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THE  
NUNATAK  
GROUP

“ IF WE DID  
ALL THE  
THINGS WE  
ARE CAPABLE  
OF, WE WOULD  
LITERALLY  
ASTOUND  
OURSELVES”

THOMAS A. EDISON

How can companies learn innovation culture?  
What role do »saying no« and holidays play in this?  
A little jump start.

\_\_\_\_\_ The American Thomas Alva Edison was one of the greatest innovators in modern history. Credits for the telegraph, the phonograph and the distribution of the light bulb belong to him. However, Edison enriched the world with many more ideas. In his 84 years of living, he applied for 1093 patents, almost 70 in 1884, a new invention every five days. Were they all implemented? No. Did he make mistakes? Plenty. However, Edison never lost his determination. Worked tirelessly. Highly motivated. Versatilely interested.

The Edison principle still applies today. Innovation is rarely a result of chance; it is based on hard work and perseverance. What Steve Jobs demanded of himself and his development teams has long been legendary: »Innovation is saying «no» to 1000 things.« That exactly is the challenge for companies. Innovation has never been more important – and never more complex. Digitalization, industry 4.0, artificial intelligence, but also the individualization of products and services need places where bold ideas can emerge. Data analysis is essential, as is an appropriate corporate culture, trust in employees, room for happiness and resourcefulness, for extrinsic inspiration

– this is the only way to ensure the competitiveness of a company.

The Nunatak Group is a strategy consulting business focusing on digitalization. Since its foundation eight years ago, the Munich based company has been dedicated to innovation.

100 percent. This is reflected in our company rules: We exchange our knowledge regularly in best practice presentations. So-called »circles« set their own goals, hierarchies are reduced, a vacation, for example, does not need to be approved, everyone takes time off if he can align it with the upcoming project.

Innovation processes are not always convenient; they require energy and persistence. However, those who put sufficient effort into the process will see real outcome. In this booklet, you will find success stories and examples – many of them from our daily work. Nunatak means »signpost«, this is what we want to turn our customers into. Enjoy reading!

**The Nunatak Group Team**  
[www.nunatak.com](http://www.nunatak.com)

# INNOVATION

IS SAYING

»NO« TO

1,000

THINGS

STEVE JOBS

**In|no|va|ti|on** inoˈvaːtʃiːn, Innoˈvaːtʃiːn  
Noun [the]

**Educational language:** introduction of something new; innovation; reform.

**Sociology:** Planned and controlled change, innovation in a social system by the application of new ideas and techniques.

**Economy:** Realisation of a new, progressive solution to a specific problem, especially the introduction of a new product or the application of a new process.

## PERSPECTIVES

1<sup>st</sup>

Place in the assessment of the innovative capacity of global countries

### German innovation capability

4<sup>th</sup>

Place in the ranking of the number of patent applications in Europe

In a survey conducted by the World Economic Forum among 12,200 managers worldwide Germany is seen as the country with the highest innovation capacity, however, in case of the registration of Patents in Europe, it is ranked behind USA, Japan, and China.

Source: World Economic Forum (2018), European Patent Office (2018)

### Investment goals for innovation

If one compares the OECD target for investments in innovation with the latest goals of the Grand Coalition until 2025, there still is a gap of 0.5% of GDP. In the latest 2017 survey period, the figure for Germany was 3.02 %.

Source: OECD (2018), Eurostat (2019), Coalition Agreement of the German Federal Government (2018)

3.0%

Target value of the investment in innovation as % of total GDP according to OECD for 2030

3.5%

Target value of the Grand Coalition for 2025

### Investment in future technologies

8%

Share of global investment in artificial intelligence start-ups coming to the EU

49%

Share of global investments in artificial intelligence start-ups in the USA

Only a small part of the global investments in start-ups for artificial intelligence went to the EU, a total of 1.1% to Germany. Meanwhile, the USA (49%) and China (36%) unite more than 85% of investment in these future technologies.

Source: OECD (2018)

### Research intensity

16%

Share of turnover spent on research and development in the pharmaceutical industry

8%

Share of turnover spent on research and development in the information and digital economy

# 10 MISTAKES THAT PREVENT A GOOD INNOVATION PROCESS

Large companies and innovation – a combination that seems to match badly in times of digitalization and a growing start-up scene. Stories of companies which are missing out on their own business are viral. Now the picture is changing.

