How to Innovate Successfully

Use the brainpower in your organization more effectively

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Partner in Perspective and *Partner* in Performance

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HOW TO INNOVATE SUCCESSFULLY

In this paper we explain how organizations can be more effective in stimulating innovation. We argue that the challenge to innovate can be met not only by creating favourable organizational conditions, but in addition, also by managing the innovation process itself thoughtfully with the help of an Innovation manager and carefully selected Innovation teams. We point out which organizational measures are successful and we show how the talents and brainpower of employees can be mobilised and used effectively in the process. Moreover special organized Thinking Safaris can help to generate the necessary 'Mind Shifts'.

1   INTRODUCTION

Organizations must be continuously innovative in order to remain competitive. In a world in crisis, the ability to innovate is an important key to survival and a guarantee for continuity. It is madness to think that you can keep doing what you always did and expect very different results.

But to be successful, organizations must create a climate in which innovation flourishes. Employees must be challenged continuously to develop new ideas and to bring these new ideas to the stage.

Innovation & Change

Insanity
=
Doing what you have always done
and expecting different results
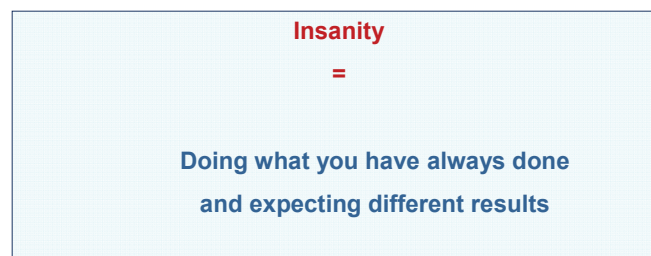
Generating new ideas, however, is only one step in the process. Innovation only takes place if these innovative ideas are actually implemented or put into practice. This means that all four phases of innovation - define, discover, develop and deliver - should be processed and managed well.

This requires courage and decisiveness of management and employees. They have to make choices and make staff and resources available for realization. Especially in a time of financial and economic crisis the natural reflex of organizations is to reduce uncertainty, reflected in for example, strict risk management, putting investments on hold and not fulfilling vacancies, etc.

Without decisiveness and daring behaviour, ideas remain 'on the shelf' and innovation will not take place. Therefore it is important to create the proper conditions for management and employees to increase the innovative capacity and to become more innovative than the competition.

2   CREATING AN INNOVATIVE ORGANIZATIONAL CLIMATE

2.1   Key Issues

Research of Amabile & Gryskiewicz amongst 120 R&D managers indicate that there is a number of organizational factors who are favourable to create an environment in which innovation can take place.

The most frequently mentioned factor (74,2%) was freedom: freedom in deciding what to do or how to do one's work in an open atmosphere. Other factors included recognition and encouragement, sufficient resources and time to explore alternative solutions.

With regard to obstacles to innovation they mention organizational characteristics like administrative procedures, bureaucracy and lack of cooperation, lack of freedom, insufficient support and an organizational indifference for creativity.

Innovative Climate

Stimulants	%	Obstacles	%
Freedom	74,2	Organizational features	62,5
Sound Project Management	65,0	Lack of freedom	48,3
Sufficient Resources	52,5	Lack of support	39,2
Encouragement	46,7	Poor Project Management	36,7
Organizational features	42,5	Evaluation pressure	33,3
Recognition and Reward	35,0	Insufficient resources	33,3
Time to explore alternatives	33,0	Time pressure	33,3
Challenging work	22,5	Overemphasis on status quo	25,8
Pressure	11,7	Competition	14,2
Other	7,5	Other	16,7

The percentages indicate how many % of the participants mentioned these factors.

An organizational climate in which employees are encouraged to bring forward new ideas and have the 'right to fail' or make 'mistakes', are seen as necessary conditions for innovation.

