet the challenge to become an open professional bureaucracy: a creative learning culture in the innovation department combined with a clear organizational structure which includes reliable figures by which the learning culture is supported and more focused. The word 'open' has to do with the concept of 'open innovation' that is initiated by Chesbrough [5]. Professional bureaucracies which continue to innovate are nowadays more open than they were in the past. We will elaborate that further when we discuss the innovation decathlon and networks.

Figure 1: Mintzberg's most important organization types

In contrast to for example Henry Mintzberg, who cherishes the adhocracy as the most innovative form, we come to the conclusion that successful repetitive innovators look more like the professional bureaucracy in Mintzberg's taxonomy. Such organizations manage to combine an open, creative learning and collaborative culture with the smoothly-running management of a rapid succession of innovative projects within a clear organizational structure. This structure provides the strategic framework, a focused personnel policy and a flexible working ‘bureaucracy’ that among other things delivers reliable figures which support and focus the essential learning processes.

Mental obstacle 3: innovation is dependent on leadership
Innovation is often seen as something mythical associated with visionary leaders. We actually did meet some passionate leaders who really sped up innovation. Repeating their past success is, however, problematic as long as innovation remains dependent on them. Visionary leaders are important for inducing an innovative culture, but they must ensure that this culture is structurally anchored within the organization and that it therefore does not remain dependent on them. We have researched some fascinating organizations and met some interesting people – often stimulating personalities, but if we may be permitted to say: no geniuses, no Einsteins or Picassos, but driven people who knew how to motivate others. We saw initiating leaders who reduced their own stake in the innovation and emphasised structures and processes: by ensuring that innovation was systematically placed on the agenda in the treadmills of the organization, by introducing focused management information systems and by setting up breeding grounds for innovation. Innovation management has many points of contact with entrepreneurship. However, there is also a difference. It appears that in innovation management, the content share of the manager involved is less important, while the content share of an entrepreneur is crucial. There are nevertheless those who stand out in both innovation as well as entrepreneurship, which serve to fuel myth 3.

III. THE TEN DISCIPLINES OF THE INNOVATION DECATHLON

Our most important conclusion is that ‘innovation routine’ is a combination of ten disciplines within which organizations must excel in order to succeed in innovation. Surpassing the initial expectations that we had at the beginning of our study, we arrived at a kind of success formula. For this we employ the metaphor of the decathlon: ten disciplines in which one must excel. If you are successful in doing so, success is as good as guaranteed! Innovation success is therefore much more achievable than most people think. It is indeed possible to score somewhat less on one of the disciplines, but this relative weakness must then be compensated by exceptional strengths in the others.

These are the ten disciplines. We have formulated them as ten new commandments.

1. Your point of departure should be a *strategic concept*, built on a strong business model. It is very important that *innovation is an essential part of your strategy and that your strategy is not realisable without continuous innovation*. Innovate, therefore, mainly in the areas in which you are good and in which you see further growth potential, and not in your weaker areas. Understand well where your reputation lies and why people come to you. And also understand your value chain well: where do you actually earn your money? If you can reinforce your concept with a powerful logo, do this and also persist in doing so. There is, however, an important qualification to be made related to our first commandment: also regularly totally new territories or at the very least the adjacent areas have to be explored. No evolution without variation. Otherwise you are going to become bored and in time, and so will your public. This brings us to the following point.

2. Be *society-oriented*. Keep an eye on what is happening in the world. Travel, surf the internet, invite crazy trend watchers, look at developments outside your sector and take advantage of them. Society is becoming increasingly more dynamic and as a result, more unpredictable. The question is ultimately one of who can handle this the best. Therefore, try to anticipate.

3. Be *customer-oriented*. Something closer to home and to today than the previous point: learn from your customers, also especially about what bothers them in your area. Visit them. Go to places where your products are sold and look at how people react to them. Put yourself in the shoes of your customers and try to look at your own range through their eyes. Keep an ear open for any possible criticism that they may have, especially if this is being voiced loudly, but also if it comes across more hesitatingly. Do not formulate solutions before you know what the questions are.

For us and our advisory commission, this differentiation between customer focus and social orientation (the second commandment) was an important new insight as in most research both are lumped together.

4. Be *ambitious and daring*. Go from Main Street to High Street to Fifth Avenue. Formulate your next step realistically, but ambitiously so that your entourage understands that half measures are not enough. Do not rest until you get there. Take risks, but obviously not unnecessary ones. Whoever is ambitious mostly invests very frugally and accurately.

5. *Develop and 'milk' your product lines*. There is nothing wrong with limited 'incremental' improvement. Many breakthrough innovations that have radically changed people's lives started out small. Do not treat innovation as being something that is absolute. On the contrary, there is no contradiction between large ambition and taking small steps. Consider innovations in areas of overlap between those areas in which you are already strong.

