

Digital SkillUp - SME Business Cases Interviews

Organization name: Rustichella d'Abruzzo

Interviewee: Piero Peduzzi

Role(s) in the organization: CEO

Time and date of the interview: 2021-11-30, 16:00 Athens time

Intro

- Would you like to share some information about your business? What do you do? Where are you located? How many employees do you have?

Our company is a traditional Italian pasta company, with a strong innovation aspect. We apply digital technologies and automation horizontally across all company functions. We utilize a variety of emerging technologies and related practices from SCADA automation and data analytics in our pasta factories, to blockchain for data integrity and digital contracts, to business intelligence for decision support. We also achieved to become a paperless pasta factory, reducing our environmental footprint through such application of technologies.

Our combination of a strong unique tradition with the integration of emerging technologies has allowed us to offer our products to more than 80 countries, while remaining agile and efficient.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

There were a number of internal and external signals that led to such a decision. The company itself is asking for change, if you listen to your workers, identify gaps and capacity limits, scalability challenges and other related problems. On the other hand, the world is changing and you can feel this change. Technology becomes a critical component of operation and you get to understand that if you do not appropriately integrate technology, you can easily lose your grip of the market and fail to keep up. But also customers request change: they want to know more about the products you produce, get more detailed, more appropriate, more real-time information. All the above led us to understand that adaptation was needed. And upskilling is an important step for such adaptation and change.

- Was the need raised first by the workers, or was it a decision made at the top? Was there in place any sort of cooperation between workers and decision makers on the process?

Even though signals came from the workers, the identification of the need and the strategic decision was one of the management, but through close interaction with the workforce. Very early in this process, we got our workers involved, to help them understand the value of

change, to co-discover the challenges and benefits. If our people had not understood the value of all this tech integration and upskilling endeavour, the change would have not been possible. Through our internal interactions we empowered our workforce to contribute essentially to the innovation in the company, to play a more important role in the change.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

Some challenges relate to traditional practices. As is very normal, inherited practices - with their clear tested value - need significant internal motivation to be revisited to allow improvement. And it takes a decisive move to understand that such practices may impose limitations that can be surpassed, if reiterated.

On the other hand, innovation is a challenge for workers themselves, since it implies upskilling. Especially older and more experienced workers may find it difficult to enter a training stage again, revisiting practices that they have applied for years and learning new methods, tools and processes beyond their experience so far. In our company, through constant interaction with the workers and persistence we found out that upskilling is possible even in such later stages of one's professional career. Of course, we took into account the unique personalities of our people, understanding their needs and guiding them through this challenge to the best of our ability.

Another important helper to surpass the challenges related to emerging technologies integration was the piloting of our plans through Horizon 2020 programs. The interaction with key technological players and other stakeholders, the knowledge sharing and the funding of our innovation actions allowed us to - safely - lead pilots that helped us understand the opportunities and challenges that we would face. This further allowed us to prepare better for the next innovation steps, to improve our upskilling processes and efforts and to achieve better results.

- what were the decision/steps that the organization had to take to implement the required upskilling?

First, we needed to face innovation as a strategic aim. This implied investing in upskilling the company. Thus, we hired a head of innovation to lead the related effort. We also decided to set our innovation roadmap as a series of step-by-step aims, which would however in parallel change all our functions and departments. The upskilling process was designed per business application to achieve the targeted steps and milestones. A last, critical decision was to apply trainings on a biweekly basis, making upskilling part of the company culture and everyday practice and not a one-off action.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how upskilling benefitted your workers?

There was significant impact across several aspects of our work. The workforce is now more motivated, since they feel that the company invests in them. The innovation opportunity also led to more commitment by all, stronger self-motivation to support the effort. Despite the challenges we faced in the beginning, the change we brought about grew bigger and more obvious over time. We all understood that being part of this improvement and change can improve everyone's CV, creating more professional opportunities.

- Your business results?

We identified improvements over different aspects of the company. First, we identified positive results in customer satisfaction. Second, we measured increased efficiency in the production processes. Then, we saved time in decision making, since the availability of data and related analysis tools provides actionable information with clear signals. Finally, we see that we reduced errors across all functions, which in turn increase productivity and reduce risk.

- Your innovation culture/capacity?

The upskilling process and the application of the emerging technologies clearly boosted our innovation capacity horizontally, across all departments, allowing higher agility in the future.

- How did it affect your image towards your market/customers/collaborators/...?

There was significant change. Perception of the company drastically changed in our sector, which in turn increased our exposure, strengthening our brand value. We became a leader of innovative change, showcased as a best practices use case. This in turn changed the way we ourselves view our company: we take pride in what we have achieved through our strong work and collaboration.

- Lessons learnt:

- What were the lessons learnt from the process?

To succeed, one needs to remain in constant interaction with the workforce and support them constantly through the change. Upskilling actions are a significant aspect of this support. We also learnt that outside help can be critical: experts are needed to drive change. Last but not least, we learnt that consistency and perseverance is critical. Once you start, do not give up. Persistence will be rewarded.

- What would you have done differently?

Despite our strong drive, I believe we could have gone even more strongly and even earlier towards innovation. We also learnt the necessity of understanding your data and defining them clearly and early to maximize your gain in the future.

- What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

If you need to grow, do not hesitate: understand the value of innovation and the need for it now. Start your journey now.

Otherwise, innovate on a limited level, with applications that you feel comfortable with.

But always, through this change, remember who you are, where you are from, what your product is, who benefits from your efforts.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

We would love to see the company utilize the technology, the data and KPIs to reduce worker stress, attract new talent, allow work from home, and - in essence - have a happy team and workforce, ascertaining sustainability for all.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?

I would like to encourage everyone to upskill and innovate, taking into account the idiosyncrasies of their setting. And, again, don't give up. It is possible and worth it.

- In a nutshell: a one-sentence message that you would like to convey?

Upskilling and innovation is an exciting and beautiful part of a growing journey. Try it.

2. Digital SkillUp - SME Business Cases Interviews

Organization name: Agdatahub

Interviewee: Sébastien Picardat

Role(s) in the organization: CEO

Time and date of the interview: 14/12/2021

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

Agdatahub is a private company, with two main shareholders: farmers' organizations and unions hold the majority of shares, while the Caisse des Dépôts (public bank of investment) owns the rest. In essence we are an instance of social entrepreneurship: we are operating platforms for farmers' consent and data exchange for the farming industry. We support our roles through know-how related to the EU Data Governance Act, but we also constitute a European operator of consents, offering a data exchange platform. Typically, we help farmers' partners to digitize their activities, in line with their farmers. This implies a number of offerings: (a) support for data-aware strategy and implementation; (b) adapting technology for the agri setting, (c) supporting technology transfer and integration of technology on the farms and their partners. Thus, we have both domain experts and tech experts in-house, forming a network of dedicated advisors of digital skills (Digital Advisors). We also contribute to EU projects related to our domain of expertise.

We are 8 people, based in Paris, Bordeaux and Lyon, since our target group requires decentralized, physical presence.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

In Europe there exist approximately 10 millions farms interconnected with 500 000 partners. We need to help traditional operators (with minimum digital skills) - 80% of which are SMEs and have no data scientists - to switch to a data-rich setting.

When the big players identified agri-food as a very high priority, we decided (also based on the EC comments towards the Green Deal), there was a clear need for farmers to take control of their own data. This data is meant, among other things, to provide more and more precise information to the final consumer. We expect that it will also help reduce fertilizers and other farming inputs, and reduce the corresponding environmental impact, while retaining the yield performance. Whether one uses robotics and AI to improve everyday function or genetic engineering to predict the impact of specific related innovations, data is needed as the basis for such studies and achievements.

Furthermore, new value can be created and improve one's turnover, by ascertaining the quality of products through the use of data.

Then there is also the need for alignment to EU legislation.

All the above reasons, easily lead to a requirement for technology awareness and upskilling horizontally to all stakeholders of the ecosystem.

- Was the need for technology integration raised first by the farmers, or was it a decision made at the top? Was there in place any sort of cooperation between farmers and decision makers on the process?

It was actually a mix. EU farmers' organizations understood the need for a code of conduct for sharing data. Of course, governmental policies and the EU data strategy supported the switch towards technology adoption and upskilling, but the understanding about the usefulness of such actions also came from the roots. In our setting the asymmetry of negotiation power (many small users vs few big providers, who may demand data produced by the users) created tension for control over the data produced. All the above formed a landscape with a clear need for training and integration of data-related practices.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?
 - what were the decision/steps that the organization had to take to implement the required upskilling?