\_\_\_\_\_ More and more perceived »dinosaurs« wake up and reinvent themselves. However, they do not succeed – or only to a limited extent – with a smart digital lab on a greenfield. A consistent innovation process that is guided by the core business and uses ideas from amidst the company is often a better way to permanent change.

It's a logical consequence that many companies have set up their own innovation funnels in recent years –i.e., a multi-stage process from brainstorming (the more ideas, the better!) to implementation, with regular checkpoints at which implementation is discussed.

A good approach, but if the hoped-for innovations are too long in coming, this process is also quickly discredited. Why does this happen? In most cases, the innovative idea fails due to one of the following ten homemade mistakes, which easily could be avoided:

## 1 \_\_\_\_\_ The strategic framework is missing

Many companies do not have a strategic answer to the transition phase in which they find themselves, which is not only but often strongly influenced by digital change. Management would be called upon to set this framework and anchor it in the organization. Employees can then develop ideas that fit in and are therefore highly likely to be implemented – preferably in cross-functional teams.

## 2 \_\_\_\_\_ The process is misused for other homework

Instead of developing new approaches, the innovation process is often used to address other long-known, urging issues. For example, a software adaption or the mere ongoing development of an existing product. Real innovation is something else: it should have the potential to

fundamentally change a business model and satisfy customer needs in new ways.

## 3 \_\_\_\_\_ Too much focus on existing customers

Innovation has to create a real added value for customers and companies. The question of the customer problems to be solved has priority. Many companies focus too much on the needs of their existing customers and ignore other customer groups that could benefit from innovation in existing or new areas. It is possible to open up an entirely new market with product innovation.

## 4 \_\_\_\_\_ There is no comprehensive culture of innovation

The classic in innovation processes and corresponding brainstorming and workshop formats: The seniors like it, the employees like it – but the intermediate level doesn't. The middle management fears for its own goals, especially when creative and efficient employees are temporarily detached. The way out is to promote a culture of innovation with appropriate values throughout the company.

Every innovation needs the success criteria that matches it.

5 \_\_\_\_\_ Innovators forgo external expertise

Anyone who dares to try new things always benefits from asking people who have done something similar before. Involving former founders or experts in innovation processes at an early stage can provide real added value for the organization, as they bring entrepreneurial thinking and market expertise with them. They develop intrapreneurs, teach methods such as design thinking, or train agile thinking. Expertise is vital when skills or technologies become relevant, which are not anchored in the company yet. It applies: The ideas themselves should come from inside!

6 \_\_\_\_\_ Digital tools are being introduced too early

»A fool with a tool is still a fool.« No phrase better sums up the current situation in many companies. Even before the internal innovation process has been determined, investments in new digital tools, for example, to improve idea management, are already made. Some companies are thriving with quite an ordinary technology – a (also virtual) mailbox. A software tool can then help to manage the process.

7 \_\_\_\_\_ The wrong people decide

It is essential to have comprehensible criteria and decision-making paths when it comes to bringing an idea closer to implementation. Studies show that it is not the top managers, the idea generators themselves or the external coaches who should decide on the implementation, but colleagues on the same level. They can judge unbiasedly and precisely whether an idea is as good as it appears at first glance.

8 \_\_\_\_\_ Idea creators are not involved in implementation

Frequently, idea creators are not involved in the implementation of their innovation. Indeed, it is right not to develop new products or services in line. They need a special status in order not to vanish immediately. If the idea creator disappears from the process, the famous »ownership« is lost. However, this is precisely what is essential to anchor innovation culture and to establish internal multipliers, who represent both –

the process and the concrete idea internally and externally.

9 \_\_\_\_\_ The success criteria do not fit

It is obvious to measure and evaluate innovations by their potential sales and contribution to earnings. Measuring in itself is good, but every innovation needs the success criteria that suits it. These can also be soft factors that are not directly related to profit. The main thing is that they measure what the innovation is supposed to achieve with the customer, on the market or in the company.

