PETER HESSELDAHL GROUND RULES FOR THE 21ST CENTURY Chapter 14

THERE MUST BE ROOM FOR ERROR

You probably remember being a child, studying a ladybug crawling up a leaf of grass, upwards towards the sunlight. Eventually, it reaches the tip, where it can't climb any further - so it spreads its wings and flies.

But what do you do if you don't have wings?

There are two possibilities: Either you crawl back into the shade again, or you can throw yourself into it the air and hope for the best.

Lots and lots of mature and venerable companies have stood before the abyss and have had to plunge into the unknown. The Finnish mobile phone giant Nokia started as a paper mill in 1865, but eventually expanded to include a broad and incoherent portfolio of activities. In the mid-eighties Nokia's product lines included toilet paper, rubber boots, tractor tires, agricultural machines and televisions. When the Soviet Union fell, however, Nokia felt the knife against its throat. A very large share of its market suddenly disappeared, and to survive, Nokia was forced to trim and focus its portfolio. As it happened, the management's bet for the future was mobile phones - and the rest is history. Once, it was obvious that the vast forests provided the raw material for the Finnish industry. Today mobile communications is the Finnish core competency. But it's already evident that Nokia are not allowed to rest on its laurels. The device, which we call a "mobile phone" and the smart services and utilities that it connects us too, are changing, faster and faster.

Entire industries may face a similar situation when the rules of the economy change. The music recording industry is deeply divided on choosing its future business model: If everyone is able to copy or download music for free, how can you possibly make money producing it? It's the same problem virtually all media are facing - from newspapers to the movie industry.

Similarly, in the energy sector: The oil age is running out, and with the increasing awareness of climate change, all industries that emit large amounts of CO2 will be fundamentally challenged.

Arguably, the entire lifestyle that we have built around a non-sustainable consumption of natural resources could be facing an abrupt change. Clearly, it will soon become very cramped on the planet if we insist on continuing to live the way we're currently doing. If our species is to survive, let alone flourish, it is time to find another route forward. But we are very reluctant to do so. No one enjoys being forced to jump into the unknown, but that's the situation we are likely to end up in if we fail to change course in time.

The natural solution: sex

One might consider whether it is even realistic to attempt to rejuvenate large and mature companies. In many cases, it might be better to simply let them whither and die. Instead of forcing an old company through a series of more or less dubious attempts to transform itself and its entrenched competencies and business models you could make a plan for a an orderly phasing out - and instead invest in building up new companies to take over.

Paul Saffo, a futurist at the Institute for the Future in Palo Alto, has compared companies to animals and humans: They all have a natural lifecycle. They bloom and grow up and as time passes they age, become slow and lose touch with the way the world develops. Eventually they die.

But with a little luck, living creatures get to bring children into the world. By giving some of themselves, and mixing it with elements from another, the result becomes a new independent being, capable of standing on its own legs.

Sex is nature's strategy for continuing life. When two organisms mate, the offspring is a new combination of old properties - plus a few random mutations thrown into the mix. Evolution needs some variety to work with. Unless something entirely new is added with every new generation it's impossible for a species to adapt as conditions change.

Some companies have an explicit strategy to develop an excessive number of new products, knowing very well that only a few will sell really well. The Spanish clothing chain Zara launches three or four times as many items per year as its closest competitors, H & M and Gap. This keeps its mix much more vibrant and versatile. If something does not sell, then it quickly disappears from the stores again. Another example is Sanrio, the Japanese company behind Hello Kitty. Sanrio launches an ongoing barrage of every conceivable product bearing the Hello Kitty figure, and most are forgotten again tomorrow. Sanrio are promiscuous; working closely with other companies that purchase the right to use the image of the cute little kitten. It is in this combination with others that renewal occurs - and thus the world has been enriched with Hello Kitty golf bags, cars, linens, Christmas decorations, bath slippers, electric guitars ...

The problem with being flawless

Such a deluge seems almost excessive. But conversely, many venerable Danish companies risk fall into the opposite extreme. They want to be so perfect that they stiffen. Danish industry stands for quality. When you buy Danish, you can be absolutely sure that things are working - that's why the companies can justify charging a higher price.

But the price for being perfect is that it's very difficult to be quick, flexible and bold at the same time. The stereo and television producer Bang&Olufsen exemplifies how a company can analyze and prepare a product to death. They certainly make beautiful devices, and at the price, which B&O charges for them, they *have* to be perfect. But B&O has been falling behind the technological development curve almost since digital technology broke through in earnest - their products and innovations are too often too late to the market.