There were a number of challenges:

- There is a lack of previous emerging tech understanding (advanced digital skills), even though farmers have a unique love of technology, which is apparent.
- There were technical challenges related to integrating the emerging technology, related to the stability of the telecom network in the areas of interest.
- There is a lack of appropriate systems or stable-enough systems that can function as expected in the actual farming setting.
- The above lack of appropriate solutions in the past, has led to a lack of trust in the present.
- Another challenge relates to the fact that systems may increase the number of their features too fast, which may lead to bugs and insufficient support of their system at the scale needed.
- Most related technology-aware professionals do not go to SMEs, but prefer to join big companies which are typically consumers of data.
- Finally, there are challenges of getting digitally trained personnel in a rural area to support the end user.

There exist however many ways to improve and reduce the above barriers, and some of these have already been put in motion:

- One can scale up the teams of users through collaboration/unions, which increases the leverage for product design and service provision related to the setting.
- There exists a movement in engineering schools which trains appropriate experts, by combining the expertise of agronomists to engineers. Thus, we build capacity that leads graduates to the companies to empower change.
- There exists real support by the government to put in place a network of digital advisors, supporting the farmers and their partners in the value chain.

We should keep in mind that farmers are pragmatic in their choices (e.g. data provision), but they understand the value they can get from investing in such actions.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how did upskilling benefit the farmers?

To disseminate digital skills we aim at use-case-driven training - which is imbued with sufficient realism to gain trust. We, thus train the trainers of the farmers which maximize our impact. This way we affect the typical training funnels, which are essentially the tech days the cooperatives organize periodically. We have learnt that physical presence helps a lot - a fact that is somewhat unique with respect to other settings and financial sectors. Our actions are not instantaneous: we aim for a periodic interaction between experts/consultants and the farmers.

The training offered to the farmers, in conjunction with the related technology tools, offer multiple gains. They can reduce the time to support administrative requirements (e.g. related to data gathering for quality control), and minimize bureaucratic overhead through automation (IoT).

- Their business results?

We expect higher quality of products, lower environmental footprint, and better alignment to legal requirements.

- Your innovation culture/capacity?
- How did it affect your image towards your market/customers/collaborators/...?

The training and use of technology increases the innovation culture even beyond the original recipient: it changes the whole ecosystem around farming, including the families and the partners that interact with our beneficiaries.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

There are many things we have learnt through our experience:

- Stay close to the actual setting and your users.
- Utilize existing structures and infrastructures appropriately.
- Mobilize the whole ecosystem. This is critical.
- You need to take into account the gain of the farmer and the ecosystem. In the absence of a social innovation aspect the risk is high for an asymmetric gain (farmers vs. big private players).
- Governance in the ecosystem is critical.

In farming there is actually little to no choice: if a farmer you do not upskill, you put yourself at risk. You need to adapt.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

One needs to stay updated to increase sustainability, revenue and reduce bureaucratic overheads. We expect this need will be even stronger in the future.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?
- In a nutshell: a one-sentence message that you would like to convey?

Keep control on your data to develop added value on your farms. Upskill to get to know how to do this.

3. Digital SkillUp - SME Business Cases Interviews

Organization name: Contextity

Interviewee: Alexandros Paramythis . Dimitra Paramythis

Role(s) in the organization: CEO & CTO / Sales & Marketing Manager

Time and date of the interview: 10/12/2021

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

Contextity is a Swiss company, active in the domain of information retrieval, i.e. we provide state-of-the-art methods for enriching, retrieving and managing information across a variety of settings. We have our own software stack, exposed as products and services towards our clients. We excel in natural language understanding, knowledge representation, knowledge graphs and other emerging technologies.

Essentially, as an emerging technology provider, we undertake a teaching, an upskilling provision role. Oftentimes, we have to help the customer understand what can be done regarding their needs and then explain how your products/solutions can fill in the gaps.

At the moment we have 6 people and employ outside help when needed, through an appropriate network.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

The needs we come to cover - which increase over time - relate to the need to use/reuse information inside the company. The linking of information, the deduplication of data, the connection that makes that information actionable is typically missing, or provided by humans in the company. Thus, managing information and knowledge within a company is something that we can support through emerging technologies.

Furthermore, the automation of processes while taking into account the business aspects of the workflows can become very challenging. Applying AI tools empowers humans in processes, improving their performance and allowing them to perform functions they previously could not. Keeping the human as a principal component of workflows for us is a necessity.

Recently, our clients have been increasing their understanding of the above needs and may identify the need for integration of AI-enabled solutions. In our setting, we also empower the customers of our customers to be efficient and happy, through technology and upskilling to

improve their everyday function. This, again, allows them to do things they could not do before.

- Is the need for technology integration raised by the workers of your clients, or is it a decision made at the top management level? Is there any sort of cooperation between workers and decision makers for the integration decision?

In most cases the realization that there is a problem that needs to be addressed is shared by workers and management alike. Usually, the first contact is the manager, but oftentimes the actual background process of need identification was started by the workers.

In a couple of cases, it has happened that a presentation we made to the company led to opportunities for the application of our solutions. In such cases, after a short introduction, people from the company become champions of our solutions and can initiate the change in their company.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) are typically in place and what steps do the organizations and you need to take to overcome them?

Inertia and fear of change is very common across companies and domains. Even the feeling that one may become redundant if AI is applied, is a really common occurrence.

The understanding of technology can be a barrier, since they may not understand how a technology is applicable in a domain (vs. a demo case). Talking in the business language of the client and providing specific use cases helps a lot.

As a third point, emerging technologies may move from production to innovation departments, since people may expect that they are not mature enough for production.

Finally, company employees and executives may end up tired from the hype related to emerging technologies. The related offerings, which may not be connected to actual business needs, may worsen this effect. It can also be difficult to differentiate between offerings, if you do not have sufficient understanding of the technology, its real potential and limitations. Oftentimes, the fact that claims of the technology offerings are too technical or too visionary further decrease trust in such technologies, raising the entry barriers.

- what were the decision/steps that an organization has to take to implement the required upskilling related to the emerging technology?

In order for people to really be able to use technologies, and maximize impact, the AI tools need to be deeply integrated into the company. This means that close interaction with people from the company itself can create technology champions, because they co-created the solutions, understand them and believe in their added value.

One should also keep in mind that, in cases that the management is not ready to invest in upskilling and co-creation, the results and effectiveness of integrating an emerging technology into company functions can be dubious at best.

- The impact:
 - How does the introduction of emerging technologies affect the company's everyday work and how does upskilling benefit the workers?

Internal processes may improve significantly, e.g. through making internal knowledge sharing more efficient, which supports operations and workflows.

- Business results?

Our customers have been able to improve services and products and/or provide new services and products. We have customers that doubled the number of clients they could support, addressing more segments of their market. Thus, the gain is measurable, clear and significant.

- The innovation culture/capacity of the company?

Definitely the application of AI infuses a novel viewpoint for innovation. People upskilled in the companies can actually map the emerging technology to other needs in their business, initiating more innovative actions. Several times we were surprised and inspired by proposals that appeared by company officers, after the first use cases of our technology were in place.

- How do you think integration of an emerging technology affects the company image towards their market/customers/collaborators/...?

We have at least a couple of cases where the image changed significantly, making them leaders in their domain. This led others from the domain to reach out for our support, in order to increase their technological arsenal with emerging technologies and apply them to catch up with the leader.

In another case, the upskilled company understood that applying the technology offered a competitive advantage, leading them to request exclusive rights for the specific application we built for them.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

In order to get acquainted with a technology, one should start by a mini-project / proof-of-concept. This makes the evaluation of the usefulness/appropriateness of a technology less

risky, acquaints the stakeholders to the actual potential of the technology and allows one to focus on the actual pain points, identify the real need. This, in turn, allows the technology provider to understand whether the technology itself is the most appropriate way to address the apparent needs. This is upskilling in essence, in a real setting, in a clear business space.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?
- In a nutshell: a one-sentence message that you would like to convey?

Make sure that you understand a real problem, before you embark on a technology integration journey.

Upskilling and evaluating an emerging technology go hand-in-hand. Once you understand the technology you can see whether and how it can help.

4. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name: CyberwayFinder

Interviewee: Rosanna Kurrer

Role(s) in the organization: Co-founder and Managing Director

Time and date of the interview: 09/12/2021

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

The company supports the transition to cybersecurity for professionals of other domains or new professionals. We provide coaching and mentoring, as well as support for certifications related to the domain. Training/re-skilling/up-skilling is just an early step of the whole lifecycle of support one can get from Cyberway Finder.

Challenges also regarding HR and recruiting. Full spectrum of ages.