10 \_\_\_\_\_ The energy fades too soon

There is hardly anything more frustrating for an innovation team than a sudden end to the innovation process. If this happens shortly before the completion of essential development stages and possibly without a sound reason in terms of content, the demotivation is high. Often background factors were not correctly rated, for example, budgets were calculated too narrow, or the idea creators were called back to the organizational line. A proper handover can alleviate the latter. In other circumstances, the credibility of the innovation process will be immediately lost.

Newcomers, as well as established companies, should introduce processes for innovation management. Because every product, every service, every business model is in danger of disruption from the moment it is born due to competing products, new players on the market or flexibly organized business models.

Rewarding innovations also pays off on a different level. After all, it is about something that people can do better than machines and algorithms even in times of artificial intelligence: finding creative approaches to satisfy needs or solve problems. Moreover, that is precisely what many graduates want for their careers. Anyone who encourages different thinking and avoids common mistakes will not only be rewarded in the innovation race but also in the fight for talent.

*The complete article of Robert Jacobi was published on 20.05.2019 on www.manager-magazin.de: »These seven mistakes prevent real innovation.«*



*As a management strategy consultant and founder of The Nunatak Group, Robert Jacobi knows where the most common mistakes in the innovation process happen.*  
[robert.jacobi@nunatak.com](mailto:robert.jacobi@nunatak.com)

Every company should ask itself these questions at least once, in fact, better regularly, in order to assess its own ability to innovate – even if the answers may be inconvenient.

1

## STRATEGY

How often do management and middle management address the topic of innovation? Is that enough?

2

## VISION

What is the topic of innovation for you? Is it about a new awareness, cost reduction, product quality, sales increase, or something completely different?

3

## HEADS

Is there someone in your company who is responsible for innovation? Do your employees know?

4

## IDEAS

Who supposedly has the best ideas in your company and who implements them? Are these the same persons?

5

## EVALUATION

Who judges whether ideas and projects are good? Is this person the right one?

6

## DIVERSITY

New ideas emerge where different perspectives and ways of thinking meet, is this the case in your company?

7

## FREEDOM

Do you and your employees have enough freedom to generate new ideas? Do you use creative methods?

8

## CHANGE

Does anything change for employees when they participate in innovation development, or is this part of their daily business?

9

## MOTIVATORS

Are employees rewarded for their efforts?

10

## SUCCESS

Is it clear to all participants when a project is considered a success, and when not? When will a project be canceled?

11

## ERROR CULTURE

Are errors considered avoidable or unavoidable? (How) are made mistakes reflected?

12

## PROCESS

Is there a clearly defined innovation process in your company? *If not, please turn the page ...*

## STAGES OF DEVELOPMENT

Can there be a fixed process for innovation? How should it look like? The answer is: Similar to a hike – there are always obstacles to overcome and new paths to follow.

Please note: Unlike a mountain hike in the Alps, you are also allowed to walk off the beaten track. It is the only way to gain new insights and meet new companions, with whom you may even plan another tour at the end of the trail.

Gate 1

### Selection of ideas

After collecting ideas, existing initiatives are combined, knowledge and insights from previous projects are used, and finally, a choice is made to send the right ideas into the conception phase.

Gate 2

### Pitching

The teams present their concepts in short pitching sessions to a jury of internal and external experts. If they are convinced, the concept receives start-up financing for the pilot phase.



### Withdrawal

Not every idea manages to pass the tests and withstands the questions. An exit must be possible at any time and does not necessarily mean failure. Valuable knowledge for the next innovation process is gathered in the backlog of ideas.

Gate 3

### Proof-of-concept

Once the first customers have expressed their buying intention and internal and external experts have been convinced, the proof-of-concept is issued.

Operating Business

Spin-Off

Internal Start-up

### Phase 1: Idea generation/collection

\_\_\_\_\_ In the beginning, there is an idea. However, where does it come from? In the best case from employees, sometimes inspired by experts such as scientists, trend scouts, designers, market researchers, management consultants, and other external sources. Ideas arise in everyday life of employees, in innovation labs, or through idea competitions. Relevant: The ideas and findings from the further process should be collected centrally in this »backlog«.