To encourage innovation explicit measures are needed. These measures regard the organizational structure, the way knowledge and experience are shared in the organization and the attitude of senior management. It is essential that senior management put their money where their mouth is and show openly their interest in, enthusiasm and commitment to innovation. A good example has many followers!

In practice however, too often management merely pays only lip-service.

Create an organizational climate for innovation

The 'Janus bifront' syndrome
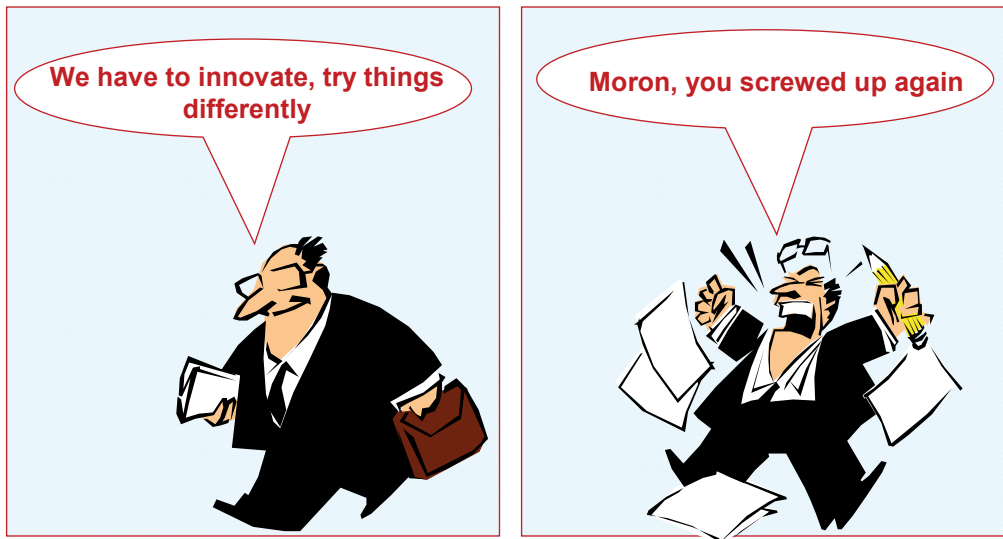
2.2 Levels of influence

Besides a strategic framework and clear company objectives there are basically three levels to influence and encourage an innovative climate or to remove major obstacles: the Organizational Structure, Knowledge Management and Leadership Style. On each of these levels there is a number of effective measures.

Organizational Structure

1. Appoint an Innovation Manager, responsible for organizing processes to enhance innovation.
2. Create Innovation teams with different Personality types.
3. Minimize bureaucracy and let managers function as a heat shield for their employees.
4. Renew 'structural' teams in time, organize mobility.
5. Provide employees with adequate reward and recognition. Create a yearly Innovation-Award.

Knowledge Management

1. Circulate lists of all issues that need improvement. Organize the process of collecting solutions.
2. Make sure that people know each other in the organization and that they know who knows what.
3. Make employees familiar to creativity techniques and creative thinking processes.
4. Allow employees to visit training programmes, conferences and workshops on subjects other than their own field of expertise.
5. Organize Colloquia and workshops to exchange ideas, knowledge and experiences frequently.

Leadership Style

1. Purposely use opinions from outside the own organization, both from experts and laymen.
2. Allow your employees time just to think.
3. Listen carefully to newly appointed employees. Ask for their observations about your organization.
4. Communicate the 'right to fail'!
5. Show commitment of senior management both by 'bold' statements and behaviour.

How easy it will be to introduce adequate measures and how successful they will be, depends not only on the choices and attitude of senior management. Every organization has its own character, that determines its reflexes to change and its attitude towards innovation.

That character is the outcome of a combination of the type of products and services and the type of market the organization and its clients operate in, but it is certainly also formed by the dominant cognitive style of management and employees.

