

Road to Rome or Roaming

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ABSTRACT

All companies with a strong dependency on gaining new value developed from knowledge have realized that their people are their greatest asset. Most companies in the Pharmaceutical industry have therefore implemented solid development and appraisal processes. However, just going this far is where we start to fail as an industry, we have not stopped to challenge ourselves and take into account other developing external social/technological factors which may impact the way we work. Have we even gone so far as restricting our full potential through applying rigid frameworks? This paper, will put forward and discuss the challenges in how we go about goal setting in our environments to drive innovation and look at two contrasting proposals i.e Should you have a set clear SMART goal in mind or do you have a vague sense of purpose where you iterate towards a defined purpose. The presenters, will debate which is the better approach and give reasons why we have to challenge our thinking due to the advantages new technology brings with regards to communications and also consider the human aspect e.g the potential impact of Next 'techno' generation joining the industry. This presentation is aimed at provoking thought and debate rather than give attendees a complete answer to the challenges of the future.

INTRODUCTION

This paper is aimed at initiating a wider discussion on ways of looking at how to initiate, developing and promoting individual but also organizational transformation to meet future needs. There will likely be more demand for new concepts allowing us to best leverage on the expertise of individual talents in organizations that build on creating new value from knowledge. This process is generally referred to as innovation. Creative ideas are typically seen as its basis which requires completion with a successful implementation. In today's business purpose, as it is defined in objectives and targets, is an essential concept to determine value. This is certainly meaningful to decide where business focus is worth investment. However, when the intent is to provide a conducive environment for innovation, how successful can a strongly targeted framework be?

DESTINATION OR JOURNEY AS PURPOSE

Never in mankind did human beings have more opportunities of moving on the entire globe. Having read this line you may certainly ask yourself what travelling has to do with leveraging and developing individual talent or even fostering innovation. Very likely, much more than one would think at a first glance. In particular if viewed in a figurative sense. A large part of our current travelling is determined by a specific purpose we plan to accomplish at its destination, we go to Rome. Even if we go somewhere for leisure we likely have a specific purpose in mind. We may just want to relax or do some sightseeing. We have read travel guides upfront and friends told us which places we should not miss. Back home we tell friends that we have seen the Coliseum and the St Peter's Basilica, and spent a good time.

A different approach to travelling is whereby the act of travelling becomes the purpose and specific destinations are of secondary importance. Most attention of the traveler is drawn by encounters and events happening along the way. In this way the destination is a more vague concept, for example Italy, its food, how people spend their day and so on. A few historical citations of influencing figures in history reflecting on their own travelling experience may provide further insight.

- "A good traveler has no fixed plans, and the primary intent is not on arriving." - Lao-Tse 4th Century BC
- "The purpose of travelling is not reaching a destination but the journey itself" - Johann Wolfgang von Goethe (German Author, 1749 - 1832)
- "The use of travelling is to regulate imagination by reality, and instead of thinking how things may be, to see them as they are" - Samuel Johnson 1709 – 1784

None of the above approaches to travelling are right or wrong and each of them has their justification for a given purpose. However, each of them is based on quite distinct concept and approach. What they ultimately provide and

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what remains in return is quite different. The destination based approach appears to be more predictable, whereas the approach focusing more on the journey and what will remain is more uncertain, but still with an outcome.

WITH OR AGAINST METHOD

When reflecting on innovation and developing new ideas the domain of natural sciences is certainly an obvious domain to have a closer look. Few would question that science has provided new discoveries whose implementation applying engineering methodologies has most significantly changed our lives and environment for the last decades. In looking for prescriptive methodologies as guarantor for success and progress in a scientific and technical environment the search will inevitably lead across more recent publications by Thomas S Kuhn and Paul Kurt Feyerabend.

T. Kuhn has created a milestone publication in his work the "Structure of Scientific Revolution". He elaborates that scientific breakthroughs are strongly dependent on the culture and historical circumstances and views. The adherence to a specific, definable method is no guarantor for success. In this regard, Kuhn's theory is considered a precursor to the more radical thinking of Paul Feyerabend. In his original work "Against Method" the latter developed and supported a position that there are no methodological approaches that advance science. He goes as far as to object to any single prescriptive scientific method on the grounds that any such method would limit the activities of scientists, and hence restrict scientific progress.

