

JPR-Focus No. 01/20

The newsletter of JPR Concepts & Innovation in the new format and still free of charge. Published in three languages - German, French, and English - now 3 to 4 times a year. Deepened, holistic viewpoints on current issues. Texts from this newsletter may be used gladly in other newsletters and web pages. However, a reference to the "JPR-Focus" as a source is necessary.

Dear readers

A warm welcome to the first issue in 2020 of JPR-Focus, our newsletter in a new format. The topic of today's issue is something that many people talk about, especially the marketing and sales people, something that is tremendously important for companies and also for all of us: innovation.

I hope you enjoy reading it.

Kind regards Jean-Pierre Rickli

Innovation - the driving force in life

1. Introduction

Every day we are flooded with news about innovations, innovative concepts, companies or people. Local, regional and Swiss prizes are awarded for the most innovative product, idea or company.

Countries around the world are also judged and classified according to their innovative power. We are supposed in Switzerland to live and work in one of the most innovative countries in the world. I write "supposed", which expresses a certain scepticism. As a rule, only the top ranked countries are reported by the media. There is hardly any information about the criteria, their weighting and other useful information. Unless there have been changes in the classification, which is often justified only by a reference to a change in some evaluation criteria.

Innovation is therefore at the centre of our lives. Without it, apparently no progress is possible. This statement seems plausible to us at first. Nevertheless, our experience tells us that it is not always so.



However, if one asks oneself the question about the meaning and significance of innovation for our society, it soon becomes clear that not everything that is praised as innovation is really one. Or is it?

It is therefore necessary to clarify the concept of "innovation".

2. What is Innovation?

What seemed simple turned out to be a real crunch. In fact, the encyclopaedia confirmed that everything that is praised as innovation is linguistically correct. In the economy, innovation succeeds the invention and goes beyond it by its economic exploitation.

There you are! Innovation is all that is new. The term "latest" is not an extension of novelty, but has only a temporal component and that is for the very actual novelties.

The difference between the innovations that we feel inside has therefore nothing to do with the degree of novelty. Its origin has more to do with the second part, the economic component; with the purpose or the benefit.

From this we can define the following innovation categories:

- Innovations whose benefit lies practically only with the manufacturer/seller.
- Innovations with clear benefits for both parties or at least for the user.
- Innovations that cause major changes in society without providing sustainable benefits
- Innovations with a great benefit for society and clearly sustainable.

a) Innovations with one-sided benefits for manufacturers/sellers

Such innovations can be observed almost everywhere today: in the fashion industry, in supermarkets and generally in consumer products. They take place every day, so to speak.

Many such innovations are mainly sales-related novelties. The product is slightly modified and already it is "new". This means that price and packaging can be redesigned or the old product becomes obsolete if the consumable parts no longer fit.

What is "new" can hardly be verified. Vague statements like new formula or optimization of the production are often regarded as justification.

In principle, the word "innovation" may be used for such innovations that merely spur consumption. However, they are by no means true innovations.

However, if a defect in the product has been eliminated, it is usually not sold as an innovation. Consumable parts can usually still be used and repairs are often possible, even with the improved parts.

b) Innovations with clear benefits for both parties or at least for the user

Such innovations are much rarer. Products are changed significantly; new technologies or materials are used or gaps in the product line are advantageously closed.

Even if some of these innovations are only of minor importance, they deserve to be called innovation. After all, content was provided on the product. This is also the reason why such



innovations only occur at medium and longer intervals. New technologies require or enable new concepts. New materials give new freedom and make new manufacturing processes necessary. New functionalities often lead to new technical solutions. All this requires a lot of time until the product can be brought safely to the market.

This is the core of the innovative power of a company, a region or a country. As it often takes place in specific and very specialised areas, it is hardly noticed by the general public.

c) Innovations that cause major changes in society without providing sustainable benefits There we find the great inventions: the steam engine, plastics, the airplane, telecommunications, the car and many others. Recently, new business models such as Amazon, Uber or Facebook have emerged.

All of them have contributed, probably in different ways, to shaping our society today and to influencing and changing our lifestyle. And they still do. We should be grateful for this.

However, as we see it today, they are not sustainable. We experience this nowadays, sometimes with surprise, because it happens often after a very long time compared to the one of a human life. Everywhere we come up against limits and realize that it cannot go on like this. Much of what we considered a blessing at the time is now proving to be a plague. Too many cars, too many tourists, too much plastic, too much energy consumption. Too much emissions. Simply too much of everything.