We are based in Brussels and Luxembourg. The core team was until recently 4 people, but currently we are 2, but we collaborate with several tens of freelancers on-demand, to implement our initiatives and projects.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

All organizations need cybersecurity because we have a talent gap, and currently the rates of such experts are sky-high, making them a scarce resource - especially for SMEs. Also compliance requirements have been increased and, thus, experts are in even greater demand.

One should note that cybersecurity goes beyond IT, so we need non-IT experts that can actually understand the business language needed to rally support for change.

- Is the upskilling need first raised by the workers, or is it a decision made at the top? Is there in place any sort of cooperation between workers and decision makers on the process?

Usually the decisions are initiated in the presence of either legal requirements or standardization requirements and/or challenging experiences regarding security breaches, losing credibility, or ability to operate. Thus, it is a set of essentially external signals that motivate the upskilling.

- The steps to completion:

- what entry barriers (to the uptake of emerging technologies) are typically in place and what steps does an organization take to overcome them?

Cybersecurity requirements bring change across all processes and functions. Thus, one needs to convince and influence people - across positions and roles - to support the effort. One needs to communicate the risks and present the need for horizontal investment.

Also language may be an important barrier for integrating cybersecurity. Sharing a language that is understandable by all roles in the company is very important to bring about smooth and effective change.

- what are the decision/steps that an organization has to take to implement integration and the related upskilling for this technology?

One needs to put cybersecurity into their strategic planning, as early as possible. Investment is critical, similarly to new tech and new equipment. Also a reskilling / upskilling effort is required, or - if this is not possible - a related recruitment effort is needed, to bring in new talent. And, in this domain, such recruiting can be a real challenge, as we said before.

- The impact:
 - How did the introduction of emerging technologies affect the company's everyday work and how does the related upskilling benefit the workers?
 - How does it benefit the business results?

This specific knowhow reduces everyday risk, it allows managing risk. One can also take opportunities (markets, tools, etc.), having an understanding of the related risks. The value of this understanding is especially applicable to other emerging technologies, such as AI.

Cybersecurity allows one to be proactive (vs reactive). It covers a variety of requirements regarding data and their use, sharing and transparency among other things. Integrating cybersecurity and digital security also ascertains sustainability, stability and business continuity. Communicating an incident and showing agility and the capacity to deal with challenges, may even lead to increase of trust to shareholders. An incident that is effectively dealt with can actually make you stronger, essentially offering increased resilience.

- Your innovation culture/capacity?

Definitely. You can innovate and try new paths, taking into account the risks from launch. Integrating cybersecurity can really help identify and mitigate risks, as well as react efficiently in new/unknown environments. This is analogous to the value of a wheel and the brake which allow one to visit a new country while not being afraid of accidents.

- How does it affect your image towards your market / customers / collaborators/...?

Integrating cybersecurity shows awareness and agility. As we said, it strengthens resilience, allows business continuity, and increases trust.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

In our domain, it is important to examine re-skilling first (vs up-skilling). Integration is a strategic decision and it needs a related investment in continuous processes. For all these reasons, one must bring cybersecurity expertise into their strategic level thinking and action.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

There is a significant lack of junior experts, so we need more cybersecurity knowhow to be gained. And we need more hands-on experience in existing programs. So we need to act quickly to gain this re-skilling momentum. We need to utilize people who already know the business to re-skill to promptly increase access to the knowhow.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?

It has happened a lot that people with cybersecurity know-how move around a lot, however it allows knowledge to be shared across companies/settings. This is challenging for companies, but mobility also increases the sharing of knowledge. And leading the way for cybersecurity can increase visibility and improve a company's public image and branding.

- In a nutshell: a one-sentence message that you would like to convey?

Reskilling and upskilling of business experts is the low hanging fruit in cybersecurity.

5. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name:Holo Ltd.

Interviewee:Jennifer Ebrecht

Role(s) in the organization: Legal Advisor, corporate governance and compliance officer

Time and date of the interview: 2021-12-25

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

Holo Limited is a cloud hosting company that is fully owned by the Holochain Foundation. Holo Ltd. is building the components of the Holo network, HoloPorts, HoloFuel, and the Holo hosting apps necessary for creating a distributed cloud hosting marketplace for P2P apps. Holo is responsible for adhering to all regulatory requirements related to the business of Holo and operations of the HoloFuel cryptocurrency reserves, while Holochain remains a distinct Open Source project with related intellectual property residing in the Foundation.

The company has over 30 team members, its headquarters is in Gibraltar, while most of the team is remotely located.

I function as a Legal Advisor in the company, working also as a corporate governance and compliance officer. My background is that of an international lawyer with expertise in Taxes and Compliance.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business know-how and why/when did the upskilling become a necessity/priority?
 - How was the need raised? Was it a decision made at the top levels of company management? Was there in place any sort of cooperation between workers and decision makers on the process?

In the past I worked as an international tax expert, providing services for clients in general. During the last 3 years, I have been working with crypto companies, supporting them in the face of related regulation requirements, which are still extremely volatile. More recently I got involved with the technology behind the business (blockchain, etc.). Thus, there was a regulation-driven need.

A few months back I joined HOLO and I really felt that decentralized technology as implemented in the company is innovative and I wanted to develop the legal and regulation aspects. This offered the self-motivation aspect to the decision.

Openness of my environment towards my work was also critical for my joining this innovation space. Previously, even communicating the international and remote aspects of my work has been challenging, considering the idiosyncrasies of the position. The COVID crisis significantly increased the understanding of remote work, but also of innovative technologies in everyday work life. The profession requirements and the technology capacities and requirements directly collided in our previous everyday practice. This formed another pillar for the decision to upskill and bring emerging technology into our line of work.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

Understanding was difficult for a non-technological person and this is an everyday challenge.

- what were the decision/steps that you had to take to implement the required upskilling?

Self-motivation and interest in the technological aspect is critical. In emerging technologies it is very important to have everyday friction with tech-aware colleagues and knowledgeable people, because nothing is still fixed. Everyday brings change and you need to gain your knowledge through experience. Being part of bleeding-edge innovation requires constant change and upskilling, which can reach the limits of human capacity.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how did upskilling benefit your colleagues and yourself?

Technologies get tightly coupled with our everyday practice: from finding a doctor, to moving around, to meeting people to communicating and collaborating. On the other hand, the use of decentralized technologies - like the one we bring into play - for data protection is critical for tomorrow's everyday digital interactions. So I expect that the impact of emerging technologies will increase in the future.

- Your business results?

I expect that the decentralization of information will increase trust, increase security and reduce risks. I had a recent experience that supported my expectation: a website related to crypto-currencies was hacked, showing false amounts of wallet credit. If this information was distributed, such an incident could have been averted.

- Your innovation culture/capacity?

Participating into the ecosystem of an emerging technology, significantly increases the openness in the face of innovation. The same stands for keeping an open mindset and gaining knowledge with an international perspective, since many technologies are international and collaborations cross traditional borders. For me, it is critical to participate in the ongoing change.

- How did it affect your image towards your market/customers/collaborators/...?

Upskilling and gaining knowhow in technologies that interact with your domain significantly improves your recognizability, your self-branding and professional image. In my profession, one must be prepared to help others in the people's everyday technological practice.

In Holo, moving towards a decentralized world, we essentially also increase the company visibility and improve the branding: we form the future.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

It was very important that I worked on emerging technologies early, because it makes my services unique. Following my vision regarding the decentralization of information gave me the capacity to work at an international level. This journey has proved me correct and provided me with many opportunities to learn and improve my technological understanding.

For me, it is really important to develop two types of skills, even early in the education process: (a) an understanding of technology and how to innovate with it; and (b) language skills (especially English, which is a very common medium of communication across cultures and locations) that will allow wider collaboration.

It is totally worth it to invest in upskilling oneself, open one's mind with new things, and widen your professional targeting to an international level. This is doable exactly by upskilling and daring to join the change.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

There are typically a number of entry barriers to undertaking a technology. But these can and will be lowered over time.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?
- In a nutshell: a one-sentence message that you would like to convey?

The greatest challenge on DEFI (Decentralized finance) is not TECH, Talent or Capital. It is REGULATIONS. Thus, emerging technologies are not all about tech: they need all types of skills to support them.

6. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name: SayItLabs

Interviewee: Erich Reiter

Role(s) in the organization: CEO, director & Co-founder

Time and date of the interview: 08/12/2021

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

We create AI technology, using big data to generate models for people who have speech disorders. We have created a speech recognition engine that has been tuned for a specific speech disorder (stuttering). This need became apparent because there appears to be very low actual specialization concerning stuttering: the percentage of speech and language pathologists that can offer real support regarding this speech disorder is problematic. In our company we gather data to improve the model and we achieve this through a game, which acts as a friendly user interface and experience to motivate the user.

