25 YEARS OF KNOWLEDGE:
SUPPLYING SOFTWARE SOLUTIONS TO TERMINALS

Q A

INTERVIEW WITH:
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SOLVO
IT solutions for logistics

"WE WILL ALWAYS DO WHATEVER IT TAKES TO DELIVER THE RESULTS EVEN IF WE HAVE TO DO SO AT OUR OWN EXPENSE."

SOLVO HAS BEEN ON THE MARKET FOR OVER 20 YEARS, WHAT HAVE BEEN SOME OF THE BIGGEST MILESTONES FOR THE COMPANY TO DATE?

Among the biggest ones I would say would be getting our first big Terminal Operating System (TOS) contract in 1999 for the largest Russian terminal operator at the time, the National Container Company and the first implementation for the FCT - First Container Terminal, the largest terminal at that time (now part of Global Ports, APM Terminals). Then we had a huge project with Container Terminal Saint Petersburg (former fourth Stevedoring company again in the Port of Saint Petersburg). Another milestone we had was Port Bronka, Saint Petersburg – this was a contract that we had been trying to secure for five years in a row and we finally got it after having been validated by the outside consultant - HPC Hamburg Port Consulting.

The third big milestone was our first project for a general cargo/mixed cargo port outside Russia – which was Aktau Port, Kazakhstan in 2013. Thanks to this project we managed to create an all new comprehensive TOS for different types of cargo and later create one of the most advanced (according to our clients off course) systems to handle non-containerized cargoes.

In 2016 we had our first project in the Middle East – the Qatar new port project which brought us valuable experience working with large partners such as IBM. Finally, in 2018-2020 we had two breakthrough contracts among others, which brought a lot of value to the core product. That was when Solvo.TOS version 6.x went live at the Antwerp Euroterminal (AET), one of the largest multi-purpose and Ro-Ro terminals in the world, part of the Grimaldi Group Naples. Another was when Solvo.TOS was chosen by Sogester S.A. (APMT and GF Sociedade Gestore de Terminais, SA) to modernise four container and general cargo terminals in Angola.

In 2017 we launched Solvo.TOS 6.0 – an all new unified TOS that combined previously independent TOS systems – Container TOS and General Cargo TOS as well as our own AGMS and VBS systems. As a result, we could offer one comprehensive TOS for the most sophisticated needs of a mixed cargo ports of any size, throughput and cargo type, including containers, break-bulk, Ro-Ro and bulk cargo.

In 2018 our solutions went live at the inland intermodal terminal of the largest container cargo rail operator in the region – the TransContainer. The same year we started implementing our solution for railway cargo stations for the Russian Railways – the biggest regional rail operator and it helped tremendously to the development of the system overall. Now this is one of the most advanced TOS systems for handling and optimising rail cargo operations.

In 2019 we launched Solvo.SCE – a new technological platform featuring all our main products: the seventh version of our flagship terminal operating system – Solvo.TOS which combined the latest technology for both marine container, inland, mixed cargo and Ro-Ro operations. Solvo.WMS – a comprehensive warehouse management and inventory tracking system, Solvo.GMS - an automated gate and truck management solution, Solvo.Billing for cost accounting and fare calculation, Solvo.KPI dashboards for managerial reporting and Solvo.Web for your customers to effectively interact with the warehouse or terminal stuff in real-time from any location. This SCE concept makes it possible to automate all intralogistics processes at any site:

port, cargo terminal, warehouse or other multipurpose transshipment complex.

WHAT ARE SOME OF THE KEY CONSIDERATIONS YOU WOULD OFFER TO PORTS AND TERMINALS WHO ARE LOOKING INTO NEW TERMINAL MANAGEMENT SOFTWARE?

The most important thing when preparing a tender and inviting a request for proposal (RFP) from the shortlisted vendors is to evaluate the following areas:

- Selecting a solution from the vendor who quoted the lowest price is probably not the best idea. Usually it means that the customer does not really see the difference between any of the solutions offered and puts the whole project at risk by not taking into account other important factors that would answer the main question: is a vendor actually capable of completing the project?
- Vendor's history – how long they have been on the market? What were the milestones?
- Vendor's unique selling proposition (USP) – what the key elements are that make a particular company different from the competition and what the strongest points are. These should comply with the most pressing issues that the operator is trying to achieve.

- It might be worth hiring an external consultant to evaluate all solutions and actually prepare an RFP. The logic is if you have a budget it is best to delegate certain things to professionals, that could save some time and efforts + reduce risks.
- Vendor's track record in a specific field – so if you are trying to deploy a solution mainly for the Ro-Ro facility for example you might want to see the Ro-Ro focus in the vendor's case studies.
- Product roadmap – make sure the vendor has a logical and adequate vison on how the product will be improved in the five to 10 years perspective.
- Vendor's project approach to customizations. This is actually very important. Most vendors are reluctant to develop new features or make any customizations whatsoever and ask you to change your current business processes in case they contradict the logic of the system. Our vision is that this kind of approach lacks flexibility and may not be suitable to many ports especially the larger ones and this is why biggest operators such as DP World or Hutchinson turn to their own in-house TOS developments. Our strategy is on the contrary, we are ready to customize on any level in case the audit shows there is no easier way to avoid this and this is clearly a modification that brings value to both the client and the vendor's solution.

- Pre-selecting only the vendors with local physical presence in your region might also be too hasty. It might have been the case 10 years ago that the vendor is obliged to have an office or representation in the local market/port but now in a new digital age it is becoming an atavism. Especially now in the COVID-19 times, best vendors do not need to actually arrive onsite and have all the proven methodologies to implement TOS in the remote mode.