In his 'Character of Organizations' (2000), William Bridges gives us a description of these organizational characters, based on the work of Carl Jung on Personality types (see also page 10). Bridges translates this concept to organizational behaviour. He describes the preferences and the reflexes of organizations to change along four dimensions, each with two opposing orientations.

Organizational Characters in motto

- Extravert *"The answer is out there, we just have to find it"*	E - I	**- Introvert** *"The answer is within, we just have to figure it out"*
- Sensing *"Change the structure and procedures"*	S - N	**- Intuition** *"Change the strategy and values"*
-Thinking *"Do the right thing"*	T - F	**- Feeling** *"Work well together"*
- Judging *"Fish or cut bait"*	J - P	**- Perceiving** *"Go for it, don't miss an opportunity"*

Based on W. Bridges (2000)

The source of energy for action

The *'Extraverted'* organization turns outward, to the market and external developments when looking for indicators what direction it should take. It can act and anticipate quickly and easily and seek help from outside if it runs into trouble. An

'Introverted' organization turns inwards and will depend on its own ideas and expertise to take action. It will only react after thorough thinking and understanding in depth the problems at hand. It will 'circle the wagons' and find solutions on its own.

The processes of taking in information

A *'Sensing'* organization is focused on the actualities and considers developments as a continuation of the past. It will best adapt its existing structure and procedures. An *'Intuitive'* organization however considers new developments as a discontinuity and a break in the trend. It will believe that it can influence the course of events in the future and will change its strategy and value system.

The decision making process

The decision making process in a *'Thinking'* organization is concerned with expected results. It will aim at efficiency and mistrust merely personal issues and judges according principles, appointments and logic reasoning. A *'Feeling'* organization however, takes in its decision making processes into account what the impact on clients and employees will be. It will aim at harmony, and consensus and support are valued and taken seriously.

Dealing with the outer world

A '*Judging*' type organization prefers to reach firm and final decisions and implement its choices decisively on a goal oriented and project-based way, while a '*Perceiving*' organization tends to postpone or avoid decision making, and will continue assessing the situation and information. It tends to develop alternative options, afraid of foreclosing possibilities and hampering the power of vision.

Mapping and understanding the organizational character with an instrument like the Organizational Type Indicator (OTI) is a first step towards successful innovation and change. It provides a framework for understanding its strengths and weaknesses, the reflex of the organization to handle opportunities and threats, its orientation and coping behaviour towards change and innovation. Measures to create an innovative climate can be effectively deployed and better and 'tailor-made' managed.

2.3   The role of the Innovation manager

To enhance the chance that innovation will occur, the creation of a favourable organizational climate is not sufficient. Organizations should appoint an Innovation manager or CIO (Chief Innovation Officer) on a permanent basis, who is responsible for the management of innovation processes: a position like the Quality Assurance Manager. But where the QA manager is precisely oriented towards standardization and ensuring all kinds of organizational and production processes, the Innovation manager is the champion of breaking through common and day-to-day patterns and is the facilitator of changes and renewals.

The Innovation manager should be provided with so called Innovation teams. These Innovation teams could be put together of voluntary representatives of the different departments.

The mission of the Innovation manager is :

- to stimulate employees to develop and bring forward innovative ideas.
- to facilitate and compose Innovation teams.
- to challenge the organization with daring and confronting issues.
- *to pose 'What if…' and 'How else…' questions.*
- to collect and evaluate ideas within the organization.
- to shape and envision ideas and visions.
- to guard 'thinking space and time', necessary to evoke innovation.
- to provide support in all ranks and files of the organization.

To be successful in his mission the Innovation manager requires a special set of competencies.

