

7 habits of highly innovative teams

Innovation = change in value for users minus change in cost for producers

This is an ultra short checklist and a 7 page manual to innovation processes making a significant difference. Among the new insights are a synergy approach, a sailplane metaphor for innovation management, a shift from innovation project to a “start up” and venture mindset, and finally a continuous innovation approach marketing the prototypes

Have fun. ☺

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Innovation navigator

CONDITIONS

Global economy
Education
Demography
Culture
Market

Megatrends
Scenarios
Media
Fashion
(Sub) culture
Lifestyle

SELLING

Supplies
Service and support
Warranty
Maintenance
User clubs
Sale
Distribution
Marketing
Brand

CULTURE

SENSING

First impression
Identification
Storytelling
Sentimental value
Collector's item
Symbol
Prestige
Comfort
Beauty
Liberating

ORGANISATION

USER

USING

Functional
Durable
Reliable
Convenient
Sustainable
Economical
Healthy,
Secure
Safe

PRODUCING

Production
IP and patents
Test
Proof of concept
Prototyping
Design
Competences
Leadership
Alliance
Strategy
Idea

SOCIETY

CAPACITY

Educated people
Technology
Mindset
Organization
Capital

Laws Standards
Infra structure
Subsidies/Tax
Environmental
Restrictions

POTENTIAL

CONTEXT

1 Asking the billion dollar questions

You can of course make fantastic innovation by pure luck and chance. If you are not that lucky, you better aim at asking the innocent really amazingly deep questions.

Zoom out

Do the “20 questions” backwards always asking for what is ever more generic

1. What kind of fire-place do we need to heat the house?
2. What do we need to heat the house
3. How do we achieve comfort in the house
4. How do we achieve or even perceive comfort

While the first question only leave us with one solution: A fire place, the second solution could be any kind of heating, the third could substitute heating with insulation and passive solar and the fourth could be some unknown high tech super insulated clothes or skin treatment. Searching the real needs, behind the traditional means, is a tremendous key to innovation.

Look for what is outside the picture. If you get to these white spots on the map first, you can make the break through innovations. The things you didn't know you didn't know. Zoom out until everything, -I mean EVERYTHING-, is within the picture frame.

Academics and consultants are with sarcasm defined as people asking questions, they are the right persons to answer. Zoom until you reach questions where nobody know the answer, and everybody are longing for a better answer

Man on the moon within the decade

Rephrase the questions into quests rather than challenges

Something so appealing and great that is worth fighting for

So incredible difficult that it could be impossible.

- Curing cancer
- Stopping aging
- Connecting minds making our intelligence grow as fast as the computer's
- Growing fuel and food in the oceans

Don't expect to get there within a month. But map a path providing lots of amazing prototypes.

2 Ban the obvious

Make a list over the ten things which are most obvious. The solution is most likely hidden where you never look for it because you don't even dream of questioning the common wisdom

If you are innovating a car, the most obvious and un-questionable things could be : 4 wheels, made from steel, combustion engine, manual gear, brakes, steering wheel, 2 seats and a bench, luggage trunk, windows at all sides, headlights. Ban them one by one, and see what alternatives you come up with. Repeat the process over and over until you come up with some truly amazing solutions

Change optics

Innovation is about seeing what nobody else sees. You can observe the same object and yet observe different things if you change optics from normal pair of glasses to a microscope or a star telescope and even more different things if you use x-ray, radar, infra red night goggles or Doppler. The same goes for innovation. Change optics and you see new opportunities. Yes you can:

- act/become the different role players: user, salesman, producer, banker, repairman
- act/become the product/service and imagine the interaction with the role players
- imagine the product/service minimized or maximized to investigate the effect of size
- switch figure and ground, black and white, foreground and background, soft and hard
- Imagine switching sex, changing age or social position
- Focus on those who don't buy instead of those who do buy
- Focus on products and services not offered (yet) instead of those available
- Change senses one by one and look for those which doesn't make sense
- Change speed, slow motion, fast forward
- Switch between the 7 intelligences (logical, linguistic, interpersonal, intrapersonal, kinesthetic, musical, spatial) and look for those which doesn't make sense

Change media

"The media is the message" as Mc Luhan wrote back in 1967. If you usually write your notes in "Word", try using "Power point". If you write in Danish try writing in English. If you draw your design with a pencil switch to 3D models in cardboard, in metal, in clay. If you design in 2 D switch to 3 D. If you design something stationary try make it into an animation. By switching media you also innovate your message. You can even communicate, -interact-,with your message and invention. Use mind maps, storyboards, sketches, models, dairies, to get thing out your head in order to share and organize your thoughts.