SayItLabs is based in Belgium, hosting 8 people and was officially founded in 2019.

We target caregivers and the paramedical domain on speech and language pathology (e.g. speech therapy). We also support the end user, if they have no access to a specialist, but also in conjunction with the (para)medical support.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

Personal experience forced me to face the huge challenges that both non-specialized speech and language pathologists and patients face with respect to having access to speech therapy. I was led to train myself, become a Speech and Language Pathologist (SLP) and work as one. So, being a research/software engineer by background, I identified that technology could help a lot and the related upskilling on technology would be very helpful in many ways. Previous experience in big firms related to speech understanding (NLP engineering) allowed me to understand the value of combining the two worlds: SLP and NLP know-how.

- Was the need raised first by the workers, or was it a decision made at the top? Was there in place any sort of cooperation between workers and decision makers on the process?

We had to introduce the main concepts to the team we formed, including a strong sharing of knowledge and interaction across all disciplines: from animation, to programming, to the medical aspects. Being a small team originally, we grew together, having this sharing and upskilling practice as a foundational process.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

Revisiting education in your 30s is a challenge. It implies changing your whole professional and personal life, and can increase risk.

- what were the decision/steps that the organization had to take to implement the required upskilling?

It is a life-changing, significant decision to professionally move to a new domain of knowledge and a related profession. And, in my case as a person, this move also gave way to a second decision: would initiating a start-up in the domain be a meaningful option?

In the company, the decision of upskilling relates to investing in communication. At Say It Labs, we decide to express all ideas and share knowledge to break cross-cultural and cross-disciplinary barriers. This is a non-trivial decision. We also need to make sure that we take the time and invest in team-building and soft skills/communication, which significantly complements the technology know-how.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how upskilling benefitted your workers?

It actually brought strong self-motivation, through the combination of technology with our important, life-changing vision and the teamwork that can make it all happen.

- Your business results?

For us the integration of AI is a critical component, without which nothing would be possible.

- Your innovation culture/capacity?

Innovation was present from the very beginning in the company, given the innovative character of the startup itself. However, the interaction with the whole team led to an even more open innovation culture that has helped a lot.

- How did it affect your image towards your market/customers/collaborators/...?

- Lessons learnt:
 - What were the lessons learnt from the process?

Upskilling requires being agile in learning and in action. Especially in SMEs, people can cross pollinate into roles well beyond their hired titles. Thus, upskilling can allow people to work in multi-disciplinary teams and undertake more than one role to enable progress of the team as a whole.

- What would you have done differently?
- What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

If you feel the fire, you have to jump. Do not expect to know exactly what will happen and how. You have to have faith in the journey combined with a realism for implementation challenges. However, search for a mentor to guide you and support you. When you are ready and have confidence in your skillset, start and enjoy the road.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?
- In a nutshell: a one-sentence message that you would like to convey?

The more you know, the more you notice. Cross-disciplinary learning broadens the vision and possibilities.

7. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name: Nanometrisis

Interviewee: Vassilios Constantoudis / Antonis Stellas

Role(s) in the organization: Co-founder and Product Director / Data Scientist

Time and date of the interview: 09/12/2021

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

Nanometrisis brings together the world of software engineering/computer science and the world of nanotechnology in order to cover the advanced metrology needs of nanostructured materials used in nanotechnology.

Nanometrisis designs and implements software to support companies that offer products using the nano-scale properties of materials. The software of Nanometrisis analyze data, images and other outputs of highly specific instruments related to nano-structure manufacturing to measure their morphology and evaluate their performance.

We are located in Athens, with a workforce of 4 people. The scope of our clientele is from semiconductors and microelectronics companies to pharma companies and blade industries.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

There were several reasons to bring AI knowhow into the company. First, we saw that computational methods are quite successful in similar domains (e.g. medical imaging). Second, there was already a network of collaborations that could enable this upskilling. Furthermore, the fact that a critical mass of new scientists were at hand's reach through our academic funnels, facilitated undertaking the effort. Additionally, our interactions with other companies and clients indicated that AI would become a major tool (especially in the R&D aspect) for nanometrology. Finally, data are becoming available and could significantly help building AI solutions, which - combined with previous knowhow (in data generation) - indicated that upskilling was a critical enabler for a next step forward.

- Was the need raised first by the workers, or was it a decision made at the top? Was there in place any sort of cooperation between workers and decision makers on the process?

It was a decision led by the co-founders, but was actually supported, implemented and pioneered by the young scientists who were upskilled. The company culture is strongly

innovative anyway, which facilitated the fertilization of the idea into a common approach for improvement.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

A main challenge was the lack of cross-disciplinary experts. Especially in highly specialized domains, understanding the challenges of the domain together with the opportunities and risks of applying AI is critical.

Thus, we undertook the effort of upskilling new scientists that would carry the best of both worlds (nanometrology and AI) and making them part of the company.

Another challenge is building trust towards the customer when AI comes into play. This barrier can also be supported by upskilling itself, since it can make the customer feel that they are talking with an expert that understands both the business needs and the value of applying novel technologies to tackle these needs.

- what were the decision/steps that the organization had to take to implement the required upskilling?

The decisions were the following: (a) whether we should invest in AI and who are the most appropriate people to bring in this joint know-how from both worlds, and (b) what training they need to have. Finally, we had to decide on the problems that are appropriately faced through AI application in our domain of expertise.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how upskilling benefitted your workers?

Integrating AI launched an internal initiative to better record, understand and utilize data. It also made us constantly invest in upskilling and remaining updated with respect to the newest methods, tools and practices.

- Your business results?

The prototypes we create are currently being evaluated both by us and by our clients. Trust needs to be built and results remain to be evaluated. Applying AI in this domain is a path that needs to be examined step-by-step, taking into account pre-existing experience and practices. Thus, the business results are yet to be evaluated.

- Your innovation culture/capacity?

Integrating a new toolset simply strengthened the pre-existing innovation culture and highlighted important opportunities, but also challenges regarding the uptake of innovative technologies.

- How did it affect your image towards your market/customers/collaborators/...?

We definitely use the new technology as a strong communication point. It has also allowed us to strengthen our position in proposals for EU-funded projects, which are an important income funnel, but also to show that we remain at the forefront of our domain. We also pivoted our branding from “a provider of nanometrology software” towards “applying machine-learning-enabled nanometrology”, which shows how much value we put on this upskilling investment.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

One needs to identify challenges and needs, to examine whether pre-existing solutions are appropriate. To this end, one may need to have an entry-level training to evaluate the applicability of the AI technologies on the company’s domain and product. AI is not a panacea, but if mapped to appropriate applications it can significantly boost the business results of a company. If one determines that AI is indeed useful, prompt action is needed to pave the way to integration.

Multidisciplinary is critical in this process, but also brings in challenges in communication between involved parties. Thus, agility of the team members is very important to mitigate the friction between scientific groups and business people, who bring in the real industrial need. Thus, internal communication and constant updates are vital to achieve a smooth integration and to maximize the positive impact of the emerging technology uptake.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

We are still in the beginning of the upskilling process. One needs to update their methods and make them AI-enabled, but always in alignment to business needs and potential clients. And there is also the challenge of whether the SME know-how will be deep enough to support big customers who may have their own R&D departments.

On the other hand, the company experts need to be constantly updated, since this type of technical upskilling is a constant process throughout the company lifecycle.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?

In Nanometrisis, we also think that the horizontal nature of AI may help us extend our market size by implementing other applications, beyond our original product arsenal.

- In a nutshell: a one-sentence message that you would like to convey?

Listen to your data even on nanoscale. They always have more to tell you than you can imagine, and they can challenge our common mathematical understanding. They demand brave reconsiderations and machine learning may be a tool well-worth playing with to listen to what data can tell you.

Company structure:

Nanometrisis currently contains a flat company structure without middle management. There are two product development roles and one market development role. Those roles also are performing research consulting duties. Nanometrisis also contains a data scientist role.

8. Digital SkillUp - SME Business Cases Interviews

Organization name: Unique.network

Interviewee: Irina Karagyaur

Role(s) in the organization: Head of Metaverse Growth

Time and date of the interview: 09/12/2021

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

In Unique.network, a company of approximately 50 employees, we offer a scalable blockchain for composable NFTs with advanced economies: the NFT chain built for Polkadot and Kusama. Essentially we offer an NFT-related toolkit/palette, including education related to NFTs. We support our ecosystem through training on how to set up a marketplace, how to customize and parametrize the system based on our toolkit.