### Phase 2: Conception

\_\_\_\_\_ Ideas are generated by agile, diverse teams to define a value proposition, form initial hypotheses, and identify potential risks. The following questions should be answered: \_\_\_\_\_ Which (customer) problem is solved here? \_\_\_\_\_ How is it currently solved, if at all? \_\_\_\_\_ Why is the approach different and new? \_\_\_\_\_ Why should investors invest money and time?

### Phase 3: Piloting

\_\_\_\_\_ After financing, the concept becomes part of an iterative lean start-up process. A »Minimum Viable Product« will be designed, developed, and tested with the first potential customers (Build, Measure, Learn). In order to prove that the product has market potential and solves a real existing customer problem, this process should be run through at least two to six times.

### Phase 4: Go-to-Market

\_\_\_\_\_ The course of action will be developed: Will the innovation continue as an internal division (»Operating Business«), as an internal start-up in the still secret »Stealth Mode« or will the innovation be spun off? Equally important is the decision of who will continue the process. Because under certain circumstances, not every member of the project team wants to be a founder or managing director.

## EXAMPLE: OSRAM

# TURN ON THE LIGHT FOR INNOVATIONS

Today changing external conditions force companies more than ever to reinvent themselves regularly and to ensure further growth through innovative processes and products. Within the organization, an often overlooked resource can be activated: the employee.

OSRAM, one of the world's leading light engineering companies, established its innovation process already early on. The so-called Digital Launchpad – abbreviated as DLP – is designed to encourage employees to submit their ideas and to push them forward at an increased pace far from corporate structures. As a result, innovation and the ability to innovate come into focus. When the idea is submitted, it is irrelevant whether an individual employee or an internal team identifies opportunities for a new service based on the data generated in day-to-day business.

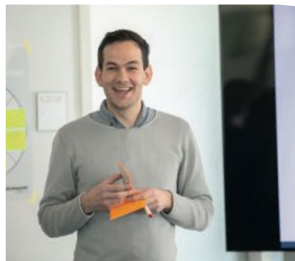
Two recent project examples are Digital Art Lighting, a software solution for the intelligent control of museum lighting, and Smart

Textile Illumination, an intelligent situational illumination for work clothing and a project [The Nunatak Group](#) has supervised.

»Innovation does not just happen incidentally. The DLP acts as a lubricant between existing executive business models and the validation of new ones. It guides innovation along with a strategic framework and a structured and agile process,« says Michael Jacobi, head of DLP at OSRAM.

DLP consists of three clearly defined stages, confined by gates. These gates are used to check ideas and concepts for customer

benefit, compatibility, and feasibility. Based on the continuous collection of ideas, the ideas are checked for their market potential in three-day boot camps and bypassing the first gate in



**Michael Jacobi**, Head of the Digital Launchpad at OSRAM.

the first phase – exploration. Principal concepts are designed, expert interviews are conducted, and potential customers are enquired to determine whether there is a real need and how a solution for the customer might look like.

The fact that ideas serve an existing problem in the market has been demonstrated in numerous DLP projects such as Digital Art Lighting and Smart Textile Illumination. Therefore, way above 20 customer interviews with renowned industrial companies as well as national and international museums were conducted in this stage. Based on this, in the second stage – definition – the prototypes are developed and tested. In the third phase – concept – a decided product strategy and a recommendation for the second gate, the Empowering Gate, are finalized. At this point, a jury decides if the product should be brought to market maturity in a three-month follow-up phase.

While Smart Textile Illumination, along with a prototypical intelligent safety vest, has already completed the concept stage and was developed for market maturity at the moment, Digital Art Lighting is in preparation for the rollout gate in June 2019. The first customers have already been acquired in response to the significant market demand. »With this mixture of lean startup methods, regular check-ins, clearly defined gates and the involvement of external coaches and experts, OSRAM can quickly validate. The feedback of potential customers is in the focus of every project,« Jacobi emphasizes.