A HISTORICAL INVESTIGATION AS MODEL

It is not surprising that both authors have extensively studied the Copernican Revolution, which built the foundation of modern physics and hence science. Kuhn's and Feyerabend's studies are not focusing on scientific facts but rather on the circumstances and putative methodologies that allowed this theory to become accepted and hence expanded. At the basis of the Copernican theoretical work an essential change in assumptions had to be given up. Those came from the Ptolemy's school of thought built on a stationary Earth at its center.

New astrologic observations with increased accuracy became more and more difficult to be modeled based on the Ptolemaic concept. Therefore, Copernicus took a different approach and proposed a cosmology in which the Sun was at the center (heliocentric theory) and the Earth was one of the planets revolving around it. But Copernicus' model did not allow providing more accurate predictions due to a lack of accuracy in calculations at that time. Copernicus' contemporaries rejected his cosmology and likely we would have all done so.

His work was later defended, expanded upon and modified by Galileo Galilei and Johannes Kepler. Both were among the first to use a telescope to observe the sky and observing satellite bodies orbiting another planet. Galileo noted that Venus exhibited a full set of phases (different variations of lighting seen on the planet's surface) resembling lunar phases. Galileo argued that these observations supported the Copernican system and were, to some extent, incompatible with the favored model of the Earth at the center of the universe.

The dismissal of the heliocentric theory by the church in the 17th century has remained a well known fact. It well illustrates that a scientific theory's conviction is not only dependent on facts. Other more influencing factors related to intellectual power can have a stronger impact. Galileo was prohibited to further publish his theory. Other proponents of the heliocentric theory, like Giordano Bruno (1548 -1600), were even burnt at the stake for their conviction. The Inquisition's ban on reprinting Galileo's works was lifted in 1718, only 76 after his death.

For sure these events have happened a few centuries ago and one can argue that today the circumstances are entirely different. Nevertheless, such a view appears to be short sighted. Openness to new approaches and solutions can never be taken for granted. Any change or new idea has to get over retro-directed movements, and defensive actions of status quo. Likely we even will have to convince ourselves that a new idea is capable of bringing us forward first before we can even think of how to achieve this in a larger context. The well documented historical example above also illustrates that progression of innovative ideas are not achieved by a single individual, but may be a coincidence of collaboration. The fact that the heliocentric idea was even originally dismissed due to lack of convincing success shows that the road to advancement is not always linear, and temporary "failure" may well be part. Likely, most examples of successful innovative ideas follow non-linear progression.

MORE RECENT EXAMPLES

The discovery of one of the most important drugs for making, antibiotics has been cause of an unplanned coincidence. It was a fortuitous accident: in his laboratory in the basement of St. Mary's Hospital in London (now part of Imperial College), Fleming noticed a petri dish containing Staphylococcus plate culture he had mistakenly left open, which was contaminated by blue-green mould. There was a halo of inhibited bacterial growth around it. Fleming concluded that the mould was releasing a substance that was repressing the growth and lysing the bacteria. He grew a pure culture and discovered that it was a Penicillium mould, now known to be Penicillium notatum.

Could such a discovery having been planned? Potentially yes, if on the search for substances inhibiting bacterial growth in blue-green mold. The point here is not about whether it could have been designed this way. The stunning fact and for which Fleming was later awarded with the Nobel prize is to have looked at what he found and having

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drawn the right conclusion. Beyond that he took the right decision to refer his finding including corresponding material to right experts for further work. But he also had the vision that his finding is based on a substance that could be a useful disinfectant, being highly potent with minimal toxicity compared to antiseptics of the day. Even if Fleming got the merits several others reported the bacteriostatic effects of *Penicillium* earlier than Fleming. The first published reference appears in the publication of the Royal Society in 1875, by John Tyndall.

INSTITUTIONALIZING DEVELOPMENT

All companies are investing large efforts into infrastructure and efforts in implementing processes to support the development of individuals. The purpose is to provide continuous education, training for new roles within organizations or the acquisition of new skill sets. Moreover, it has become a competitive advantage for attracting and retaining talent. People are well aware how important continuous education is to grow and meet the demand in the future. The requirement of continuous education in a knowledge based industry is not at debate of question. However, ways of implementation and effectiveness are well worth a closer look and debate.