6. Learn from *real figures*. In Mintzberg's terms we view the most important challenge as being innovative organizations developing into 'professional bureaucracies': organizations that combine continuous innovation with clear agreements. Therefore, develop a good management information system with which project leaders and managers can accurately follow the progress of your innovation

projects. Analyse any possible setbacks that you face on the basis of this. Also develop a set of indicators (for example, using a Balanced Scorecard) at a high level within your organization that enables you to analyse your progress as an organization as accurately as possible and really learn from this. Do not shy away from your weak points. On the contrary, dissect them with an open mind and learn from them.

7. Look for the *best people*. The majority of us are average people with average capabilities. The more we want, the more we need to surround ourselves with the best, smartest and most enterprising people. The most strategic decision that you will ever make is in hiring people. Therefore, make sure that you do this carefully. Check references thoroughly. Present applicants for instance with a complicated problem that you are actually struggling with yourself instead of just carrying out an obligatory introductory interview. Look for bringing together the best team combination for each innovation project, possibly also with people outside your own organization. Also ensure that you have very adept gatekeepers who keep an eye on the social and technical developments that are critical to your organization.

8. Create *ambiance, an open culture*. Stimulate open communication about what goes well and less well in projects. Ensure that there is a climate of trust that allows difficult issues to be discussed; even better: get annoyed with people if they do not do this. Keep the atmosphere fun, but also keep people focused: agreements are agreements.

9. Build *strong networks*, within and outside your own organization. Whatever you want to achieve is difficult to do alone. Therefore, be strategic in maintaining strong links with the your most interesting networks.

10. Sharpen your *focus and commitment*. Keep your eye on the ball. Ensure as much as possible that the milestones are reached by the agreed times. Timing is even more important in innovation as the competition does not stand still. This does not mean that you should not be prepared to take your foot off the accelerator if things look like they are going off course. And do not put a stop to a project at the first setback.

We presume that most readers will be familiar with most of these points. The danger is therefore if you say: we are largely already doing this; that is going well... or maybe: we are already doing this, so why are we not experiencing more success? Our answer would then be: Examine what you are doing not so well. You will not qualify for the Olympic Decathlon with eight strong disciplines. You must therefore first work on the three disciplines in which you are not yet strong enough. Our success formula may perhaps be simple, but it is by no means easy.

IV. THE SCORES OF THE ORGANIZATIONS THAT WE EXAMINED

Not all our cases scored equally high in the decathlon as can be seen in table 1 where we scored every organization in a similar way many consumer organizations do. Quite a few of the cases listed in the table will probably be unknown outside the Netherlands. That is not really a handicap for

understanding the conclusions we draw. Even in the Netherlands some of our firms are relatively unknown.

Figure 2: How the top innovators scored in the Decathlon

The ranking follows the total score of plusses but the differences are small. Broadly speaking there are two categories. Thirteen organizations are close to overall high scores. Seven organizations form a second category which scores slightly lower. These organizations are sometimes hampered by a disability, such as the integration of the innovative Dutch department of Siemens in the cumbersome set of Siemens International. Other organizations have a somewhat less stabilized innovation routine, for example because they have not a long-lasting tradition in innovation.

To start with, it is noticeable that those companies printed in black – organizations with a relative long tradition of innovation and a medium-sized innovation department – score on average higher than those organizations printed in white – organizations with a relative short tradition of innovation and/or without a large innovation department. This definitely applies to the manufacturing companies, where this tradition goes back to the first generations of technology management. However, outside the industrial sector ‘black’ companies with a substantial innovation department also score relatively high. It seems that on this point, *no* structural difference exists between companies with a technological or non-technological background. ASML (wafer steppers for the chips industry) or Stage Entertainment (musicals), Philips (consumer electronics, lighting and medical equipment) or HEMA (retail) all operate in different environments, but we see little difference in repeated innovation success. And where differences emerge, they are not significant – rather like a photo finish. It is noteworthy that in the first group of thirteen also some ‘white’ organizations are present, where innovation routine is slightly less anchored. These ‘white’ and ‘black’ organizations usually departed from a different point departed. This is shown in Figure 3 where we brought together our cases in Mintzberg’s matrix organization.

Figure 3: Our cases in Mintzberg’s matrix

An arrow indicates a change and a rectangle stands for a relatively stable position.

To be honest, we were also surprised when we first compared all the scores with each other. We have obviously looked for innovation champions from a wide range of sectors, but we were really surprised to see that the innovation management at musical firm Stage Entertainment and department store chain HEMA was so deeply rooted. This leads us to the conclusion that the exclusive association of the topic of innovation with the industrial domain is really a thing of the past – or even better – must be relegated to the past, as the majority of the books and reports that we see still place the emphasis on manufacturing industries, when it comes to this point.

We can imagine that people, who know a certain company to be a front runner in innovation, will be surprised to see such an organization in the lower echelons of the table. To begin

with, we repeat here that these companies are all leaders in our eyes. After all, it takes a lot to become a finalist. So, let us now take a look at the final. For example Rabobank which is often a trendsetter in the financial sector.² Their initiatives surely signals ambition and daring and also a society orientation that goes further than the following financial year. That is why the score for these components is also high, but compared with the other finalists, not the top-ranking score. With respect to society, Shell goes much further with its scenarios and HEMA with its trend watchers. In terms of ambition and daring, ASML really does go a step further with extending its share within its relevant world market from 65% to 70% and daring to take on two parallel development lines leading to a 100 million € write off in an innovation project before it is even ready for production. This final point is definitely on a world class level.