Competencies of the Innovation Manager

Personal qualities

- Empathy
- Imagination
- Sensitivity
- Entrepreneurship
- Sense of Reality
- Self knowledge
- Helicopter view

Skills

- Encourage
- Listen
- Inspire
- Influence
- Confront
- Facilitate
- Organize

Knowledge

- Innovation process
- Group dynamics
- Thinking processes
- Organizational Character
- Creativity Techniques
- Process Management
- Project Management

3   MANAGING THE INNOVATION PROCESS

As pointed out earlier, knowledge and understanding of the specific character of the own organization and its departments is needed to orchestrate and manage the innovation process successfully. But knowledge and insight in the innovation process itself and the core competencies of the employees and their potential contribution to the innovation process are even more important.
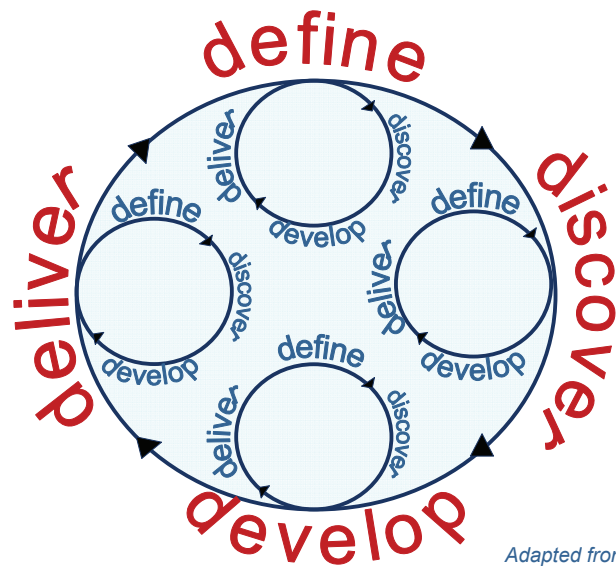
3.1   The process of Innovation

Innovating is basically the process of completing successfully four different stages:
Define - Discover - Develop - Deliver.

The Process of Innovation

Adapted from: Killen & Williams

The first step in any innovation process is to define the problem and get an clear answer to the question '*what problem do we want to solve?*'.

The next stage is to discover new or alternative solutions. This is the step in which idea generation, divergent and 'out-of-the-box' thinking are needed.

Once alternative solutions are generated, the third stage of the innovation process can start. It is necessary to reduce the amount of ideas to interesting but also realistic options. And then choose the options that deserve further development and elaboration.

In the final stage, the idea is put to practice and implemented in a planned, project based manner. A well thought solution is chosen, the product or service is produced and introduced to the marketplace.

In reality, more than once this stage of 'putting ideas into practice' turns out to be the bottleneck in the process. Rethinking or the elaboration of another idea seems the only way out. Therefore the innovation process is a flexible process and isn't limited to a specific logical and well defined order of activities.

Often each step in the process has it's own mini cycle (define-discover-develop-deliver), but innovation doesn't occur unless every step is taken successfully.

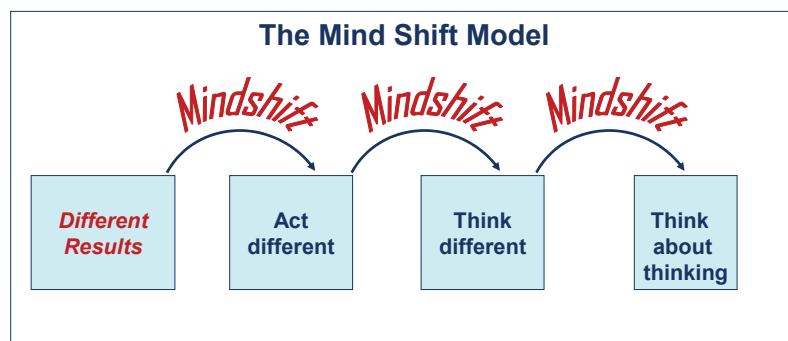## 3.2   Innovation: different thinking for different results

An Innovation is a new and different result. A product, service or production method that differs from what the organization produced, delivered or did before. According to Rolf Smith (2002) we need a 'mind shift' of the first order to accomplish that. To be innovative we have to do things differently.