WHAT ARE SOME OF THE BIGGEST CHANGES YOU HAVE NOTICED WHEN IT COMES TO DEMAND FOR THIS TYPE OF SOFTWARE?

Some of the biggest changes are:

- A paradigm shift that a TOS is not only good for moving boxes efficiently (containers) but brings value to general cargo facilities most of which traditionally worked without any process automation.
- It's not only the classic TOS that is in demand but rather a comprehensive terminal suite of systems incorporating resource planning, stowage planning and optimisations, yard management, CFS, gate management, rail planning and scheduling, a single window subsystem for operators, suppliers, shipping lines, cargo forwarders and cargo owners.

- Use of cloud-based solutions incorporating any model – infrastructure as a service (IaaS) or software as a service (SaaS) is in trend.
- Automation modules, IoT and AI-powered add-ons to the TOS are catching on as new buzzwords and future requirements so far but soon might become a mainstream requirement in any RFP
- As many TOS vendors becoming parts of multinational crane companies unfortunately a software solution sometimes becomes a bargaining chip in the deals between operators and those companies.

PTI UNDERSTANDS YOU ARE WORKING WITH A NUMBER OF TERMINALS AND PORTS IN AFRICA, WHAT ARE SOME OF THE SOLUTIONS YOU ARE PROVIDING AND HOW ARE YOU ACHIEVING SUCCESS IN THIS REGION?

Yes, we are really proud of the latest developments in Angola. Now we are close to the completion of the main phase of the project for Sogester S.A and deploying the latest version of our TOS solution at two seafront terminals, Luanda and Namibe, and two inland terminals, Panguila and Viana.

The TOS will be in use by both container terminals and purely general cargo facilities.

Not only will the customer enjoy the classic TOS features such as real-time vessel stowage planning, yard management, rail planning and scheduling, gate operations management, electronic data interchange (EDI) message exchange automation, key performance indicator (KPI) dashboards, equipment control and automation but also specific add-on features.

These include human and machinery resource planning for mixed cargo operations including day-shift planning and work orders; empty container depot management (ECD), container freight station (CFS) operation, integration with automated access control systems and the latest reefer monitoring solution by RTE, on-board crane system automation, integration with third party financial systems and more.

As you can see the project is huge in terms of the number of areas the system is covering and sophisticated integration. I could already say the client is so far satisfied with the project and I think the key to success was in finding a rapport with the local team at Sogester – our project managers and engineers becoming friends with the customer teams and also our great commitment to the project, doing a bit more than was indicated by contract terms. Our customer really appreciates this and we believe this approach as risky as it is for the vendor actually helping the teams overcome any obstacles.

Another important thing worth mentioning when we talk about Africa and Angola is that we are trying to help local community. For example, in the beginning of 2020 right at the start of the COVID-19 pandemic Solvo and Sogester joined forces on a charity mission to help equip the Neurosurgical Center in Luanda with new computer equipment. The medical centre received a gift from both SOLVO and Sogester - a high-performance modern microscope (Configuration of Standard ASOM-4), which will help improve the quality of brain surgery.

LOOKING AHEAD, WHAT IS NEXT FOR THE COMPANY?

Our company's mission is to deliver customised information technology solutions to help global logistics be more efficient, safe and people-friendly even in the most complex environments where other solutions cannot work. For example, we work in the coldest and hottest ports in the World, areas with no Wi-Fi coverage, etc and we will always do whatever it takes to deliver the results even if we have to do so at our own expense, risking the profits, etc, since this is the word we give to our customers and our reputation that matters.

The World is still going through hard times recovering from the pandemic and we are supporting all our customers in doing so. One of the latest developments that we are now offering and will be using from now on is Remote Implementation of TOS Methodology (RITM). We are now deploying our WMS solution using RITM in such areas as Tajikistan for example, TOS in Angola and Port of Antwerp in Belgium and other regions.

Another important development that is a part of our roadmap is shifting towards the new TOS architecture based on micro services as it is becoming evident that monolith structures are not always efficient. Certain environments require smaller independent elements all working on their own as cloud services and those are to be combined with many other elements from third party vendors on the spot. Soon Solvo will be delivering the new alternate versions of our Supply chain solutions including the flagship TOS, WMS and AGMS based totally on new architecture and powered by various new DBMS.

ABOUT THE ORGANIZATION

SOLVO is one of the leading providers of software solutions for container terminals, break-bulk and mixed cargo ports, Ro-Ro terminals and warehouses. Offering a number of comprehensive solutions such as Solvo.TOS – integrated terminal operating and document management system for a port or a terminal of any size and type; Solvo.WMS – an industrial warehouse management solution suitable for even the most complex tasks, Solvo.YMS – Yard management system and other software, Solvo.Billing and more. All of its software solutions are validated by the Fraunhofer Institute of Logistics in Germany.

ABOUT THE INTERVIEWEE

Elena Grebenshchikova holds a degree in Automated Management Systems graduated from the Leningrad Electrotechnical Institute and spent times as a programmer at the enterprises of the USSR rocket and space industry.

In the period from 1980 to 1990, she taught special applied disciplines (in Russian and German) at the Leningrad Polytechnic Institute and at the Engineering School of Electronics.

Through 1990 to 1994 Elena lead an initiative group of programmers and system engineers specialising in the development and delivery of applied supply chain execution software contracted by a number of American companies.

In 1995 she founded SOLVO, an IT start-up specialising in development of warehouse management and terminal operating software for the Russian market and CIS. From 1995 to the present, Elena has been the CEO of SOLVO leading the company to the success as a global vendor of TOS and WMS solutions with worldwide presence.