



E03: Optimize them Up: Fire Extinguishers Done

O: Many great things, ideas or businesses and bands, of course, all started from a garage and this is the exact reason why I decided to turn the garage of our new office into my studio for this episode.

This quarantine time has apparently served to everyone as a good opportunity to reevaluate some things in their lives and to start cherishing what truly matters to them. Sometimes you don't value things enough until you lose them, or you are temporarily deprived from them. For a majority of people, they came to know how precious it is to be free to just go out carelessly and enjoy time with their friends or family and the loved ones. I've just come to realize how much I appreciate the dishwasher in my Belgrade apartment, after assisting my grandma with her chores for a couple weeks.

Yeah, you know it, automatizing processes is the real deal, my friends, and this is the very topic of our today's episode. Fusing Futures episode number three - *Fire Extinguishers Done*. I'm delighted to introduce you our guest for today's episode, it's my friend, my former colleague at BOS and fellow member of BOS alumni network, Nikola Petrović. Nikola is a co-founder of startups Nncord & Hilbert Space and primarily focused on digitization projects. So he's our go-to guy for this topic today.

N: Everyone has household chores that they just don't like to do, but they have to. Honestly I have never liked to water the lawn, but I knew I had to. And after one sleepless night and online shopping of smart garden devices the lawn in our house has received more attention than in the past decade. Mowing the lawn can be translated to at least 2 cold beers with good discussion with people like you! The satisfaction I've felt after digitalizing the system in our garden opened up the new horizons for digitalization of pursuits.

O: Let's just build up on it a bit more. So, Nikola, please tell us how this particular experience spilled over to your understanding of commercial digitalization? What are the perks of ongoing digitalization?

N: Great potential lies within our drive to overcome boring and repetitive chores and tasks. The idea of freedom and having time on our own makes us intrinsically happy, enabling us to focus on things that matter. Therefore, digitization is just a word for the change, change of the way we do work and way we solve tasks by adding technology.

With this type of change we can get better end results with less time spent. For me, the best part is that it can be done at almost every job we do. For example, have you ever queued to get a seal of approval? By digitalizing that process, you can save at least an hour of traveling, waiting and dealing with all the paperwork. Now imagine extending the digitalization to track and analyse how much food waste we make, or to optimize electricity consumption by letting digitized systems decide when to turn your dishwasher on or air conditioner off. And the list goes on and on, because almost everything we do today can

be done in a better or easier way. To achieve it, all we need is collecting data, analysing it and making solutions based on it.

O: So as you said digitalization of processes comes with a lot of data gathering, I'm into that myself - but maybe from a different perspective - as the person who's looking into policy development, transparency, public participation etc. So can you explain both to the audience and to me the perks of this data gathering or so-called data tsunami from your own point of view?

N: So let's say that you have optimized your electricity household usage. And as a result, you have less power consumption during the day. What if every house in your neighborhood does the same? This would generate a lot of data which will further optimize the power grid itself so it can predict how much electricity is needed based on users' behavior.

This leads us to the current narrative the more data the better, as it can provide a bigger picture about the processes we want to digitalize. Big Data utilizes these large chunks of data or constantly changing data to understand consumers' patterns. By doing so, it makes decision making preciser and more reliable. Speaking of negative sides of Big Data, the main problem I see is security and the way this amount of data is handled and by whom.

O: Okay, so Big Data can solve big problems. Now, let's make a step outside of our garages, our kitchens, our front-yards and let's just think big. So how can we utilize digitalization and optimization we talked about, to address global challenges such as climate change, are there already some solutions put in practice that contribute to this?

N: Yes there are! For instance, London is tracking use of public transportation and optimizing it within a minute to prevent major traffic jams. This is just one of the projects London has undertaken to reduce emissions by 60% by 2025. Thanks to this and similar initiatives, they have managed to reduce emissions by 39% in the last two decades.

This example leads us to smart cities which intend to optimize the quality of citizens' lives. Instead of having separate city services, digitalization enables data collection and interconnectivity between health systems, public transportation, and rubbish removal services, just to name a few. The size of the city is not crucial.

Let's take a city of Santander in Spain with a population of something around 150k. There are more than 12K sensors installed over the city collecting different data, which is publically available. Some of the sensors are placed on every parking lot which made finding it easier than ever before. This parking app helps in saving fuel, makes traffic streamlining continuous and reduces pollution emissions. Further on, brightness of the street light is tailored upon pedestrians' presence. I guess we can all agree this is not an SF story.

O: Thank you for this. We've discussed solutions in developed countries, but let's spin around the globe a little bit. What about the digitalization in the developing countries? Is the digitalization already a thing there as well?

N: Let's take Pakistan as a developing country and the 4th biggest milk producer in the world. Even if it is one of the least responsible countries for global warming they suffered a big loss from landscape change. Catastrophic floods occurred about a decade ago, while

the same areas are coping with droughts now. These climate changes worsened the milk quality and production.