Originally an architect by background with experience in management consulting, I took the role of ecosystem growth when I started in the company in 2021. This role implies marketing actions, project onboarding, having sufficient blockchain knowledge, an awareness of possible applications, and - essentially - knowledge of the whole lifecycle of the product. This involved significant upskilling and still does. It was my university background that allowed me to upskill and focus on blockchain. However, keep in mind that in the blockchain community education programs are very commonly provided by the toolkit designers: they range from having a generic, high-level focus to being developer-centric; from online courses to webinars and networking.

The interview (~20')

- The need:
 - Why did you decide to include an emerging technology in your knowhow and why/when did the upskilling become a necessity/priority?

The co-founder has been in the domain for several years and the movement towards Web 3.0 formed a clear opportunity, based on the token economy (tangible/intangible). There were many use cases that offered opportunities and paved the way to the utilization of blockchain as a foundational component of the company.

In my personal story, the COVID lockdowns led to my learning about blockchain and discovering the ecosystem. Step by step, I prepared myself informally for joining opportunities that I identified in the NFT business side.

- Was the need for the integration and training first raised by the workers, or was it a decision made at the top of the company? Was there in place any sort of cooperation between workers and decision makers on the process?

The specific technology was the building block for everything in our vision. It allows combining different blocks and different technological components to form synergies across companies and industries. It allows one to provide an immersive experience and setting evolving the current state of the Internet into the Metaverse era.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

Difficulty in understanding the basics could be an obstacle both for non-techies and techies. For IT people / developers the ecosystem is critical. We have several thousand followers across social media and communities trying to empower and facilitate this ecosystem. We assign ambassadors who can help scaling our communications, we offer workshops and generally strongly support the community that form our target group.

In my case, understanding the basics and developing an understanding regarding the connection between the basic technology and the business cases as opportunities was a challenge I faced. But through interaction with the community I increased my know-how to a sufficient level to undertake my current, exciting role.

As a side comment, there exist groups that are very important as business case enablers and they also enjoy maximal impact through upskilling: artists. These people really need to understand how to enter NFT space and share their collections, because this is most probably the future of their monetization and trading practice.

- what were the decision/steps that the organization had to take to implement the required upskilling?

In such a volatile setting, constantly everything has to be revised. Research and education is ongoing and, thus, a related decision is a strong requirement from the beginning of any related endeavour.

Our user base needs to decide on whether they want to be part of the Metaverse revolution through our products, creating new opportunities and being part of the ecosystem. This implies time investment and new ways of doing things, like sharing a piece of art, or selling my products.

- The impact:
 - How did the introduction of emerging technologies affect the users' everyday work and how can the related upskilling benefit them?

In the Unique.network ecosystem, assets and trading are directly connected to a decentralized wallet, which is transparent, traceable, making it an enabler for any digital entity that is part of this community.

Due to the agility of our toolset and offering, each user can customize their approach to the Metaverse and its extensions into the physical world. Essentially, through this work, value is brought to the Internet itself.

- Their business results? Their innovation culture/capacity?

Integration of our technology brings agility, may support gamification, and allows innovation. It supports the combination of different modules / components to form a variety of solutions, from the simplest to the most immersive and complex experiences of Web 3.0.

Overall, our technology essentially empowers creators. It allows them to innovate in this all-new world, possibly creating new professions and roles that will participate in the future of the Internet as we know it.

- How did it affect your image towards your market/customers/collaborators/...?

Being part of this ecosystem, it moves adopters into a new era of creation, and makes them part of the new decentralized ecosystems.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

Essentially all industries can take advantage and innovate using blockchain-based technologies. The community is your teacher and in there opportunities arise. Join the ecosystem to understand the type of opportunities that exist out there. Sharing knowledge in itself allows building collaborations and new projects. You can also bring social impact through the community and the technical tools, regardless of where you live, regardless of physical borders and barriers.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

The more people we involve, the more opportunities will appear, the more innovation will occur.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?

The community is critical. Transparency of the community increases the understanding of the opportunities and where you can really belong as a person.

- In a nutshell: a one-sentence message that you would like to convey?

Step out of your comfort zone. Give yourself a chance to learn. The community is welcoming and encouraging. Do the first step, find an environment that suits you and then reach to the place you want to be.

9. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name: Block.co

Interviewee: Alexis Nicolaou

Role(s) in the organization: CEO

Time and date of the interview: 8/12/2021

Intro

- Would you like to share some information about your business? What do you do? Where are you located? How many employees do you have?

Block.co is an innovative company applying blockchain credentialing for documents / electronic files. We work towards brand NFTs for sharing and claiming. We are a Cyprus-based company with approximately 12 people, located all around the world.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

My professional journey was a long, exciting one from financial/accounting consulting to leading media groups. Recently, my steps brought me into the domain of blockchain, an emerging and apparently ground-breaking technology.

Throughout the years I have very often come in contact with other emerging technologies. Such interactions started, for example, from the effect of the Internet to the advertising sector. More recently I also met with the effects of technology in the banking sector and clearly observed how this offered a whole new viewpoint regarding trading and money.

On the other hand, I saw that the digital spaces that have appeared online and have become significantly more populated during the COVID-19 era directly affect the promotion, exposure and sharing of brands and products. This impact combined with the rise of blockchain and NFTs creates a wealth of opportunities and challenges for bringing the two worlds together.

This understanding led me to follow the upcoming change to avoid becoming outdated in a very volatile and novel environment.

- Was the need raised first by the workers, or was it a decision made at the top? Was there in place any sort of cooperation between workers and decision makers on the process?

The vision of the company was essentially outlined by the CEO of the Univ. of Nicosia who started the whole endeavor. I should note that this vision was formed back in 2014, very early in the lifecycle of the blockchain ecosystem. Which means that upskilling would be a foundational aspect of the people that would contribute to this vision and organization.

On my part, I contributed to the business plan of the company, as the output of an MSc thesis. Coming from a financial investment background, I had to also gain basic technical knowledge to allow synergies between business experts and technical experts, since such synergies are critical for success. It is the knowhow of the team as a whole that provides the value of the company. In our case, academic knowhow brought in from the University was - and still remains - very significant as part of the company capacity.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

The biggest barrier today is the business development aspect. The fact that it is a nascent area of tech application requires that we deeply understand the idiosyncrasies, vocabulary of business development and marketing channels, which are typically different from traditional settings.

On the other hand, the whole ecosystem around blockchain diverges from previous efforts/domains and, thus, requires an innovative, agile viewpoint to interact efficiently.

- what were the decision/steps that the organization had to take to implement the required upskilling?

Since my decision to get into the media industry, I could clearly see a change in the future of the sector. At the time, I had a strong tendency to invest in a space that would form the future. Technology was something I understood was the way forward. When I was at the University of Nicosia, I felt it was a space where blockchain technology had its established experts. Thus I needed to decide whether I wanted to be in the right space at the right time: the answer was easy.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how upskilling benefitted your workers?

In our domain of application, the blockchain revolution brings into play a completely new reality in the up-and-coming digital spaces. Pioneering such a change, with support from academic experts that lead the change significantly changes the drive and motivation of the team on a daily basis.

- Your business results?

The first projects are underway which means we will need to examine the actual achievement in retrospect soon. This is the price and excitement of leading an innovative effort.

- Your innovation culture/capacity?
- How did it affect your image towards your market/customers/collaborators/...?

There was a clear improvement when discussing with tech people, since they understand I am more than a visitor in this domain: I can understand and bring value from the business space into the technology space. This is invaluable.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

It was extremely important to move out of my comfort zone and to move on and invest in this new challenge. I believe that people need to be aware of such sectors that lead the future. This is feasible through training and interaction.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

I strongly feel that we all need to adapt to the ongoing change. To live through the related challenges adapting means improving oneself, learning more, opening up to more.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?
- In a nutshell: a one-sentence message that you would like to convey?

Embrace technology to reduce fear, to get a better understanding of what it means. Allow yourself to err and improve. Know the change. Take the human into account, take emotional intelligence into play, through experience. Develop yourself technically, but keep the soft skills aspects as well. The collective knowledge of the team as a whole is critical: together we stand better.

10. [Digital SkillUp](#) - SME Business Cases Interviews

HISTORY: Promote the design and construction of a "Pollinator Park" with REVESTIC and PAMRELAVES methodology in "scenarios-of-OPPORTUNITIES and risks-of-OSH-green jobs"

Organization name: Global3CCS®

Interviewee: Pepe Betancort, [Walter Casquino](#) y JoseMa Padrón

Role(s) in the organization: Member of the Board of Directors

Time and date of the interview: 2021-11-30, 16:00 Athens time

Intro

Would you like to share some information about your business? What do you do? Where are you located? How many employees do you have?