But to do things differently we need a 'mind shift' of the second order: we have to think differently. Thinking precedes acting. And before we are able to think differently we must be aware of the way we use to think. That urges for a mind shift of the third order: We have to think about the way we are thinking. And that is the most difficult part, because we never think about that and are unconscious about the patterns of thinking we developed.

Nevertheless we have to. Because today's problems can't be solved by thinking the same way we caused these problems and let them happen.

Innovation & Change

(Rolf Smith, 2002)

So it is important to be aware of and have insight in the way we think. Different thinking processes lead to different problem solving styles and they lead to different types of ideas and therefore different types of innovations.

If we can use the brainpower and different problem solving styles in our organization more effectively and efficiently, we will be able to manage the innovation process more successfully.

3.3   Personality Type and Innovation

Each person has a personal set of comprehensive and consistent competencies that influence his orientation for acquiring and responding to the information he receives. This set is called cognitive style.
The basic premise is that every individual is faced with an overwhelming amount of information, and only a part of it can be given attention and acted upon at any time.

Individuals, therefore, develop strategies for reducing and interpreting the information they receive. No strategy is inherently good or inherently bad, and not everybody adopts a clear identifiable set of strategies that become part of his or hers cognitive style. The concept of different cognitive styles is based on the theory of Carl Jung.

According to Jung, every individual uses two basic cognitive dimensions:

- **An information gathering dimension**, divides a sensing strategy from an intuitive strategy. Different strategies for taking in, coding, and storing information, develop as a result of a filtering process used by individuals to select what they see as relevant or information that demands their attention.
- **An information evaluation dimension**, divides a thinking strategy from a feeling strategy. Different strategies for interpreting and judging information develop from a particular problem-solving pattern.

A **Sensing strategy** focuses on detail, or on the specific attributes of each element of data, rather than on relationships among the elements. Sensing thinkers are rational and have few preconceptions about what may be relevant, so they insist on a close and thorough examination of the information. They attach special importance to the unique attributes of various parts of the information they encounter, and tend to be convergent thinkers.

An **Intuitive strategy** takes a holistic view and emphasises commonalties and generalisations, that is, the relationships among the various elements of data. Intuitive thinkers often have preconceived notions about what sort of information may be relevant, and they look at the information to find what is consistent with their preconceptions. They tend to be divergent thinkers.

A **Thinking strategy** evaluates information using a systematic plan with specific sequential steps. There is a focus on appropriate methods and logical progressions. Individuals who use a thinking style generally rely on objective data. Attempts are made to fit problems into a known model or framework. When such people defend their solutions, they emphasise the methods and procedures used to solve the problems. They operate consistently with existing patterns of thought.

A **Feeling strategy** approaches a problem on the basis of 'gut feel', or an internal sense of how to respond. The problem is often defined and redefined, and approaches are tried on a trail-and-error basis rather than through a logical procedure. Feeling individuals have a penchant for subjective or impressionistic rather than objective data, and they frequently cannot describe their own problem-solving processes. Problem solutions are often found through using analogies or seeing unusual relationships between the problem and a past experience.

Jung discovered that the use of these two basic cognitive dimensions is influenced by the attitude toward the outer world.

Extraverts are oriented primarily toward the outer world; they focus their perception and judgement on people and objects. They love excitement and action, act quick sometimes without considering the consequences. They are sociable, talkative and impatient with slow developing work.

Introverts are oriented primarily toward the inner world; thus they tend to focus their perception and judgement upon concepts and ideas. They love quiet work environments to concentrate, they don't like interruptions and tend to be cautious.