However, a complete process does not protect against setbacks, for example, if the market potential is not as significant as hoped for, customers do not need the innovation, or the technical feasibility is more complicated than initially assumed. If this is the case, team and management must be prepared to stop a project and learn from the gained knowledge. The Car2Car communication project based on LED vehicle lamps is such an example. After four weeks of exploration, this project was stopped due to a lack of demand. Briefly two years after the introduction of DLP, the balance sheet shows, that the iterative process at OSRAM works. Since then, more than 25 promising ideas have been submitted, and these days, the second wave of ideas is examined for this year. Even though not all projects have made it or will make it to market maturity, DLP increasingly establishes itself as a single point of contact for innovative employee ideas and prompt implementation.

»To prevent prototypes or finished products from disappearing into a drawer, it is essential to have already defined a clear handover to the line organization during the process«, says Jacobi. In the case of OSRAM, in the final rollout gate, all relevant division managers decide on the continuation of the project and ideally release a budget the same day. At this point, the DLP process is completed, and in the best case, former product owners become founders within the company.



# ONLY THOSE WHO DARE MAY FLY

The media are more affected by digitization than hardly any other industry. How the news network n-tv is actively facing the challenges.

\_\_\_\_\_ How can one earn money with news on the Internet and remain the preferred user-platform considering a variety of competitors? Eva Messerschmidt, Head of Sales & Digital Products at the news channel n-tv, is working on the answer. With her team, she deals with the distribution and the monetization of n-tv.de-contents on all crucial digital platforms. Messerschmidt pursues a consistent first mover strategy: n-tv always wants to be where the users are.

#### **What challenges does a news channel like n-tv face when it comes to innovation?**

We are a small station with a small coverage, which is why our budget must remain within reason. Mistakes are essential to learn from, but they should

not gobble up vast sums of money. At the same time, innovation must always be based on news relevance. Personalization, for example, challenges us with the question of how much makes sense, without losing our claim to be a general news service and without creating filter bubbles.

#### **Why do you personally care about innovations?**

Nothing ventured, nothing gained: If n-tv had not been so brave so early, we would not have been the first ones with an app. We want to shape our products and their market, reach users, and target groups where they are, and expand further. In times of rapid change, we

want to secure our competitiveness and sustainability and inspire users and customers.

#### **Well, your keyword is »courage« – what do you want to give along the way?**

That courage may sometimes also mean giving up on things that do not work.

#### **What do you think is the biggest mistake a company can make when it comes to innovation?**

To be afraid of complicated workflows, to consider one's position more important than the entire innovation process and therefore to insist on predominant knowledge and hierarchical processes.



**Eva Messerschmidt**  
is head of Sales & Digital  
Products at n-tv.

# CO-CREATING CHANGE

\_\_\_\_\_ The Linde Group is a global market leader in industrial, process, and specialty gases with 600 affiliated companies in more than 100 countries. How can innovations emerge in these dimensions, in fact, how can they be used reasonably and driven forward? To master this task, the company has established an internal team: »Linde.Digital«. In Munich Sandy Brückner, Susanne Engler and Henning Tomforde are dedicated to the topic of digital transformation.

## How did you approach the topic of digitalization in your company?

At the beginning of last year, we launched a pilot and sprint approach tackling the question of digitization – i.e., how can we bring new technologies, as well as working methods, ways of thinking, perspectives and approaches best possible to the company. In addition to our pilot projects, we researched what other companies and major players already do in this area.

## What are the results?

There is no off-the-shelf solution, which you just buy and everything is fine. We have learned that a result becomes active when it can grow organically from itself.

## How do you implement this experience in your company?

From the pilots, a central element emerged: our »digital learning journey«. An advanced training, in which we take along 20 to 25 employees, preferably from mixed organizational units, on a three-month program. The participants learn new skills in technologies and methods and apply them in practice.

## What are these study journeys about?

Primarily it is about digital technologies and agile working methods. The most important thing is that we explicitly link everything to real questions of the company. Which also comes with

considerable advantage for the employees – they can continue their education, get to know Linde better, and establish contacts.

## Where will the journey take you?

By now we are a permanent core team in digitalization. Jobs dealing with this topic are also emerging in individual divisions and regions. The divisions realize, if they want to promote digitization, certain functions within the company are necessary to take care of it.