V. HOW DOES YOUR COMPANY SCORE?

The decathlon can help you to determine how well you score in comparison with your competitors. When it comes to recruiting personnel, are you at the top of the list for school-leavers and people who wish to take a new step in their carrier? Do you know a lot of people at networking events and do they know you? Do you work together with other companies and with intermediaries? What do you know about your customer satisfaction levels? Furthermore, how do you score in comparison with your competitors?

The metaphor of the decathlon is widely applicable, but obviously the exact same decathlon is not held everywhere. In many respects each sector possesses its own rules of the game. Is emphasis placed on technical innovation or rather on the non-technical aspects? Does it concern a B2B (business-to-business) or B2C (business-to-consumers) market? Is there an accent on product or process innovation or is it mainly concerned with transactional innovation or combinations of these? Is the relevant market global, national or rather more local? These are all relevant distinctions if you are competing within your sector, but the striking fact is that they really do not suffice if we are looking for the rules of repeated innovation success. From the initial comments that we received it seems that this conclusion is anything but obvious. Do the same rules for repeated innovation success really apply everywhere?

Not completely. Let us take the simplest example: we can imagine that in B2B sectors – those that are aligned to business customers – the pressure on discipline 2 – society orientation – is less extensive. This can also be deduced from several of the scores in the overview table. But do be careful on this point. If you innovate, then do not just focus on your direct customer, but also on your customer’s customer. Companies that make yarn and material and supply to the clothing industry also follow the fashion trends or try to influence them. A company such as Philips has realized to its great cost that it can better concern itself relatively more with

² The list was made up before the financial crises became large in Europe. In the Netherlands the Rabobank seems to be hurtled relative weekly. In the interviews it was stated that Rabobank did not develop products that had no added value for the customer, also not when these products were expected profitable for the bank.

lifestyles than with technologies. The lesson is therefore rather that the dynamic and competitive pressure in a specific sector increases the pressure to pay relatively more attention to certain disciplines. But ultimately they are all important to the continued success of innovation.

More innovative companies are strongly aware of this, which allows them to be inspired by what is happening in other sectors. This sometimes leads to surprising collaborations. As a consequence we want to encourage people not to revert to the reaction of “maybe true elsewhere, but not with us”. Competitors need to keep an eye on each other, but they must also allow themselves to be inspired by innovative practices elsewhere. Therefore, try not to look for reasons for not taking part in the decathlon. In doing so, you will only be helping your competitors.

References

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Dany Jacobs & Hendrik Snijders

Figure 1: Mintzberg’s most important organization types

environment	stable, predictable	dynamic, unpredictable
complex	<i>professional bureaucracy</i>	<i>adhocracy innovative organisation</i>
simple	<i>machine bureaucracy</i>	<i>simple structure entrepreneurial organisation</i>

Figure 2: How the top innovators scored in the Decathlon

Innovation disciplines Cases	1. strategy/ business model	2. societal orientation	3. customer-orientation	4. ambition, daring	5. continuous incremental innovation	6. learning from real figures	7. the best people	8. ambiance, open culture	9. strong networks	10. focus and commitment
ASML	+++	++	+++	+++	+++	+++	+++	++	+++	+++
Philips	+++	+++	+++	++	+++	+++	+++	++	+++	++
Stage Entertainment	+++	+++	+++	+++	+++	+++	++	+	++	+++
HEMA	+++	+++	+++	++	+++	++	++	++	++	+++
DSM	+++	++	++	++	+++	+++	++	++	+++	+++
MEXX	+++	+++	+++	++	+++	+++	++	++	++	++
Albert Heijn	++	+++	+++	++	++	+++	++	+	+++	+++
KesselsKramer	+++	+++	++	+++	+	+	+++	+++	++	+++
Efteling	+++	++	++	++	+++	++	++	+++	+	+++
Intervet	+++	+	+++	++	++	+++	++	++	++	+++
Shell	+++	+++	+	++	++	++	+++	++	++	+++
Unilever	+++	+++	++	+	+++	++	+++	++	++	++
Koning & Hartman	++	++	+++	++	+++	++	++	++	++	++
Effactory	++	+	+++	+	+++	++	++	++	++	++
Siemens NL	+	++	+++	++	++	++	++	++	++	++
TenCate	++	++	++	++	++	++	++	++	++	++
Groninger Museum	++	++	++	++	++	+	++	++	++	++
Kunsthal	++	++	++	++	+	++	++	++	++	++
Achmea	++	++	++	++	+	++	++	+	+	++
Rabobank	++	++	++	+	++	++	++	+	++	+

Figure 3: Our cases in Mintzberg’s matrix