The 16 Personality Types

	Sensing		**iNtuition**		
Judging	ISTJ	ISFJ	INFJ	INTJ	**Introvert**
Perceiving	ISTP	ISFP	INFP	INTP	
Perceiving	ESTP	ESFP	ENFP	ENTP	**Extravert**
Judging	ESTJ	ESFJ	ENFJ	ENTJ	
	Thinking	**Feeling**	**Feeling**	**Thinking**	

The concept of cognitive styles was further elaborated and translated into practical instruments by Katherine Briggs and Isabel Myers. They added the attitude of dealing with the outer world 'Judging' and 'Perceiving' and developed the **MBTI** (Myers-Briggs Type Indicator) that gives the opportunity to identify the four basic preferences.

The style of dealing with the outer world (e.g. the extraverted part of life) concerns the preference of using the information-evaluation dimension **Judgement** rather than the information gathering dimension **Perception**.

People with a **Judging attitude** are at their best when they can plan their tasks properly and reach their goals in a planned, scheduled order. They can decide quickly, like organizing and completing a job.

People with a **Perceiving attitude** tend to react spontaneously and are flexible in dealing with changing situations. They tend to keep their options open, always prepared to take in new information and make adjustments. Therefore they are no decisive decision makers and they can easily overload themselves with too many tasks without to be able to complete them.

According to Killen & Williams (2009) the information gathering function is the key factor in the thinking strategy in innovation processes, but the attitude towards the outer world the key for the implementation. Someone's contribution to innovation processes is therefore determined by a combination of preferences.

The SJ - innovation attitude: do things efficiently

For people with Sensing and Judging preferences concrete, detailed information and time are key factors in their thinking process. SJ-types build on already known and existing matters. Information is compared and judged against earlier experiences and known patterns. There is a search for discrepancies and analysis why something led to success or failure. This leads towards ideas to do things better or more efficiently or effectively. They are concerned with realizing things and the outcome of their actions. They search for a practical and efficient way of doing that. Their strength in innovation processes is in implementing ideas in the Deliver phase.

The SP - innovation attitude: do things better

For people with Sensing and Perceiving preferences, the reality and actual situation are leading in their thinking process. They are constantly focused on information that contributes to improve reality: improving existing procedures, production processes and methods. They can easily stop doing things that are not functional or mandatory. SP-types are constantly seeking clarification and simplifying things. They don't stop doing that before they have a clear picture of the problem. Their strength in innovation processes is in analyzing, unravelling and clarifying problems during the first Define phase.

The NJ - innovation attitude: do things different

For people with Intuition and Judging preferences it is essential to realize, organize and plan the execution of their ideas and views. NJ-types can easily build on the ideas of others and adapt them to applicable solutions for their own problems or challenges. They easily recognize patterns in complex situations and see analogies to different contexts. They can combine and link them to their own situation. NJ-types are not satisfied unless their ideas are implemented. Their strength in innovation processes is in converging and reducing ideas and alternatives and to develop the best ones during the Develop phase.

De NP- innovation attitude: do things no one else is doing

For people with Intuition and Perceiving preferences is generating challenging and original alternatives and reflecting on their potential the source of energy in their thinking process. NP-types are not bound by the limits of man and means in the reality. Their attitude: 'nothing is impossible'. Their strength in innovation processes is in discovering new possibilities during the Discover phase. Their energy and interest is not directed towards the actual implementation of their ideas.

Innovative ideas, Attitudes and the Innovation Process

Adapted from Killen & Williams
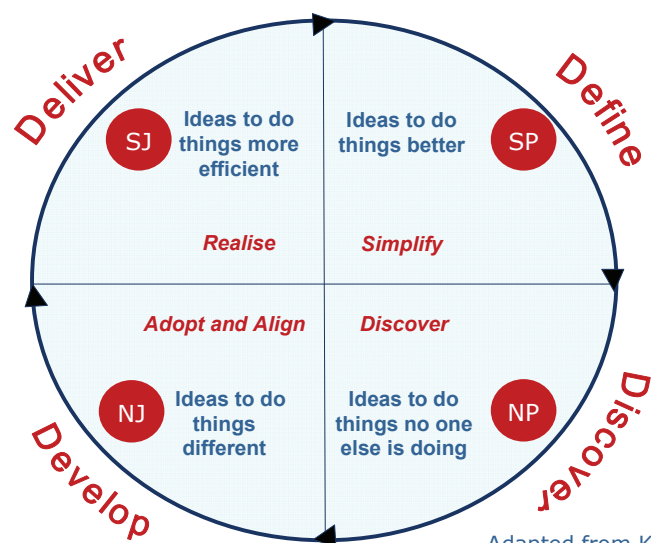
3.4   Innovation Teams