[Global3CCS®](#) is a consulting cluster [Industrial Connected 4.0](#), empowering companies and organizations through technologies and training schemes. We help them identify their challenges and needs, through detailed analysis, and we suggest corrective actions and solutions.

Such solution proposals may come in the form of short to long range initiatives and projects. We cover all levels of organization functions, from the core to the more peripheral ones. In our approach, technology comes first after identifying the needs. The technologies that have been selected to solve a problem lead to suggestions on training and capacity building. Finally, we tune internal organization processes to ascertain smooth integration of the upskilled workforce and the updated processes. Our final aim is to improve the productivity of the organizations we support, and we measure the impact of our proposals through appropriate KPIs.

We have 6 full time people working for us, and also employ outsourcing to strengthen our team, through a network of more than 20 people. We are based in The Canary Islands, Spain.

Pepe:

In Global3CCS®, we also aim to contribute to two more aims touching [societal](#) challenges. First, we try to reduce problems in decision-making in ecological and innovative public procurement for compliance with efficient green subsidies, which reduce CO2 emissions. And, on the other hand, we try to turn students into workers by transforming unemployment benefits into wages, through the application of targeted upskilling and introduction of young, innovative people in the workforce.

The interview

The need:

- Why did you decide to include an emerging technology in your business or propose it to companies you support and why/when did the upskilling become a necessity/priority?

For us, technology from the [Ecodesign3CCS®](#) is a fundamental tool during consulting. It allows solutions in a variety of domains and challenges. Thus, we have added emerging technologies, such as AI and blockchain, as part of our portfolio. Thus, I would say that such emerging technologies came into play through the market needs themselves, but also the maturing of technology and its branding. We have already built proposals integrating these innovations for sectors such as [training](#), water, mining, circular economy, and biosecurity.

- Where did the need originate from? Was it the companies themselves, their workers or was there a different source?

We, as consultants, indicate the technological opportunities to our customers ourselves, also communicating the value of such an integration and the related upskilling process.

The steps to completion:

- what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

To integrate an emerging technology a number of challenges exist. One needs to motivate the people, essentially “market” the technology appropriately to the interested party. Then, knowledge transfer needs commitment, training and capacity building, which implies investment and appropriate resources. Last, but not least, adapting the organizational structure and processes can be critical. In all the above, young people - that may be more ready for innovation and more open to new knowledge - constitute a strength. We typically propose bringing such people into the organization to infuse the innovation mentality needed and change the culture over time. It is indeed a change management process.

- what were the decision/steps that the organization had to take to implement the required upskilling?

The decisions one has to take are related to (a) Commitment to move forward, (b) Investment for capacity building and attracting new talent (c) Training the whole workforce to enable smooth transition to the technologically-enabled company status (d) Undertake innovation and upskilling as a continuous process, making sure that improvement is ascertained one step at a time (d) Aiming for technology-aware change as a strategic decision.

The impact:

- How do you see that the introduction of emerging technologies will affect your clients' everyday work and how will the related upskilling benefit your workers? Your business results? Your innovation culture/capacity?

The main aim for such an integration of emerging technologies is to increase productivity, performance and comfort across company functions.

One would also expect that such innovation-driven change needs to be brought to the whole ecosystem: starting from companies and upwards, to academia, and government functions.

All the above are expected to significantly increase innovation readiness and capacity, facilitating further change and minimizing the related risks.

- How does it affect the companies' image towards your market / customers / collaborators/...?

We expect that bringing emerging technologies into a company offering does change a company's image and improves branding. Since the impact of applying such a technology may also extend to other stakeholders beyond the company itself, through the related interactions, it makes sense to make them aware of such change.

Lessons learnt:

- What are the lessons learnt from the process of technological integration into companies and organizations?

Innovation needs to be a long range goal. On the other hand, one needs to set short-term milestones and apply iterative, strategic evaluation. We always suggest that the feasibility of the application of an emerging technology to a new domain is revisited periodically, ideally by an external auditor.

We have clearly seen that, in order to innovate, commitment for change is needed across all levels of management and the workforce. Full support needed by all to facilitate a smooth transition into a new state of work, being empowered by the emerging technologies.

- What would you suggest to others in a position regarding uptake of the technology and upskilling?

Upskilling is critical, but one needs to first identify the right form of training, customized to the company's challenges and needs. Such an identification process is not trivial and needs (possibly external) experts to identify. This is where our expertise comes in: to ascertain doing the right thing for the right reason.

The future:

- How do you see the next steps and the future of a business when it has completed both emerging technology uptake and the required upskilling?

We expect that companies undertaking the integration of emerging technologies can achieve more. Always aiming for improving productivity, they may also align to sustainable aims and - in the end - better understand the needs of their customers but also of their own organization over time.

Outro (5')

Is there anything else you would like to add? Any thoughts or suggestions?

In a nutshell: a one-sentence message that you would like to convey?

Upskilling and innovation means Improvement, means wanting to improve, improve everything.

11. [Digital SkillUp](#) - SME Business Cases

Interviews

Organization name: Next Solutions S.A.

Interviewee: Giorgos Gavriil / Katerina Kopsacheili

Role(s) in the organization: CEO / Customer Empathy & Product Director

Time and date of the interview: 2021-12-06

Suggested structure

Intro

- Would you like to share some information about your business? What do you do?
Where are you located? How many employees do you have?

We empower everyone in how they manage their financial lives, taking banking out of their thinking. We ensure peace of mind around payments.

We offer a state-of-the-art AI-enabled assistant, that interprets the users' financial data for two main reasons: to automate all mundane financial tasks on behalf of the user, but also to offer assistance regarding the future of his/her money.

We are located in Greece, but looking for expansion in the Euro-zone.

2 full time people, supported by numerous outsourcing teams to ascertain an appropriate web presence, but also to help us integrate AI and to support other (not necessarily technical) functions of our line of work.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

The decision was not based on hype. The aim of our product is to interpret data in a domain where removing cognitive biases can be very successful and data are in abundance. Thus, data analysis at scale and AI offered a clear pathway to achieve our aims.

Upskilling became a priority to better understand the potential and the limitations of AI as a tool for our aims and to be able to better manage the integration of this technology into our workflows and product.

- Was the need raised first by the workers, or was it a decision made at the top? Was there in place any sort of cooperation between workers and decision makers on the process?

The decision came from the top, since the company is a start-up and the structure of the company was still in its beginning. However, we involved also our partners in the upskilling process, to horizontally align to the opportunities and challenges we may face in this integration of emerging technology.

- The steps to completion:

- what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

There were a number of barriers:

- We needed to better understand AI, with respect to its requirements, its potential and risks.
- The current status of our product, which is at a beta-testing/demo stage, causes a challenge related to the data and whether they are enough to really allow us to exploit the full potential of the technological tools we have at our disposal.

We made sure that we started with a training workshop to increase our understanding and converge to a company strategy regarding AI and its introduction into our product. We also launched the first pilot projects to increase our affinity to the technology and hone our management skills regarding such technology projects.

- what were the decision/steps that the organization had to take to implement the required upskilling?

The decisions were mostly related to:

- how important the integration of AI was in our development lifecycle and when;
- the timing of the investment in this upskilling with respect to our funding efforts;
- who would be able to participate in the trainings and for what reason;
- draw the fine line between the integration of AI in the MVP or at a later stage.

- The impact:

- How did the introduction of emerging technologies affect your everyday work and how upskilling benefitted your workers?

We have not seen an everyday change, essentially due to the stage of our startup. We are in a phase where we measure the effectiveness of the related

methods and learn to integrate them as appropriate in our next steps and growth.

- Your business results?

We expect to see the first results after the product is fully launched.

- Your innovation culture/capacity?

Integrating AI did definitely change our innovation capacity. It allowed us to further strengthen our pre-existing innovation viewpoint and to help us match ideas to technical methodologies. While originally the technology seemed exotic, the upskilling allowed us to bring the understanding needed to apply it realistically.

- How did it affect your image towards your market/customers/collaborators/...?

Based on our current status, the evaluation of our efforts is mostly focused towards the product itself and the related business model. Thus, it is early to evaluate the actual impact.

- Lessons learnt:

- What were the lessons learnt from the process?

Katerina: I would have liked to have had the training earlier to be able to revisit the product features earlier. This boost in our innovation capacity would have been even more impactful perhaps if it started earlier.

Giorgos: Integration of such a technology is more an initiative than a single project. It implies long term commitment and training.

- What would you have done differently?
- What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

Katerina: Start early, because understanding more allows you to see more. A hands-on experience and increased understanding of the potential allows one to better evaluate whether the integration of the technology makes sense, but it also opens up new options and ideas for products, workflows and services.