## Your advice to successfully respond to digital change?

A highly committed management. You need people who consider the topic relevant. Supervisors and employees have to work on it. Companies can only be successful in the long run, if they realize that something new does not necessarily have to overrun you. Change can actively be shaped. It is not about becoming a professional everywhere. It is much more important to understand the basic principles and apply them.

## One more thing we would like to say:

We believe that innovations must be understood correctly and not only through an innovation team or idea platforms. A key factor is work culture. In an ideal situation, we help people in our company to drive change.

## An experienced team

(left to right): Sandy Brückner, Henning Tomforde, and Susanne Engler promote the digital transformation within the technology company The Linde Group.



WITH US  
YOU CAN  
SEE HOW  
THE  
NEXT  
GENERATION  
REACTS TO  
INNOVATION



PHOTO: SIMA DEHGANI

**Why is it exciting for companies to collaborate with universities?**

**Claudia Linnhoff-Popien:** Universities offer two crucial advantages: On the one hand, students and postgraduates have grown up with digitalization and master technology. On the other hand, they form the perfect target group.

**In what way?**

Young people are curious and open to new technologies. Artificial intelligence (AI) or the Internet of Things (IoT) are a matter of course for them. In our classes, seminars, and internships, you can see how the next generation reacts to innovation. Technology must be simple and offer added value, in order to be accepted.

**What is the advantage for you if the industry approaches you?**

My goal is applied research: to educate excellent students with a high market value. In cooperation with a practice partner, both sides benefit.

**Can you name examples?**

With data provided by the municipal administration authority Munich and BMW, we have developed a software that calculates how fast a car has to drive for a green wave. BMW test vehicles already show the recommended speed on the speedometer. Together with Siemens,

we are working on concepts for the autonomous factory of the future.

**How would you describe the role of your academic chair and your students within the industry?**

We are a brilliant source of ideas in the early stage of technological innovation. In a structured creativity and innovation process, we develop new products and implement them right up to the demonstrator. We know what is technically doable and iteratively test what is accepted by the market. Scientifically we are always up to date: we travel to partner companies and renowned conferences worldwide. We present research results and observe what is happening technically in the world.

**How do you manage to think innovation again and again?**

We work at the interface of technology and application, form heterogeneous teams, and bring different skills together. The only important thing is that everyone involved is eager to experiment!

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**Prof. Dr. Claudia Linnhoff-Popien** holds the chair of »Mobile and Distributed Systems« at Ludwig-Maximilians-Universität in Munich and has been a member of The Nunatak Group's Advisory Board since 2017.

# THE NUNATAK GROUP

\_\_\_\_\_ We develop digital growth strategies and business models for companies in various industries – from media and financial service providers to consumer goods manufacturers, large industrial and retail companies that are globally active.

The Nunatak Group was founded in 2011 by digital and media focused entrepreneurs as a strategy advisor. Our founders Robert Jacobi and Rupert Schäfer have actively experienced the change in the media industry in their previous jobs – one of the first industries pressured from the growing Internet economy.

## Contact

We look forward to hearing from you. Just give us a call or send us an e-mail.

For news and updates follow us on Facebook, Twitter, or LinkedIn.

By focusing on digital growth, transformation and innovation management, digital marketing and advertising, digital mergers & acquisitions, data analytics and strategy, change

### Nu|na|tak ('nana,tæk)

A Nunatak is a freestanding mountain peak that stands out from an ice field or glacier. Due to the pressure of the eternal ice, a Nunatak continues to grow every year.

Origin of the word: Nunataks are considered to be easily recognizable landmarks. Therefore in the language of the Inuit, it means signpost.

management and digital coaching («Nunatak Academy») we help our clients to realize the full potential of an ongoing revolution.\*

Our goal is to make our clients like Nunataks stand out from the crowd and the competition. Instead of relying on standardized approaches and structures, we use our knowledge and skills from numerous