Absorb inspiration

Nature is a great source of inspiration. Watch what million of year's evolution has developed. Scientist, inventors or hobby enthusiasts might already have the solutions you are looking for. Look for emerging technologies in all different fields. They could be the thing changing the game.

Paradoxes, humor and art

Paradoxes and humor are great sources of innovation. Consider innovation as a joke, in the positive meaning. Combine words that is not normally connected to each other, play with new words, new concepts, new worlds. Look for inspiration in art, movies, science fiction, and fantasy literature

3 Mind(set) the tension

Just like earthquakes release tectonic tension, disruptive innovation is most likely to occur where a business is most out of balance, falling far behind other businesses, not yet utilizing emerging technologies and competences or being particularly un-productive and losing money. Look for strong tension between what is offered and what the users really want or want to pay for. The offering can be both too wide and too limited. Successful innovation is often hitting the priorities of the user's bull eye.

Scenario mindset

Business as usual, equilibrium, everything being equal, is the most common mindset. But frankly speaking that is highly unlikely in a world with 30% more people, 60% more retired people, 50% less oil and a hundred thousand times faster computers within the next 20 years

Investigate the innovation potential in these changes using a scenario mindset

1. What is the 10 best thing that could happen
2. What is the 10 worst things that could happen and how can that be an opportunity
3. What 10 kinds of unlikely events could rock the boat and change the world

Challenge paradigms

Einstein once said that you cannot solve a problem within the mindset that created it. Professions are full of paradigms, rules, special language and basic assumptions. Take a close look at the skills and professions in the business and find out what is outside these professions, what is invisible to the professions, what is even deemed un-professional. Look for solutions in other businesses with tougher challenges. To them, your challenge might be trivial. The contemporary paradigm shift is from dead to alive, to intelligent and interactive systems, to green, biological, genetic, converging systems and services, to biomimic, adaptive, learning systems and products.

Innovate everywhere in the value chain

Look for innovation everywhere: Management, partners, competences, organization, production, distribution, customer relations, services, maintenance, recycling. And when you have innovated distribution, you will also change the product like IKEA did with self assembly kits. If you change the customer relation selling via the internet, you also change the product like Southwest did....

Focus & Flow

Work undisturbed for many hours. Imagine that your brain needs to read all relevant information into a memory in order to process the complexity. Disturbance is like pulling the plug and needing a restart. Separate idea generation and evaluation, but keep switching back and forth between generating ideas and evaluating them. Keep adding competences and new people to this process. Never stop after the first loop. Take the necessary number of loops, until the result is brilliant.

Use the fast lane

Most things evolve slowly but computers double speed every 18 month and have done so the last 50 years and might do another 50 years. So far the speed has increased roughly a billion times. The more you can move your process, product or service into this virtual world, the faster you progress.

Give chance a chance

Be aware of pure luck. If you are too busy pursuing your plans you might not notice your luck.

4 Synergize

The challenges we face can only be solved in a new era of synergy. Productivity and innovation are both about producing the same things faster and to increase the value of the things. The concept is that a system can deliver more than it's parts can. Just like a clock is more than it's cock wheels

- Goggle and Wikipedia create synergy in global information
- Electric cars can store electric energy in synergy with wind power, solar energy and other renewable energy sources needing storage
- Lighter cars need less engines needing less batteries making them even lighter ...

Positive side effects

Sometimes the side effects may show up as a significant attraction. Super insulating windows save energy **and increase comfort**. Tesla roaster has a large electric motor giving rocket performance **and saving all the braking power**. Electric cars save energy, **and saves the environment from noise, smell, particles**. I-pod provides you with mobile music **and saves material, space and energy**. LED light and monitors saves energy for lighting **and energy for cooling in the room**

Integrate

I-phone squeezes all the functionality you need into one single mobile unit. The value for the consumer is larger than the sum of all the substituted boxes: Cell phone, GPS, Stereo, CDs, PDA

A small thing making a large thing better

Maintenance is of course about keeping an expensive thing running by adding new spare parts. But these new parts can have significant added qualities like new low energy tires, winglets for planes, software, add-on's, plug ins etc. improving performance at marginal cost,

Higher utilisation

Using tools and staff 24/7 reduces the physical items you need and improves cost benefit. Ryanair is a master in this discipline, www.hotels.com increases the load factor on hotels worldwide, co-generation on power stations utilizes the fuel better etc.

User synergy

Innovation is not only about products but about their impact on the user's life: Products and services enabling, supporting and sustaining individuals and communities and also sustainable business.