There is indeed intensive research, development and invention. Unfortunately, in most cases it is only about fighting the symptoms: For example, power generation with less CO2 emissions, but higher consumption of rare materials or plastics, cars with less CO2 emissions but higher consumption of plastics and resources, plastic-free solutions for packaging and disposable products and higher consumption of plant products. What is really better has yet to be proven. All too often, the main thing is that one does something!

d) Innovations that are of great benefit to society and clearly bring long-term sustainable progress

Only a few of the innovations to date belong to this category. They are of such a fundamental and sustainable nature that they continue to exist. New innovations in this category are urgently needed to ensure the sustainability of our activities.

3. What are the usual drivers of innovation?

The great driving forces of innovation are need, demand and scarcity. This can be seen very clearly at trade fairs like the annual Inventors' Fair in Geneva.

Where drinking water supply is problematic, innovative solutions are invented for the treatment, whether desalination, sterilization or purification of water from available sources to drinking water. In most cases, the solutions are for everyday life, for household needs, rarely industrial solutions. Or where the medical care of people in places in remote areas is insufficient, solutions for self-diagnosis or self-medication are developed.



Another example out of countries with underdeveloped electricity supply of distant regions. In many such regions it can be crucial whether you have light from an LED lamp in the evening. The few watts required for this are collected individually during the day from many small sources. The money for a solar module and the corresponding battery is often missing. Therefore, creative and innovative minds tinker with inventions that are often unimaginable for us. Unimaginable for us because we regard these watts and often more as acceptable waste for the standby solution, which saves us getting up to switch on the device.

Therefore, the conclusion is obvious: if a society is fed up, then its capacity for innovation suffers or it is used for irrelevant things.

This applies not only to the society, but also to companies.

Many do not see any added value in their products or services compared to those of the competition. Sometimes these products and services do not offer such added value either. The only distinguishing feature then remains the price. Therefore, it is essential to reduce costs, in many cases "cost whatever it takes!" First of all, innovations bring savings in machining, material use or production. When the possibilities are exhausted, depending on the ethical values of the company, some of the work is outsourced to the customer - today the customer does the job of cashing - or new products are advertised which actually only involve a change in the packaging (contents).

Other companies have positioned themselves and their products differently and clearly. For example, their business models are based on quality, safety, accuracy or even innovation. As a result, price is no longer the number one factor for innovation. If the goals of such models are left open without a quantitative specification, then the innovative power never slackens, so to speak. According to the motto, there is always something to improve.

Here, the particular position of an often neglected source of innovation is to be mentioned: the customer service. Repairs, parts that need to be replaced, even outside the warranty period, and customer feedback, when properly analysed and not simply booked off as a source of costs, are not only a source of innovation for developers, designers and production people, but also of inventions. Very often the solution of a technical problem triggers a series of new patent applications.

4. The global influencing factors - The Kondratiev cycles 4.1 What are these cycles?

Our life is a series of cycles. We are born, grow, develop, get older, maybe weaker and die.

What applies to the individual should actually also apply to the society. This is what economist Nikolai Kondratiev thought. That is where his theory of long waves came from, which he based on observations of the last 200 years.

Such cycles of 40 to 50 years have so far been triggered by revolutionary basic innovations. The first Kondratiev cycle in 1800 was the steam engine and cotton. Later in 1850 it was the railway, in 1900 for the third cycle it was electricity and chemistry. The fourth cycle was triggered around 1950 by petrochemistry and automobiles and the fifth cycle in 1990 by the information technology.

Such basic innovations occur when a shortage or need can no longer be satisfied.



Since the fifth cycle is already fading away, the question inevitably arises: Who is going to be in the sixth cycle?

More about that later. First, we need to know more about the trigger factors.

4.2 The possible governing principles

This is the big problem with these cycles. Although the observations seem to be correct, it has not yet been possible to define a clear chain of causality.

This is not surprising, actually. Because when you analyse the results like certain numbers or trends, you are looking at symptoms, which can be very different. The society in these two hundred years has changed a lot and at the economic level there can only be a certain similarity. This is also what Kondratiev observed and also all those who have tried to understand these cycles more closely.

We must therefore shift our attention to a higher level.

Perhaps the temporal view in Feng Shui can help us there? There we find certain parallels like the cycle approach and the 60 years. Also the current larger time period of 180 years which started in 1864 and will end in 2043.

The key data in comparison would then be:

- 1804 as start of the first Kondratiev cycle in the last third of the previous 180-year period
- 1864 for the second
- 1924 for the third
- 1964 for the fourth
- 1984 for the fifth
- 2044 for the sixth

Some of these data appear suspiciously familiar to many, at least if you take a few years in or out. We also notice, according to this teaching that we are at the end of one of these 180-year time cycles.

It is also worth noting that the end of a cycle does not simply point to the starting field. Rather, it is a new beginning with the same sequence, but under different conditions.

One does not go around in circles; one walks along a spiral. You have changed the plane and the boundary conditions are different as well.