The use of knowledge about the different thinking processes of different types of employees and knowledge about the character of the organization and its reflex on change helps to manage innovation processes more effectively.

The smart and well thought composition of Innovation teams in the organization, based on this knowledge, allows the organization to use the brainpower and therefore the strength of its employees. It depends on the specific task or step in the innovation process if teams should be put together in a more diversified way (i.e. with SJ, SP, NJ and NP types) or just as teams with a specific dominant attitude.

The Innovation manager then could organize so called 'Thinking Safaris' with his teams on a regular basis. A Thinking Safari addresses specific problems or themes and initiates and directs in a more focussed way innovation processes. Shared knowledge of each of the team members' strengths and pitfalls is the key to enhance respect for everybody's contribution in the process.

Dominant Attitude in Teams

Introverted teams	Will probably need time to figure out solutions by themselves, and possibly forget to communicate what they come up with.
Extraverted teams	Will probably react quickly and a bit herky-jerky, communicate too often and too many premature ideas
Sensing teams	Will probably work out improvements step by step.
Intuitive teams	Will probably focus on radical changes.
Feeling teams	Will probably pay attention to the potential impact of changes on people.
Thinking teams	Will probably try to find the most logical and effective solutions.
Judging teams	Will probably be focused on the implementation of changes.
Perceiving teams	Will probably look for innovations with a drastic impact.

SJ-types should be aware that they must be patient in brainstorm sessions or in the process of generating alternatives that appear irrelevant to them. They must postpone their judgement about what will work or not.

SP- types in Innovation teams should take into account that you cannot know or clarify everything upfront. They have to trust on what they do know and be confident to take the next step in the process.

NJ-types have to realize that not everybody can automatically follow their line of thinking. To be effective they have to explain their ideas step by step so everyone can catch up and get the same picture.

Last but not least **NP-types** have to realize that generating new and exiting ideas is not the same as solving the problem. Idea generation is not a goal in itself but a tool to be able to take action. They have to learn to be patient and to commit themselves to develop and deliver realistic solutions.

3.5   The role of HRM

The Human Resource Department could play an important role in this process of innovation by
- assessing and mapping the character of the organization,
- recruiting an Innovation manager with the right skills and competencies
- assessing the personality types and therefore the brainpower of the employees who volunteer for the Innovation teams
- helping to put together the most effective Innovation teams.

Organizing Workshops in which the Innovation teams are facilitated and skilled in using different types of creativity techniques could be another important role. These skills will increase the effect of the 'Thinking Safaris'.

In the end it is the task of the Innovation manager together with the Innovation teams, to question running processes, dilemmas or bottlenecks and approach them from a different angle and perspective than usual: *think differently* and *look differently*.
Only in that case the organization will be able to make the necessary steps towards 'acting differently' and producing 'different results'.

Ten Commandments of Successful Innovation

1. Create a favourable organizational climate
2. Analyze the character of your organization, to understand its reflexes on change
3. Appoint an Innovation manager who has the adequate skills and competencies
4. Manage the innovation process itself well.
5. Understand that different personality types think differently.
6. Understand that different personality types have different attitudes towards innovation
7. Set up Innovation teams and organize "Thinking Safaris"
8. Use the differences in brainpower in your organization to cover the idea landscape.
9. Take account of the different phases in the innovation processes and the character of your organization
10. Organize the implementation of innovation as projects.

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