Talks with#: Kedmenec brothers – Verso Altima Group

Cisco NSO is a crucial for today's business ecosystem. Certification, working experience, case studies and traveling worldwide to teach and consult clients and partners is a role of two brothers working in Verso Altima Group from its beginning.

Dražen Kedmenec   Vedran Kedmenec

Q: What is your role in the Verso Altima Group?

Dražen: My role in the company is "Senior Technology Advisor", which is a fancy title for "when everything else fails, call him". From the beginning, my role was to research and adopt new things, and then disseminate them throughout the company, so that they become a new competence we can use to solve problems our customers have. The role is very rewarding, as it is aligned with our strategy of becoming trusted advisors to our customers.

Vedran: I see my personal role primarily as a trusted advisor. This means that our customers can always count that I will try as best as possible to see the challenges that they are facing from their perspective. Internally, it means that colleagues can count on getting maximum support in all the ongoing activities, without the need to continually check whether what was agreed is done or not.

Q: You are employees of the Verso Altima Group for 18 years, what has changed since then?

Dražen: Almost everything. The company has grown considerably, in size and scope. Our projects have become more complex, our customers more demanding, our competence more mature. Looking back just five years ago, some things we did seem like early middle ages. Competences we had at the beginning are almost irrelevant now, but what is ahead of us looks far more exciting. After talking to customers about automation for years, it finally looks like we are nearing a point where people will truly perform meaningful, creative work focussed on productive outcome, and we'll let machines do the menial and ordinary.

Vedran: The only thing that did not change in the last 18 years is the company culture. Everything else changed; from technologies we are addressing to projects that we are able to deliver. For me, working in verso for 18 years feels like I have worked at several different companies: starting with a small company in which everything was done in person, going through all the phases of accelerated growth and ending up in company in which structure is encouraged. I have a feeling that changes will continue, as we adapt to the requirements of our customers.

Q: How does it look working with your brother?

Dražen: Lots of fun. The level and immediacy of understanding cannot be matched with other colleagues. And sometimes customers mistake one for the other, which is a mishap that never gets old.

Vedran: Working with my brother is challenging because expectations are greater. I would compare this to being in a class in which your parent is a teacher. Do not do anything to embarrass them ☺. However, it makes the entire experience more fulfilling, because I am able to achieve more under continuous encouragement of an accomplished professional.

Q: What are your current challenges in business?

Dražen: Convincing customers that they have to take a serious plunge into automation and orchestration. At this moment they are tipping their toes into the subject. The main concern I hear expressed again and again is "what will my experts do if we automate everything"? What I tell them is that they will stop wasting their experts on menial tasks, such as troubleshooting and resolving trivial configuration issues. This makes them available for more productive tasks, such as focusing on customer needs. There were several technological shifts within my career in service provider networking, but none was met with such resistance. I guess network experts don't see themselves as programmers yet. They will, very soon.

Vedran: A real challenge is to try to anticipate in which specific direction are technological implementations going to evolve. By this I mean that for really hot topics such as digital transformation (at least in Service Provider sphere), it is not clear exactly which of the myriad of available technologies will eventually win. This is almost exactly the same as two great purges in networking technologies from the turn of the century: first the triumph of IP and then annihilation of all other L2 technologies by Ethernet. The trick is to understand that is not always the technologically superior solution that ultimately wins.

Q: How important is expertise in a chosen field of work?

Dražen: You cannot deliver at a level that our customers expect without a deep knowledge and understanding of technology and solutions available in the market. With complex projects we deliver, understanding services end-to-end is essential. Not just for architecture, planning and delivery, but more crucially for troubleshooting and problem solving. Being able to determine what is not causing the problem is as important as understanding what is, especially in complex, multi-layer environments. To be able to do that, you really must know your stuff.

Vedran: The only way I can answer this question is by posing another question: if you need a surgical procedure, would you like the surgeon to have unlimited fast access to google, or to actually know what needs to be done. The customers (and rightfully so) expect us to be able to answer their requirements competently and they expect to be able to trust our opinion without a need to verify. However, it does not hurt to be able to also discuss other topics that are not directly related to technical expertise.

Q: Why did you choose Cisco certification and what certificates you hold?

Dražen: Besides professional development, one of the main reasons to take the challenge of Cisco CCIE certification is a simple fact that studying for CCIE is probably the best learning tool you can have if you are in my line of work. It makes you dig deeper, have a better understanding of underlying technologies, focusses and structures your knowledge. It also makes you study areas you might not encounter in your daily work at a level you would never attempt, therefore making your understanding more complete. Currently I am certified CCIE Service Provider, CCIE Enterprise Infrastructure, CCIE Data Center and CCIE Security. My colleagues jokingly say I am a "one-man gold partner". There are some exciting new CCIE-level certifications in the pipeline, so who knows where they will lead.

Vedran: Cisco certification is not just a formal way to prove expertise. The certification process is known for being tough (even frustrating), but it allows people with substantial knowledge and experience to achieve the highest levels of professional recognition. Path to Cisco certification allows a person to systematize their knowledge and experience, which can prove to be a great asset. I am currently certified as a CCIE Security and due to COVID-19 situation other possible plans for additional certification are on indefinite hold.

Q: Did COVID-19 change your work environment?

Dražen: Fortunately, in our line of business we can perform most of the work remotely. It has been like that almost from the beginning. The only tools we use is a laptop, some dongles and a bit of grey cells. However, meeting customers face-to-face cannot be entirely replaced with Webex meetings. Especially when you are building trust and customer's confidence in your work. There is definitely far less (zero) travelling since COVID-19 struck. My guess is that people willing to travel will be at a premium after the crisis passes.