Theoretically one could go back to the very beginning of Feng Shui - about 3000 years before Christ - and unroll the sequence of small and large periods to find the main sign of the present period. Because of the enormous time span and the no less great differences in the society over the years, the result would be rather speculative. It should be enough to focus on the current period.

We are in the last third of the 180-year time cycle, that is, in the lower origin dedicated to the earth. In addition, we are about to enter the last 20-year period, which is also dedicated to the Earth. So, the theme would be: The Earth or even better the "System Earth".

Interestingly, we are standing at about the same place in the previous cycle where Darwin published his theory on the origin of species. A theory that has influenced the current cycle so much and is now being thrown overboard by many. Life is not a matter of competition, but of cooperation. At



that time it was about the origin of life on Earth. Now one could assume that it is about the perpetuation of life.

Therefore, could the Kondratiev cycles be synonymous with the 60 cycles of Feng Shui? There are many indications that this is the case.

Thus, technologies would not be the triggers for the great changes in our society, but merely tools for them. Our future should not be confused with technologies.

4.3 The possible theme of the sixth cycle

Or should the title not rather be: What is needed in the next 180-year time cycle?

Various business researchers have asked themselves which technologies would dominate the next Kondratiev cycle. The following possibilities were brought into play.

- Biotechnology
- Nanotechnology
- Robotics or artificial intelligence
- The nuclear fusion energy
- The mobile internet, the internet of things and cloud computing
- Renewable energies, technologies for the efficient use of resources

These technologies are certainly important and will continue to be necessary in the future. But, as mentioned before, they are all just tools for what is required.

Leo Nefiodow also derived the significance of the topic of health from the economic perspective, primarily human health.

As already said, cycles run in a spiral. Therefore, what is needed for the next round is on a different level. It is no longer the economic aspect that is the focus.

Looking at the problems at hand, the conclusion of Nefiodow and the overriding theme from the Feng Shui consideration, one comes to the conclusion that the theme of the next cycle is the health of the "System Earth". This includes not only us humans, but all animals, plants, the environment, water, air, soil, etc.

Thus, all technologies that help to restore, stabilize and improve the health of this system are essential. Many as seen above already exist or are already advanced in their development. However, they need to be implemented for the benefit of all. For this, something decisive is needed: a change of consciousness! Our environment is not only supplier and servant. It is part of us and of our health.

5. How do you achieve innovation?

5.1 Generals

It is all too often still believed that innovation can be "managed". This is why training in "agile innovation management" or standardized innovation management according to ISO 56000 are offered.



Sometimes the boss has the feeling that there are too few innovations made in the company and gives the command: from now on we have to be more innovative. Measures are taken to achieve this goal, such as setting up idea boxes, suggestion boxes, appointing a jury to evaluate the ideas, defining an innovation process and many others.

Creativity and innovative ideas cannot be commanded. They cannot develop and flourish in structures. This is clearly demonstrated in our educational system. In the best case, 10% of the initial creativity of children remains after their obligatory schooling. After school most of them have become unimaginative carry-outs.

The usual procedure can be described roughly as follows:

- One stands in the desert and orders people to select individual seeds from a bag of mixed seeds and put them into the ground,
- The soil is kept arbitrarily dry, moist or wet,
- If by chance a cotyledon or several cotyledons come up, an ignorant judge decides whether the plant is valuable and what should be done with it.

No wonder that many ideas are already dying in the bud!

Of course, not every idea is valuable and feasible for a company. Furthermore, the company's resources are not unlimited. It also needs structures. Let us see how it can be realised.

5.2 Ensuring the environment

Ideas are like seeds; they are the result of fertilization. They do not come to existence by themselves. They need the exchange with others, the confrontation with others. Only then can the seed, the idea emerge and a fruit develop from it.

It is therefore necessary to provide the appropriate environment. It is not enough to simply say: play here, be creative and bring me a result in two hours. Often even not only a seed is expected as a result, but a whole fruit.

What does it mean to ensure the environment for innovation? You can read that below:

Ensuring the environment for innovation What it takes for this

- 1. A corporate culture that promotes creativity This should not only take place in the "creative" departments, but should be lived throughout the entire company, from top to bottom.
- 2. Open and natural communication within the company, from top to bottom and across departments and business units. In this way ideas can cross-fertilise each other throughout the company. The company should be permeable. Structures and hierarchies should offer support and not be a hindrance.
- 3. Mutual respect, trust and an open attitude are present and lived at all levels of the company.

4. Now that the soil has been prepared, it is important to ensure that the seeds can germinate and grow. They must be given water, not too much and not too little. Ideas can be nurtured until they are ready for you to see what to do with them. Time and patience are needed, as well as curiosity, openness and gratitude for what may come.