OWNERSHIP OF DEVELOPMENT

The following quote by Sir Walter Scott (1771 – 1832) provides a clear statement on the ownership-

“All men who have turned out worth anything have had the chief hand in their own education..”

A danger in too extensively institutionalizing education is that the responsibility for education and development is easily delegated away and easily seen as a good of consumption. Quickly it can lead to an exercise of superficial value that would not justify maintenance of extensive processes. In this respect it is crucial to emphasize in Development Discussion that the driving part should be coming from the Associate him or herself. The superior or manager as representative of an organization in this situation is available to provide guidance and one of the most precious good these days, time. This approach sets the roles of ownership very clear and also ensures real commitment from the beginning on both ends. Large companies have various training offers of all kind. If not provided in the company itself, which may well apply for smaller organization, there are numerous external organization offering training and development courses. Looking at development as going through a list of trainings easily becomes an exercise of going through a shopping list of courses. A training as a starting point not directly followed with an application in the daily work or other mean does not provide much value, in particular in the form of continuous education where the important foundations are already established. Only in having the application link real learning effect is ensured in a working environment. Likewise, instead of offering a course it may be at least as effective to provide time for someone to do investigation on a specific agreed topic. In fact providing each individual to work out a topic themselves should become a common practice for development. It likely is much more effective, because it well emphasizes the importance of ownership by the associate and in general goes much deeper. Moreover, it allows to the individuals to establish their ways on how to work out sound solution to questions and problems. The manager acts in this respect act as a mentor or even better a mentor with no reporting responsibility is more appropriate. As our educations tend to become more and more scolarized, it is even essential that education concepts built on personal responsibility are built into development programs.

Fostering the personal responsibility and eagerness to acquire something new will also allow to cutting down on some training efforts that are being established around process trainings. In general all processes should be well documented in our regulated environment, even though some information search is required, because the knowledge management environments are incomplete. Searching for relevant information is a key asset that needs to be trained while working out a subject. Providing extensive training programs around processes including the creation of extensive time consuming e-learning may no longer be necessary. All that is needed is confirmation of self-study by the associate him or herself followed by QA session with a subject matter expert. If this approach does not provide the right results then the documentation is incomplete or not carefully done in first place.

In recent years we have continued with the rapid development of technology and adaption of this technology in both our social and work lives. This has had a greater impact on the younger generation, who are our talent of the future, with regards to learning styles and techniques, communication and social networking. As yet the majority of training courses have not embraced or taken advantage of these changes. This requires a change of mindset of management and training departments to maximize this area.

INSTITUTIONALIZING INNOVATION

It is perfectly understandable that organizations have a desire to maximize innovation. This goes well along with a desire to have a good approach to control and monitor of success and possibly reward success accordingly. The mean of Management by Objectives as applied in yearly performance life cycles is often adapted for this purpose. It has been designed to empower employees who have clarity of their roles and responsibilities, understand their objectives to be achieved and thus help in the achievement of organizational as well as personal goals. Pay incentives (bonuses) are often linked to results in reaching the objectives to reward success. This approach has its merit in achieving well defined and goals in terms of scope and time frame. Since the performance life cycles is

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constraint to a yearly cycle a clear limitation in what can potentially be achieved is given. To date traditional management approaches have applied structured techniques such as monitoring SMART goals. But maybe managers should challenge this paradigm by looking at different approaches to encouraging innovation eg. approaches - e.g. creative pool, giving people time to work on their own ideas or giving people time to work on their hobbies which develops their learning and thinking capabilities.

CONCLUSION

Shall we be taking the plane to Rome or attempting to hitch-hike there. The answer depends on what we intend to achieve. The plane brings us faster to a target but it requires us to be fairly well defined and does not allow for much room for innovative solutions. A success appears more likely by going by plane because of a better defined endpoint, however, hitch hiking may reveal undiscovered treasures which maybe more rewarding. Thus Pharmaceutical companies may want to review their approaches to training and encouraging innovation. They can retain the value of a structured approach while taking advantage of what the new age of technology brings with regards to communication and networking, and thus potentially to accelerating both learning and innovation.

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