So one startup from Pakistan made smart neck collars that track cow temperature and behavior. It is also collecting data from all farms that have these neck collars on droves and making public information about overall cows' health and milk production. Despite the Pakistani level of development, we see here that innovations powered by data can find their way to solving problems caused by third parties.

O: Finally, let's stop spinning. Let's take a step back into our own backyard and let's discuss whether there are any smart solutions in our country, but let's stay on the track of agriculture and food production. As we've seen in the last couple months, this is the sector that we absolutely cannot live without, unlike many other perks of modern life that we gave up on relatively easily. So are there any smart solutions in food production in Serbia?

N: Einstein said on one occasion that if bees are extinct, we have at most 5 years of life on this planet.

There is one solution from Serbia that might reduce our fears. A couple of experts made a device that monitors the apiaries. It aggregates the data about their temperature and sound change. This device informs beehives owners whether the apiaries have been attacked or need food supplies during the winter days.

The same team didn't stop here. They created a platform where fruit producers and beekeepers can make a contract for mutual benefit. One such solution not only affects the profit growth of involved companies, but also benefits every stakeholder, and in this case, humankind.

Nostalgia: Luckily I don't feel under the weather today but I want to tell you about a cloud. I remember one specific BOS cloud which enabled us to optimize our daily tasks. Let's see...I think thirty years ago we had the first computers which laced us to the office crowded with files, binders, and all sorts of documentation that you cannot even imagine. When we needed something, we had to go through huge piles until finding a file we were looking for. "Hey, have you seen a contract number 56b07? Did you see the copies that we received yesterday by the snail mail? Where is the final report that I gave you the other day?" These were ordinary questions that shaped our daily work routine. Yet one day our dear IT department started talking about a cloud that would help us with the jumble. Oh, please, clouds would solve it out? come on, we are not born yesterday! It turned out that we were. We soon learned about cloud computing, cloud storage, and already the next day we got all the documents and files available at one click regardless of our sign-in spot. To rephrase a children's poem, what a cloud - a mighty cloud.

N: Five years ago, when I was in college, I realized that it will be harder than ever for me to compete as a developer due to the excessive demand. That's why I decided to gather a group of friends, do projects and acquire practical knowledge. We started with simple websites for small business and as time passed by we decided to expand the team and move towards the development of our own projects and products. Some of them failed, some people left, but we learned a lot from the whole process. One of the major lessons has been that a solution to any kind of problem can be found with the right people, persistence, and dedication. With that on our mind and digitalized fire extinguishers on our portfolio, we are not planning to stop with services digitalization any time soon.

O: Tell us, Johnny, how come you guys got interested in the digitalization of fire extinguishers?

N: Honestly no one in my team ever thought that they would be solving this problem, but there was a situation when we were close to someone who had a problem with fire extinguishers and did not know how to solve it. We knew we could help, but we didn't know exactly how.

Then we found experts and started listening. I think that was all it takes, having enough patience to listen to someone so well, that you understand every aspect of the identified problem. All gathered information starts unrevealing inherent logic guiding us to the next stage. Our move forward was to innovate in unexpected areas, just as digitalized maintenance of fire extinguishers.

O: Based on your experience, how has this particular project contributed to your overall development and growth?

N: We have matured with this project. The field of innovation is still uncharted territory and as far as you are ready to learn you are able to grow. This was a big game changer for us. When we realized that others are also learning by doing, it encouraged us to experiment even more. Our pioneering project on digitalization of fire extinguishers showed us that the best way for scaling is listening, questioning, and reviewing.

When we get to the finals of the competition for the best technological idea in Serbia, we realized that fire extinguisher digitalization is just the tip of the iceberg. There are so many services that need to be digitally transformed. And that is the whole beauty of digitalization and optimization - you can help someone in a way no one thought you could do. The world is changing, I have its best version in my head but I'm still interested in how humanity will change that picture.

O: Finally, let's light up our listeners with the encouragement on how they can fuse what they know in order to create some appealing future for themselves in their businesses. What is your key take and key message to them?

N: For all makers, doers and risk-takers out there I have one message. No matter how small, it's crucially important to have your very own project that aims to spark changes in communities regardless of their size and level of development. My team and I embarked on making our product using available data. Thanks to the data, we started discovering the power of digital transformation and optimization. These processes showed us that small tech innovations can be of great global importance, especially in tackling climate change. Do not only think but also act fast forward.

O: Fusing Futures: Light Them Up is a Belgrade Open School's audio podcast. BOS alumni - Nikola Petrović, Gordana Bojanić, Jelena Šapić and I, Ognjan Pantić, took part in making this third episode. Aleksa Račić and Marko Mitrović supported by designing the sound and audio effects. Over the next five episodes we are going to explore the impact of COVID-19, AI, fintech on climate change, so, in order to stay tuned, do not forget to click subscribe at Apple Podcast or any other application you use to listen to podcasts. For more updates, follow us on Instagram and Twitter.