It is also critical to bring business people into play: integrating an emerging technology affects all company workflows. Thus, grassroots understanding and effort is needed to achieve a sustainable integration.

- The future:

- How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

Upskilling is a constant worthwhile effort, and implies a periodic commitment to obtaining new knowledge.

On the application side, data gathering will allow us to better evolve our ideas and put them to practice in later stages of product development and fine-tuning.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?
- In a nutshell: a one-sentence message that you would like to convey?

Do not hesitate to try it early. Evaluate realistically. Commit decisively. Do not do it for the hype. There is a deeper value in it.

12. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name: Smarthink

Interviewee: Lucilla Crosta

Role(s) in the organization: CEO, R&D

Time and date of the interview: 7/12/21

Intro

- Would you like to share some information about your business? What do you do? Where are you located? How many employees do you have?

Smarthink is an Educational Technology Italian company based in the North of Italy, aimed at creating a real developmental learning experience for online adult learners, through the use of innovative technologies. We work especially on two levels: first on the assessment of workers skills and second on the development of these same key skills required today by the marketplace. These skills are for example: soft skills, remote working skills, and few more. Our work on skills is possible thanks to our internally built platform called Edulai, that performs the above two tasks first through its Skills Checker and second through its Intelligent Library and our e-learning courses. We are 7 in total, from specialists in Education and training to marketing, business strategy, R&D, administration and sellers.

Our product provides recommendations for a personal / individual training: which content is more appropriate for the specific person. This aspect of the product utilizes AI algorithms/Machine Learning

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

The market was asking for something new, and we wanted to bring an added value to what already existed. Indeed, our technology makes use of Artificial Intelligence and Machine Learning, while respecting and taking into account key teaching and learning principles. We also decided to include an emerging technology into our business because there wasn't something like this in the market yet and because we were aware that such emerging technologies are the future. Internally, there was a need to understand how machine learning / AI works, how it supports the tool we created, and why data were needed to train

the tool. This need was already apparent since 2016-17. Our product was significantly boosted by the pandemic requirements, since it allows remote training.

Concerning how we applied upskilling to others, since this is our main offering, we focused our services based on market demand: technologies for remote working. There was a prompt requirement on how people could work, manage time and projects, and interact efficiently from home. Also mindfulness and wellness was an issue.

Furthermore, more recently, the Covid-19 Pandemic, played a key role in making the upskilling process even more explicit and needed, since with the Pandemic, classic professional roles were twisted, the number of unemployment increased and the digitalization received a strong and unexpected acceleration with the introduction of technologies even in those sectors where before then, the change was taking place at slow rate. We received similar signals from the academic world with which we have a strong interaction.

Also the lack of key soft and transversal skills, necessary for bringing innovation in the company, for solving problems, for building effective teams and so on, was expressed by company executives. These ideas were even more emphasised by the findings of a recent Erasmus+ project Catch21st, in which we worked, where we interviewed several local and international employers reporting the issues discussed above. Hence, upskilling was already a priority even when the Pandemic arrived in the world 2 years ago now.

Based on the above, new emerging technologies are part of our offer, but these need to be supported by soft skill development.

Our product provides recommendations for personalized / individual training: which content is more appropriate for the specific person. This aspect of the product utilizes Machine Learning / information retrieval / AI algorithms, improving as the system is being used. It is this emerging technology that empowers our product to offer significant and innovative features.

- Was the need raised first by the workers, or was it a decision made at the top? Was there in place any sort of cooperation between workers and decision makers on the process?

The internal need for training was driven by the whole workforce. Our practice was a bottom-up co-creation process, which brings very valuable feedback and comments from everyone and improves sustainability. Our employees had to be aware of the system capabilities to better communicate it, support it and allow it to evolve. The market, on the other hand, provided the external requirements for training.

Concerning the companies we have been working with, on the upskilling process, there has been one the top executives of which, expressed a strong need of mapping the key transversal skills of its workers, for decision support on personnel allocation. Indeed, the Pandemic brought some important changes in the company and they had to reorganise its structure and to make important key strategic decisions for the future. We can say that there

was in place some sort of cooperation between the workers and the decision makers in the company, since the project and the new process was well accepted by workers overall and also well received. There was however an implicit unexpressed need of upskilling, that probably thanks to the Pandemic, was made explicit while creating, at the same time, some degree of awareness among workers themselves.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

Our internal training was mostly a set of informal discussions communicating the main points of AI use to our personnel. The communication gap between ICT and non-ICT personnel know-how caused a communication challenge, so the team needed to converge to a common vocabulary and understanding of the technical details and their impact to everyday practice.

As far as our customers are concerned, the company decision makers were quite new to our technology and to the use of our tool; they had never seen or used something like the Edulai Skills Checker®. For this reason we supported the company in the process, while planning together step by step, every phase of the process for them and for their workers. We organized a couple of meetings first, explaining the process, how the tool worked, how to submit the tool to their workers while making ourselves at their complete disposal in case of any kind of need. This helped not only the process to take place smoothly without any particular challenge, but also the company to feel safe and supported during the process. Indeed with a good advanced planning and training everything worked very well. Among workers there was also some kind of initial skepticism on the tool, however after having used it and after the results had been reviewed and discussed with the company entrepreneurs, major skepticism disappeared.

- what were the decision/steps that the organization had to take to implement the required upskilling?

Internally, we initiated discussions and invested time to develop an understanding of how things work and will affect us. This facilitated all the next steps, where more minor decisions needed to be taken .

Concerning the organisations we support, they had to review, analyse and discuss with us the result of the Initial Skills Assessment, for each of its employees and to deepen the results of the reports, with additional meetings with some other key employees. This helped them to make an informed decision about their workers' upskilling process in order to give value to the talent of everyone and in order to reinforce the skills of those where existed gaps. Hence, they had to implement some counseling and e-learning offers in order to reinforce those skills in which some employees were weaker.

- The impact:

- How did the introduction of emerging technologies affect your everyday work and how upskilling benefitted your workers?

The introduction of emerging technologies is now fully part of our everyday work, we cannot work without it since it impacts 100% our everyday work and our upskilling process.

Emerging technologies are part of our core business today, it simplified and helped us scaling our services offers, while reaching also very far away geographical areas. This process benefitted our workers because in some ways they can carry out their daily activities without limits of space and of time, wherever they are currently located. They also developed some more new digital skills also because of the process automation.

Upskilling related especially to AI also helped our people better understand the product, its unique features and allowed them to communicate it in a better way. Also allowed them to be part of the company value proposition and company value, and - essentially - the cultural values that form our foundation.

- Your business results?

Our business results definitely benefited a great deal from the introduction of emerging technologies because as said before, it allowed us to work without both space and time limit. We reached customers in different parts of Italy but also of the world, through our team's fluency in the English language. Without these technologies we could not have reached the customers we have today.

Concerning the AI aspect, its integration allowed us to have a unique value proposition, combining different aspects, from (human) learning/teaching theory to technology, to achieve a journey of self-development for workers. We also tried to empower our assessment tool in a way that would be more adaptive than typical assessments of the past, to allow workers to reflect on how to improve their skills.

- Your innovation culture/capacity?

Our innovation culture again was positively affected by these technologies too. They have made the difference for us and for our culture which is based on continuous learning and innovation. We have understood that innovation, in a company like our own, especially continuous innovation in a rapidly changing world and a market such as this one, should be at the basis of our value and principles. We acknowledge and value, for example, our employees' ideas, insights and suggestions. Such contributions can make the difference and sometimes really initiate change in the company, since they can see things under different perspectives.

- How did it affect your image towards your market/customers/collaborators/...?

Again it had a strong impact on our image towards our customers and collaborators because it helped open up new doors and new projects for us that we could not otherwise have opened without the related technology. The novelty of the product, of the process, the interconnection of this technology with other fields of application and other technologies, has definitely helped us enlarge, not only the type and number of our collaborators, but also our network reach and our potential customers.

- Lessons learnt:
 - What were the lessons learnt from the process?

We have learnt that when you do something with passion, because you believe in it, it sooner or later pays back and is recognized also by your customers, by your partners and by your network. This happens even if it is something new or unknown at the beginning. We have also learnt that companies oftentimes need to reach a certain degree of awareness around both the use of technology and its relation to the upskilling process of their workers. This is where we can contribute through our tool to provide this type of support. However, once awareness and trust are achieved, everything which comes next becomes immediate and a necessity.

- What would you have done differently?

Informal training has its own power vs an external training, since we had agreed to constantly interact and collaborate to better understand through hands-on experience. Also co-creation increased the involvement and dedication of everyone, making them part of a bigger change and improvement. Such practice worked nicely in our setting. Thus, at this stage and probably in this specific case, I believe I would change nothing.