And that's how the effort to avoid making mistakes ironically ends up jeopardizing some of the qualities that are essential to the users. The technology changes in a matter of months, new solutions, new formats and new patterns of use emerge and disappear again in the unpredictable interactions of a much wider ecology of devices and media. For the consumer, there is not much point in having a media player that is not up to speed with everything else in the media landscape. B&O launched new telephones at annual intervals, while Samsung and Nokia launches in the range of 70-100 new models on the market annually. The vast majority of those disappear quickly from the shelves again, as soon as it turns out that they were not what consumers want

currently. But no one knows in advance which models will hit.

When the brand becomes a burden

Looking at Asian companies' approach to innovation, they are generally more likely to send products to market faster than Western companies that want to test thoroughly whether everything is in order and in accordance with the signals reported in the market surveys.

As Edward Tse, head of the consulting firm Booz & Co. 's operations in China, says, Chinese companies use the market to test their ideas. They send a series of products out and see what happens. If it doesn't sell, they are quick to try something else instead. New products need not be absolutely right when they are launched. It is good enough if they are *approximately* right.

This is a strategy that you can afford as long as you are relatively new in the industry and the market is changing rapidly. If a company makes good products and succeed with them, it will typically begin to build up a brand so customers know what they can expect and therefore are willing to pay a slightly higher price. But that's when you get trapped. The better known and respected a brand is, the less the company behind it can afford to make mistakes.

It is a difficult balance to keep up the speed of development and renewal without making too many mistakes - just ask Toyota, which over many years had carefully built a reputation for being the worlds leading manufacturer of cars without defects. But in their eagerness to also become the world's largest automobile manufacturer they began to neglect the quality. Only after ten years and over 200 accidents, of which more than 30 were fatal, Toyota finally acknowledged that there was a problem with the accelerator, which could get stuck in some of their model, and they had to recall hundreds of thousands of cars. Costly in itself, but worse, Toyota's reputation for flawless production lay in ruins.

Without belittling Toyota fatal arrogance, it is worth considering what would have happen if instead of Toyota it had were a Chinese automaker, which had similar production errors. Most likely it would not make the front-page of the global media if the brakes failed on a Geely, Tailwind or BYD car. Hey, what did you expect?

The necessity of error

As mentioned in Chapter 12 on uncertainty, we tend to believe that we can plan and steer our way through a steady and predictable development - but in practice the future often turns out quite different from what we had imagined. Looking at the development of groundbreaking technologies and products it is a general pattern that their story often featured a substantial element of surprise:

Viagra was first tested as a remedy for angina - chest pain. But when the male patients reported that one of the side effects were erections, the pharmaceutical company Pfizer wisely chose to approach a very different market with the new drug.
It took Danfoss more than ten years to develop the high pressure hydraulic pump Nessie. Originally, it was thought that the technology would open a huge new market for hydraulic systems based on water, but in fact Nessie ended up being used for water purification and fire-fighting based on water mist.

- The escalator was originally developed as an amusement at the Coney Island amusement park near New York.

- And of course, Christopher Columbus' discovery of America. He actually sailed westward in the hope of finding a faster route to India – which is why, when he reached America, he called the natives "Indians" ...

Looking ahead at the coming years, the demand for renewal and adaptation will only grow, because change is accelerating. And hence, the need to manage and handle errors in a constructive way will grow as well.

Sometimes failures turn out to be improvements. Mutations are the raw material and the precondition for evolution to develop new solutions. The dilemma is that although variation and experimentation is needed to survive in the longer term, they are inefficient and inconvenient in the short term. Nobody likes failures. A well-run company with an established market would rather streamline, optimize, streamline and minimize errors - instead of encouraging them.

Fast, affordable failures

If you know that it could cost your job or derail your career if something went wrong, you will obviously be less inclined to experiment. But in a culture where no one dares take chances, and no one dares express their doubts, the organization also receives fewer signals and less inspiration to navigate from.

The trick is to use error consciously and constructively. As long as you are not exactly standing at the brink, you don't want to bet the whole company. But you have to make *some* bets to move forward. You can allocate a certain amount of resources to projects that are more risky and experimental in nature. You can systematically collect comments, ideas and criticisms. You can have "playgrounds" where employees get an opportunity to test their ideas for a while. You can - like Google - give employees the right to spend a certain percentage of their time on projects that are unrelated to the existing business. You can set up collaborative projects and alliances with external participants, use social media to engage with customers. You can systematically analyze your mistakes, so you don't miss the learning and experience that failures bring. You can even launch a new, independent brand that makes it possible to market the more risky and innovative ideas without compromising the old, established brand.

There are plenty of opportunities to create the space and confidence to experiment. And you should. Evolution *requires* variation, a lot of provocations that can challenge the existing logic and a lot of proposals for new ways, you could try going in order to adapt to the worlds' changes. It doesn't have to cost all that much - as long as the failures get weeded out in time. *Fail fast and cheap*. The idea is to make the mistakes, while you can afford it.