Coaching, Wissensmanagement, Innovation, Energie

5.3 Encouraging Creativity

JPR Concepts & Innovation

J.-P. Rickli Coaching

Now that the ground has been prepared for, creativity can develop and unfold. But there are still a few hurdles to overcome first. The most important of these is actually only the fact that we have reduced our innate creativity down to 5% by the time we leave elementary school. This creativity is located in the right hemisphere of our brain and was totally suppressed by education.

The economic imperatives of our society have led our parents to prioritise the "right" learning content for the "right" job. Through this education and conditioning we have been raised to become perfect, efficient human professional robots. There was no room for creativity. The last percent of our creativity then disappears in the companies at work, where it is primarily about functioning and where dreams have no place.

The good news is: this creativity has not been lost. It has not disappeared either. It just lies dormant and asleep within us. We need to bring this childlike, natural creativity back to life! There are many different techniques to do this, which will not be discussed in detail here. Most of them are about reducing the need for control of the left hemisphere of the brain.

This happens by giving creativity a clearly defined space. After this phase the left half can take control again. With time, the space becomes larger and larger. In this way, both hemispheres gain confidence, the left that everything is controlled and the right that it is given space. This is typically the procedure in Brain Storming.

Before dealing with innovation, such actions can be used to good effect in providing the innovative environment, as exercises and familiarisation, so to speak.

Once creativity has been reawakened in the company and is alive and well, one can get down to tangible innovations.

5.4 Definition oft he Frame

Every company, every person has a specific task. Not each company or person is responsible for everything in the world.

It is therefore a good opportunity to reflect on the vision of the company, its mission and its values. When this is clear, the members of the development team can reflect on their own values and objectives.

In an exchange within the team the common values and objectives of the team can then be defined. In this way, the team is aligned with its tasks. Only when this is clear, further work on the innovation can be started.



Afterwards, all those involved and affected must be identified and a representative in the team must be nominated for each of them. Some of these positions are familiar, but too many have all too often been overlooked. Here is a more detailed list of the partners involved:

- The market respectively the customer
- The sales and the marketing departments
- The development and the design units
- The factory
- The after-sales as well as the service and repair centre
- The investors
- The legal frame
- The suppliers
- The natural resources
- The staff together with their families and relatives
- The authorities and society at the place of production, installation or consumption
- The recycling und the reuse
- The environment and the sustainability

Perhaps there are others who have been forgotten here?

You can see right away: hardly any modern product involves more than the production and distribution partners. Even when it comes to customers, one looks more at how new needs can be created than existing needs can be met.

Due to their short life cycle, especially in the consumer sector, products and services are practically conceived as waste and are regarded and treated the same way as waste by customers.

A sustainable innovation breaks this thought structure and makes sustainable things possible, not only for the environment but also for everyone involved. Innovations, products and services are created that are valued and last and last for a long time.

The rest is routine work. There's no need to go into that here. There is already enough literature, procedures and methods. This is now the structured part of the innovation.

6. Summary

We stand at the end of a period of time and on the threshold of a new age order. This is derived from the not so comprehensible Kondratiev cycles and mainly from the much structured 60 years cycles or the even larger 180 years time cycles of Feng Shui.

This means that what we need today are innovations of the fourth type, type **d**) which are of great benefit to society and will clearly bring it forward in the long term.

The solution to our mobility is not to be found in the way cars are powered, but in the understanding we have of our mobility. It may be that drive technology will then play a role.

Similar thoughts are in place for all the critical issues today; for health, for education, for finances, for the environment and so on and so forth. All these open questions belong to the topic "Health of the Earth System". This is simply the overarching theme to which all innovations must conform. The innovations of type a), which mainly serve self-interests, are hardly needed any more.



Innovation is not a question of structure; it is a question of context and mindset. That is the greater challenge, because our creativity has been buried deep within us by our search for efficiency and material security. Now we must reawaken, cherish and nurture it. Ways to do this are known.

Let's go for it!

Yours Jean-Pierre Rickli

Let your friends and acquaintances participate in this newsletter. Simply forward it or better let them register!

Earlier Issues of JPR-Focus can be accessed under News/Archiv of our Website or directly by clicking here: <u>http://www.jpr.ch/newsarchiv.cfm</u>

JPR Concepts & Innovation J.-P. Rickli Coaching - Knowledge Management - Innovation - Energy

Höchistrasse 47 8610 Uster Tel.: +41 (0) 44 9404642 Fax: +41 (0) 44 9404643 E-mail: jprickli@JPR.ch

Subscription or deregistration: simply via the website <u>www.JPR.ch</u> or by e-mail to <u>jprickli@JPR.ch</u>