Ecology

Ecology is defined as the interaction between a living organism and it's environment. Focus on the impact of this interaction, but also use less materials, energy, water, meat, keep stuff longer and recycle. The imperative challenge is: Minimal ecological footprint. The innovative approach is to make it nicer, more comfortable, more fun and sexier to be sustainable

5 Choose WOW

Choose the solution creating enthusiasm in the audience. It is a little like falling in love. Without the enthusiasm, the fascination, the WOW, chances are small that the solution will survive the long process towards reality.

Start with hundreds of different solutions

Nature has produced million of species and there are species in any habitat. That is the basis for natural selection. Without anything to choose from natural selection would never work.

Do commercials before prototypes

Try to communicate the many ideas in 15 seconds commercials. If you can't tell a convincing story in 15 seconds, the elevator pitch, you can forget about attention and forget about your innovation.

Hit the target group

You cannot communicate with everybody. You have to address somebody specific, because you are dependent on the response. Just as some messages are only interesting to a specific target group your innovation is only interesting to a target group. And be cautious if that target group is very small. The smaller the target group is, the more the invention need to be collector's item

Go for excellence

It might be easier in the short run to cut the corners and make something pretending to be great. But in the long run it pays to be honest, to provide real excellence, to satisfy rather than to cheat. Go for brand value rather than TV-shops. Go for excellence. Aim at the permanent exhibition in MOMA. Innovate collector's items.

6 **Become a glider pilot**

Production is like flying a scheduled motorized plane, but innovation is like flying a glider. Everything equal a glider pulled to 3000 meter can fly max 200 km. The world record for gliders is however an astonishing 2500 km. The best path is the path with most up and tail wind and least down and head wind. Translated into the innovation process, you navigate to find people, organizations and funding supporting your project and avoid those trying to crash your project. Don't be fooled by having a budget for the entire innovation process. If you lose altitude, if one single thing goes wrong, if you don't continuously reconfirm your support, the project will crash.

Create good feedback circles

If the innovation can create enthusiasm, it can gather enthusiasts, tapping into sources growing when shared: Good circles, positive feedback circles, reinforcement circles, are powered by

- Win-win
- Sympathy
- Confidence
- Respect
- Empathy
- Knowledge
- Joy
- Care
- Generosity
- Vision
- Success
- Support
- Help
- Enthusiasm
- Celebration
- Forgiveness

If you and your invention can create this spirit, your invention will survive even without funding

Connecting minds

The collaboration challenge is to connect minds, making more people think and innovate together empowered by

- Shared goals, values and benefits
- Workshops connecting minds
- Interactive tools
- Enthusiastic facilitation

Manage risk

The one thing investors hate the most, about innovation, is unpredictable risk. Map the critical path and start proving the solutions that could be fatal to the project if they fail. Proving the concept can be virtual, composed from simulation and virtual reality experiences in "caves", but physical live models are often more convincing. Develop always a plan B or in critical issues a plan C so you avoid hitting the stonewall. Introduce only one risk in each step of the process.

7 Virtual start up

Every successful innovation needs an entrepreneur or intrapreneur fighting for it. Some organizations believe ideas can be passed on from the inventor to producers. It is like driving straight from the birth clinic to the kindergarten and leaving your baby there for good. The baby needs love, care, training and devotion for decades or it will suffer or even die.

Forget about R&D departments, technology departments or innovation departments. Forget about internal and external. Innovation projects should be considered as start ups. Start with a business plan and a prospect you can present for “internal venture investors” in 15 minutes on a “First Tuesday” like event. Establish a start up or a virtual startup within your company.

A virtual start up is different from a project because it extends outside the departments, even outside the company. It includes all aspects of the value chain. Upsides in the start up are the incentives, and the whole thing is for real. You only chose to participate, if you really believe in it, not because you are ordered to.

Set a team with all the competences needed

Innovation is about things you don't already do and don't already know how to do. Always set the team with the necessary competences, those who really can solve the entire challenge, before you ramp up an innovation project. You often also need extra tools and facilities and new customer relations.

Use customers as leveler

All funding is temporary. Your best allied in any innovation process is your customers. If they are on your side, your innovation comes true. And remember, half the customers are women and soon 50% will be above 40 years old and 50% will live in emerging economies like Brazil, China, India and South Africa. Track user preferences, complaints, annoyance, ergonomic, consumer tests, users own innovations, trends, fashion. A good fruitful innovation process, on something nobody really wants, makes no sense.

Sell your prototypes

Step by step prototypes gets closer to the actual product. Keep the process virtual as long as possible because it is less expensive to learn from mistakes and correct the model in the virtual world.

Cell phone producers are extraordinarily good at making the customers buy the prototypes thus step by step reaching their vision of converging mobile computing. High speed innovation is made from a long and frequent row of small step prototypes within a long term strategy rather than by one single disruptive innovation.