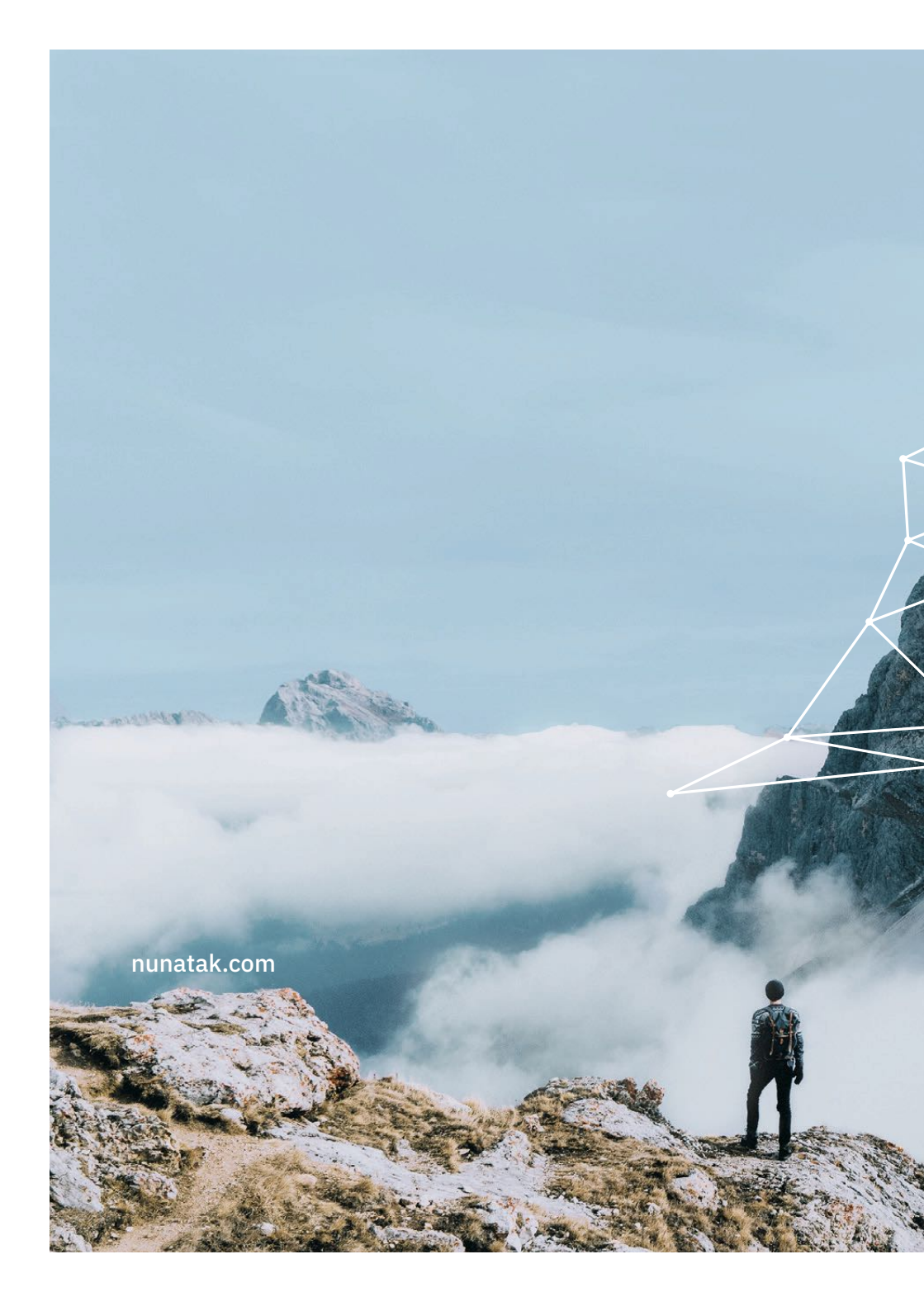
transformation projects to develop highly customized solutions. We accompany our clients from the concept to the implementation of their strategies.

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\* This booklet originated ahead of a Nunatak Networking Night on the topic of innovation management.

A person in outdoor gear stands on a rocky mountain ridge, looking out over a vast sea of white clouds. In the distance, a prominent mountain peak rises above the cloud layer. The sky is a clear, pale blue. A white geometric line pattern is overlaid on the right side of the image. The text 'nunatak.com' is positioned in the lower-left area.

nunatak.com