Not all errors are equal

We have an ambivalent relationship to errors. On the one hand no one enjoys making mistakes; of course you prefer to get things right rather than wrong.

On the other hand, we need to be open for new opportunities - even deliberately seeking out situations where there is greater risk of error.

Errors are not equal. There are errors that are unacceptable. A surgeon or a pilot should not experiment much, because if it goes wrong, the consequences can be fatal.

Other errors are just banal and annoying: something goes wrong, because you are unfocused, poorly prepared or just out of luck.

However, there are also mistakes that are useful and necessary. Errors, you learn from, or bets that fail, but might just as well have succeeded. If you want to create something new, you have to experiment and if it genuinely is an experiment, then there must be some possibility that it can fail. The crucial part is to learn from the failures.

Basically, we are programmed to take chances to learn. Children do it naturally, they learn by trial and error - sometimes to the point of pure contempt for death. People are inclined to look for challenges and learning, otherwise we get bored. If everything we did in life were easy and familiar all the time, we would lose our engagement.

Illustration: flow corridor.

The American professor of psychology Mihaly Csikszentmihalyi describes the tension between challenges and skills by using the concept of "flow".

When people are in flow, we forget about time and focus completely on a particular task. The flow mode occurs when the task we are working on is so challenging that we just barely have the skills to handle it. If the task were easier, it would be boring, if it was harder, we would be stressed or frustrated. We feel the best and learn the most when what we are working on, lies just above our usual competence. Therefore, we have an innate drive to seek out tasks that involve experimentation and the opportunity to fail.

The risk of failure is a basic challenge that makes life interesting and stimulating. It's like in sports: It's not much fund to play a game where you cannot lose.

It is human to err

Throughout this chapter I have pointed out that there may be rational reasons for being more open to error. Blunders, irregularities, freaks, the strange and surprising... they actually have value because they are a source of innovation.

If you want to be resilient to change, diversity is a clear advantage. We know from biology that monocultures are vulnerable. If all farms grow exactly the same crop, they are all vulnerable to the same disease or change or weather. Better to cultivate many varieties, so the entire harvest will not be destroyed at once. Short-term, variety may not be optimal and efficient. But the variations that we do our best to weed out may some day prove to be the way forward, once circumstances change. It's impossible to predict what abilities and resources might become necessary. It is obvious to draw parallels to the culture of society. If everyone were alike, totally normal with the same taste in pop music, fast food and clothes, with straight teeth and subdued manners – would we risk missing the fertile mistakes and innovative surprises that can bring us forward?

Yes, of course. We are in a deadlock if we don't make somersaults periodically. If we are not being challenged and surprised, if we don't occasionally screw up or are confronted with something truly weird, we will go nowhere.

But there is another important reason to be tolerant of faults: It is a fundamental part of being a decent human being.

The world is fluid, flexible, hectic and vibrating. For the strong among us, change is an opportunity, a chance to move forward and flourish. However, not everyone is equally resilient to change and risks. What if you can't keep up? If life speeds away from you?

The attitude of participation and assuming responsibility that is necessary to thrive in the 21st Century requires a certain mental surplus. What if you don't have that? You could be sick, depressed, surrounded by obstacles or simply going through a bad spell. It doesn't take very many wrong turns and trip-ups before the train continues without you on board.

To become as rich as we are, we have streamlined functions in society to the degree, that there is no longer room in the labor market for those that are inefficient, a bit slow or fragile. Instead there are a lot of people on welfare. In Denmark, almost one fourth of everyone in the working age, between 18 and 66 years, are on welfare or receiving pensions year round.

One might fear that the polarization between those who participate and those who are outside the interaction will be significantly greater in the future. As we have mentioned, there is a strong trend towards greater inequality and a similar risk that more people fall by the wayside. What do we do with them? Should we just let evolution run its course and let those who cannot cope with the demands succumb, so the stronger part of society is free to continue to innovate and adapt?

In the midst of the daily struggle to make a career and the next quarterly results, we also need to consider what it is that makes humans human? What sort of qualities distinguish us from machines, what are the values that basically makes us happy and make us feel comfortable and at home in the world we are creating with all our initiative and creativity?

I believe that an important part of being human is to have compassion for other people. Christianity's message of compassion and forgiveness remains fundamental for humanity in the 21st century. We have a free will, we must assume responsibility for our actions and we are each committed to do our best. But we are not perfect. We make mistakes, we have our weak points and we are dependent on and closely linked to our fellow creatures. Often it is just coincidence that separates happiness from ruin. We must leave room for the individual initiative and we should hold each other accountable for our actions – in the realization that each of us is free. But we also need to be forgiving and understanding. It is human to err. None of us can go it alone; no one bears the responsibility alone.