On the other hand, of course, enlarging our network more and talking more with our prospect customers would have been useful in the developmental phase of our project, through piloting and getting feedback.

- What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

I would suggest they first identify where the technological idea originates from. Then, I would suggest that they request full support by the company for the technology use in their processes. This will help to fully benefit from the process and to understand why this technology is there for that purpose.

In relation to the upskilling, I would recommend to first understand and map what the company needs are, since workers are different and they have different needs, strengths and area of improvements. Then, they should act once this first aspect has been clarified. Last but not least, one more note I could add, is to create some kind of awareness around the upskilling process among workers in order to motivate their participation in a project of this kind.

Another aspect that is important is that of the company size. The size of the company can be critical when deciding the way of upskilling. For small SMEs, informal incremental training can be helpful, but in bigger organizations things can be different. Feeling part of something bigger can anyway be very helpful and motivating for participating in the integration of an emerging technology in your everyday practice.

- The future:

- How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

Upskilling a never-ending process. Integrating an emerging technology opens a door, it is a new start. You need to be updated over time and the employees need to be updated as well, to be part of an evolution process that touches everything in the company from the products to everyday practice.

Beyond upskilling, we see and we foresee a growing future based on our updated skillset and know-how. We are undertaking and establishing new partnerships both locally and internationally, we are getting in touch with new customers and we see how what we offer is becoming a constant and regular need in companies today. We foresee the expansion and improvement of the features of our technology, in order to address more and more of the unique needs of the rapidly emerging market. We also see how we can become ready to also offer new upskilling together with re-skilling services to our customers, since we are already working with some of them expressing this need.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?

Companies bringing novelty and emerging technologies also for improving the upskilling process of workers are usually small startups. There is a need of supporting the matching, the meeting between traditional companies and these new realities. It would be important to organize initiatives and events like the Digital SkillUp project, which facilitate this process of service mapping while creating more awareness in the market.

- In a nutshell: a one-sentence message that you would like to convey?

Emerging technologies are already part of our present today. If they are well-designed, they can have a strong impact on the upskilling process of our workers and make a difference!

One needs to keep a growth mindset, an upskilling culture, to not be left behind. Upskill your workers continuously.

13. [Digital SkillUp](#) - SME Business Cases Interviews

Organization name: 3DBear

Interviewee: Jussi Kajala

Role(s) in the organization: CEO, Co-founder

Time and date of the interview: 10/12/2021

Intro

- Would you like to share some information about your business? What do you do? Where are you located? How many employees do you have?

3D Bear has two main functions. First, our 3D Bear application which offers a tool for augmented reality world building and provides a first step into applying AR. It allows telling digital stories and sharing them effectively, with minor added effort. Second, we provide services, helping customers build holistic virtual learning environments using AR/VR. Essentially, we are a full service provider for a virtual learning environment.

We have offices in Finland, the US, and India. We currently have 10 employees.

The interview

- The need:
 - Why did you decide to include an emerging technology in your business and why/when did the upskilling become a necessity/priority?

The company launched originally aiming at 3D printing for creativity. Then, in a year, it became apparent we had to move to a more digital (AR/VR) environment, for higher sustainability and wider applicability of our products and services. It was a little later when we understood that clients cared about holistic solutions related to learning environments.

On the other hand, COVID-19 had a great impact on the value of virtual learning environments. I should note that around 85% of our customers are vocational, because currently AR/VR is a must for a subset of professions, while traditional lessons can be done even with less advanced technologies (e.g. teleconference). The impact of our tools and services is huge, given the capability of virtual hands-on experience on professions that require such experience (e.g. cooks, nurses).

Through our interaction with the market, we also saw that train-the-trainer services are also critical. Approximately 500 different study fields have been touched so far by our products and services. A detailed design of learning is critical, so we upskill the teachers to become content providers and contributors themselves, through our tools.

- Was the need raised first by the employees, or was it a decision made at the top level of the management? Was there in place any sort of cooperation between employees and decision makers on the process?

The decision came from the top, following the requirements of the market and the discussions with our investors. However, we did extensive workshops with various stakeholders and internally to converge to our actual vision and services.

- The steps to completion:
 - what entry barriers (to the uptake of emerging technologies) were in place and what steps did the organization take to overcome them?

AR/Unity developers are rare and are oriented towards the gaming industry, so it was challenging to recruit. So outsourcing was originally applied.

Education in itself is a challenge, because it is a bureaucratic environment, with sensitivity concerning data. Thus, there were challenges related to communicating the value of our products and services. Dedicated people for education-related-sales are hard to find. Thus, we found teachers that could be upskilled and understand the product and services and explain their worth. So we trained them to be able to communicate the possibilities we offer.

Every quarter we have two days dedicated to teamwork, interaction, assessing skill gaps, and designing next upskilling/reskilling steps. We suggest and use many books to learn new skills and we also use external resources, e.g. people from the gaming industry, audits and feedback to complement our upskilling and improvement processes.

One could also identify other challenges, such as building trust in the team, as well as building a team abroad. These challenges may be more apparent in an emerging technology setting, since related experts can be scarce and difficult to find across all locations.

I should also note that there was no previous experience in emerging technologies in the market we target. Thus, we had to work from scratch to build trust. Adaptability from this viewpoint was really critical for the team.

- what were the decision/steps that the organization had to take to implement the required upskilling?

We had to take an early strategic decision and choose a constant upskilling culture. The aim was to build adaptability and constantly evolve. We also had to trust people and train them to keep them aligned to the company culture.

Finally, specific high-level goals led to individual development goals, which in turn designated the need for upskilling.

- The impact:
 - How did the introduction of emerging technologies affect your everyday work and how did upskilling benefit your workers?

Originally it was not a big change, since our people were adaptable to new technical skills. Reduced “legacy” know-how essentially reduced the switching time to a new target, i.e. from 3D printing to AR/VR.

This switch to a digital setting allowed us to operate remotely, getting over physical limitations. But we also faced a significant challenge when we pivoted from one emerging technology (3D printing) to our current aim (AR/VR): we had to adapt our workforce, laying off people whose expertise was not applicable in the new setting and recruiting others to fill our skill gaps.

- Your business results?

Moving to AR/VR and the digital paradigm, we improved our sustainability, increased our reach and accessed new markets. We also boosted our scalability and agility. The new setting allowed us to offer holistic experiences through collaborations with partners. Finally, we ascertained business continuity through the applicability of our products and services in the presence of health (COVID-19) challenges.

Our innovative practice led to collaborations with big players (Google and Apple partnerships), which is an amazing achievement. However, a number of unforeseen challenges appeared. There was now a requirement to adapt effectively to requirements beyond the technical aspects: we had to deal with an innovation start-up ecosystem and market. To do well in such a setting can be a long learning path. The challenge becomes bigger due to the lack of hands, given the size of the company. But in this case, strategic thinking can help. In any case, focusing on the action and priority that is more appropriate and timely can be a constant challenge.

- Your innovation culture/capacity?
- How did it affect your image towards your market/customers/collaborators/...?

Pioneering can be critical. It can have a significant, positive impact on funding opportunities. We managed to be leaders in Finland regarding securing US funding. We are leaders in the EU in terms of access to foreign markets (India). The fact that we managed to create education technology that is prospering is no little achievement. All the above, improved our branding as an SME, which also led us to play a leading role in the wider community and ecosystem.

- Lessons learnt:
 - What were the lessons learnt from the process?
 - What would you have done differently?
 - What would you suggest to others in a similar position regarding uptake of the technology and upskilling?

The need and impact of AR/VR on education grows big. The COVID-19 crisis showed that we need to change the way we learn. There is a lot of work to do and numerous opportunities to evaluate. However, patience is needed: one needs to get ready for a marathon (~7 years) of change. This education space and related technological opportunities and challenges offer an intriguing environment. However, so far we have managed to have an amazing impact on this environment which makes us proud.

If you are motivated, do it. Learn a lot, beyond technical skills. Establish partnerships.

- The future:
 - How do you see the next steps and the future of your business now that you have completed both emerging technology uptake and the required upskilling?

Upskilling is constant. It brings agility to the company, which coupled with specific aims can really boost opportunities and company performance.

Outro (5')

- Is there anything else you would like to add? Any thoughts or suggestions?

Many words and phrases come to mind: big impact, big opportunity, keep an open mind, extend partnerships, gain win-win situations. One has to have a holistic approach to the use of emerging technologies. One also has to understand the real software needs and apply modular solutions that can solve these challenges sufficiently.

- In a nutshell: a one-sentence message that you would like to convey?

Have clear strategic goals and identify clear upskilling processes to maximize your impact.