Vedran: For me the work environment has not changed much. The only aspect I really miss is traveling for work. During the COVID-19 situation I realized that work from home (for me) is not the same as work from office. I admire people who can combine the two. In general sense, it seems to me that work from home can function for team members that are self-motivated and are working on strictly defined projects with well-defined tasks and time requirements.

Q: How crucial is automation and orchestration in today's business?

Dražen: I would say essential. In my professional opinion, nobody should deploy any services in their networks that are not fully automated and orchestrated end-to-end, using some kind of standards-based API. This is true even for relatively small networks. In fact, we advise customers to stop using CLI as much as possible. Ultimately, no human should ever log into the devices to configure anything. The age of CLI is over, and network engineers need to look at their networks as programmable assets, just as they look at virtual machines. In this sense, the difference between network engineer and pure programmer is that a programmer understands API calls, and network engineer understands what happens when those API calls are applied on the machines. Orchestration has so many advantages it is hard to think of them all. For example, in our recent deployment, we were able to deploy very complex services with a customer that had very little experience with Cisco equipment. Such deployments would be impossible without orchestration; we would need to extensively train the customer's engineers and spend a lot of our resources for basic day-to-day provisioning and fixing configuration mistakes until they were brought up to the appropriate level. With orchestration, everybody is a top-level service expert on day one. Let the machines do the boring and unrewarding work, and let the engineers focus on what matters most to the customer.

Vedran: Automation and orchestration is not just crucial; it is the only way forward. We cannot discuss any serious network projects in the future that will not incorporate fully automated provisioning and orchestration. This is like asking at the beginning of the last century, how crucial is for a home to be connected to the electric grid. We are now in one of those transitional periods in which there is a plethora of approaches and technologies, most of which will die off, be fused or be replaced by better or more cost-effective solutions. It is our task to try to convince our customers that they should not look at the specific technology, but to change their mindset before they will be forced to. At this point it is imperative to understand that the entire network should now be viewed as a programmable asset on which old rules do not apply. By that I do not mean that there is a substantial change in how networking devices are delivering the service, but what we can do with the services that are at our disposal. Let me just give one simple example: properly understood automation can make a Key Account Manager at a Service Provider into configuration star. Yes, it is possible.

Q: You mentored experts worldwide, can you highlight the difference in innovation and knowledge acceptance?

Dražen: There are more similarities than differences. Engineers everywhere are eager to know what works, what other people are doing, what are the best practices and the best way to get up to speed. Working with customers that are on the cutting edge is rewarding, because it is at the same time a learning exercise for everybody involved. There is a goal, but the way to reach it is not clearly defined. So, you light the lantern and probe the dark, searching for the way forward. On your way, you work with really smart people who are creating ground-breaking solutions right in front of your eyes. As the technology matures, you engage the customers that were patiently waiting for somebody else to break the ice. Your experience with the pathfinders helps the cautious customer immensely, letting them get up to speed with much less time and effort. In my experience, service providers everywhere follow technology and markets diligently, always striving to be at the cutting edge, and it is my job to help them do just that.

Vedran: Working in international environment has shown me what I have always believed: people are the same everywhere. The only true difference that can be highlighted is the opportunity landscape. It seems to me that in cultures where opportunities are abounding people tend to focus on the next hot topic. This is especially true for innovation. Such environments tend to produce people who are innovative, eager to grab the next opportunity and to quickly adjust their conduct to the most urgent needs of their customers. They naturally coordinate their efforts with others, within and without the immediate sphere of interest and tend to attract equally capable co-workers. The key is to understand that the critical mechanism that tells people whether their contribution makes sense or not is the feedback they get from the customer. If there is a lot of noise in that feedback, the end result is wasted effort and less innovation. This seems to be true everywhere.

Q: Are there any projects you've been working that make a great impact on your work?

Dražen: At the beginning, it was the shift from traditional data technologies to IP. More recently, the shift from CLI to orchestration. The one pitfall I noticed with automation and orchestration is that it tends to make really good engineers dumb. You start relying on the orchestration platform so much, that you lose the sense of what the machine actually does when you tell it to provision something. I have seen some CLI-Jedis aimlessly clicking away at the provisioning button and wondering why the service does not work, when they erroneously entered subnet mask or some such triviality. This just reinforces my belief that understanding is key to doing. On the other hand, I've had a great experience with Cisco NSO, because it does the most essential thing flawlessly: when it tells you it configured something, you can be 100% certain that it is done. You don't have to check. Such level of confidence in service provisioning was previously present on individual boxes. Now you can have it system-wide, end-to-end.

Vedran: Two disciplines currently seem to have the greatest impact: as-a-service paradigm and unbelievable potential of automation (when properly understood). Recent projects have thought me that it does not make much sense to think about any services without the "as-a-service" paradigm. This also includes networking infrastructure. How this will exactly be delivered is another matter. I still see my role as someone who works on components that are inside the cloud, and not just rely on the black box to deliver expected services.

Dražen: More work from home. More automation. More AI. No more wires. Machines will take more and more work that was previously done by humans. That's nothing new and is very helpful for repetitive tasks and for sifting through and making sense of vast amounts of data. Engineers will have more time to engage customers and think about creative ways to address their needs.

Vedran: As most of the capital innovations of the last two centuries, digital transformation will make everyone's life easier. Whether people will appreciate the fact is another story. The immediate consequence for our field of work is that more will be done with less. It means that smaller and smaller companies will be able to purchase more and more complicated services at a price point that was not possible previously. My opinion is that we are still just scratching the surface with pushing digital to everywhere. Improvements in construction, farming and other (up until now) less technology driven fields will be staggering. The infrastructure is getting there quickly; the rest is up to letting people do their job without too many obstacles. If anybody tells you that they know exactly what the consequences of digital transformation will be, they are lying.

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