SOLYNEWS

Editorial

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TRANSFORMING CHALLENGES INTO OPPORTUNITIES

The postal and logistic business is evolving and SOLYSTIC is evolving along with it. As the industry experiences growing needs for improved media and parcel processing, SOLYSTIC is transforming these challenges into opportunities. The company has put its industry know-how at the service of its clients in order to support them as they resolve important process optimization issues. By working closely with our customers, we gain in-depth understanding for the issues at the heart of the field and work to solve them. Based on our skills in machine learning and vision, real-time software, simulation and information technology and mechatronics, SOLYSTIC builds integrated multidisciplinary teams that leverage logistics solutions. Likewise, SOLYSTIC has developed Soly™ to respond to the growing influx of parcels; a direct consequence of the robust e-commerce market. In contrast to mail, parcels require an individualised level of handling coupled with the most efficient means of automation because their complexity tends to increase costs. Soly™ was designed to respond to these challenges. Officially introduced at POST-EXPO, the solution gives SOLYSTIC the opportunity to measurably improve delivery driver preparation, just as the company did for the mail sector with the XMS™. SOLYSTIC, well known for its innovative capability, engages its engineers in the logistical smart factory process. Even if it is difficult to sketch the final picture, we all know that cyber physical systems, Internet of Things and Internet services will transform the value chain organisation of logistics systems. It is our mission to support our customers while truly reflecting upon what's coming next.

Turning the postal business model by 180°

By Walter Trezek, Senior Partner of Communication Logistics Experts.

It's the recipient who drives innovation.

"Changes in mail volume, product and service mix, we have experienced over the past decade, are heralding the digital service environment in which we will all find ourselves in the near future. Countries like Denmark, whose governments have actively fostered direct and integrated means of secured electronic communication to raise the efficiency of business and citizen-focused interactions, are seeing the end of analogue transactional or consequential letter mail.

The boundaries between the means of production, regions, and labour forces are all dissolving. Cross-border commercial letter post, packet and parcel volumes are growing. South-East Asia and South America are experiencing major growth in ecommerce. North America and Europe will fall behind.

"PROPRIETARY SYSTEMS ARE UNSUSTAINABLE"

Digitalisation is breaking down current delivery value chains into their constituent – and exchangeable – parts. This directly impacts cost and business models. In the not too distant past proprietary systems, safeguarded by monopolies, secured by regulated tariffs, and guaranteeing daily delivery, were needed to maintain nationwide and global communication and the exchange of goods.

Manufacturing and the trade in consumables has created a global, digital service infrastructure. The communication media needed, trade and its related transportation infrastructure will be based on commonly established standards leading to marginal cost. Proprietary systems, once safeguarding postal administra-tions, are turning into a burden. Looking to meet the needs and expectations of consumers, manufacturing, retail and commerce are all actively extending the reach of their open digital service infrastructure beyond supply chain management, to include last-mile delivery functionalities in a multi-stakeholder, partial-pipeline environment.

"THE RECIPIENT, AN INTEGRAL PART OF THE BUSINESS MODEL"

Enterprises who place their focus squarely on the recipient strive to make the customer an integral part of their business model, by applying state-of-the-art communications to leverage on their existing infrastructure, minimising their own costs and boosting customer-retention -e.g. Amazon Prime.

facebook.

The most popular media company does not create content.

airbnb

The biggest provider of accommodation owns no property.

Alibaba Group

The most valuable retailer has no warehouse.

UNIVERSAL POSTAL UNION

The worldwide postal network owns no delivery services.

UBER

The biggest taxi company does not own a single taxi.

The infrastructure and systems needed to fulfil the demand created by the digital service infrastructure is neither being driven by politics nor legislation. Ecosystem-like multinationals -e.g. Uber, Alibaba- are busy creating consolidation platforms to facilitate interaction and trade, which reflect and shape the demand for delivery.

- The demand for **quality** leads to measurable performance and customer service being at the heart of the business model.
- The demand for **speed** leads to customer retention via same-day or even immediate delivery options, financed via a flat fee model.
- The demand for **transparency** leads beyond traceability to proactive messaging and real-time adjustments according to the preferences of the recipient.
- The demand for **convenience** leads to easy-to-use return solutions, scheduled drop-off and alternative delivery, pick-up and recycling options.

Recipient-focused first and last mile demand is eliminating today's product and service silos. The distinction between "Courier", "Express" and "Postal" becomes irrelevant.

"SEAMLESS CROSS-BORDER SOLUTIONS ARE BASED ON ADVANCED ELECTRONIC DATA"

Threatening for traditional postal operators – and others failing to turn their business model by 180° – seamless cross-border solutions, not offered by dominant delivery providers, will be substituted by the platforms themselves, who, thanks to their customer-centric business models and use of advanced electronic data, can engage with any available infrastructure.

Commerce initiated by recipients using a globally accessible digital service infrastructure, will determine the lasting success of an integrated and open future business model for the delivery of postal items." ∎

Platon: a mail transformation program for Posti

By Pekka Luomajoki, Senior Program Manager Operations, Posti.

How XMS™ contributes to increase productivity and process quality.

SOLYSTIC: Posti has adopted a program called Platon that aims to modernise the postal network. Can you explain Platon, what it consists of, and the desired objectives?

Pekka Luomajoki: We are facing similar challenges that other companies in the postal industry are experiencing such as declining mail volumes, increased competition and changes in customer needs. Posti recognises the opportunities associated with new services and enabling technologies. We look for synergistic benefits from new growing markets. Home services, meal deliveries and food logistics make use of Posti's nationwide distribution network. We also develop new data and analytics services to meet customers' needs.

Platon is a mail transformation program for Posti. In the program we want to develop our sorting and delivery operations with streamlined end-to-end processes and use of modern technology. We are implementing solutions to increase automation levels and total productivity in the end-to-end supply chain.

S.: What are the phases and operational time intervals concerning Platon? When do you expect program's completion?

P.L.: We are currently improving our processes and utilisation of existing sorting machines (LSM, FSM) with higher sorting rates. At the same time, we are testing and verifying new sorting technology for the future needs of our customers. With successful results, we are planning to implement this technology across our sorting centre network over the next 3-4 years.

New technology is a key enabler for the transformation. We also need to keep our people motivated and involved in the change process.

S.: In the context of Platon, what are the specific challenges that Posti is seeking to address?

P.L.: Posti is focusing on productivity and cost of our mail operations while maintaining high process quality and customer satisfaction. For example, when moving from manual sorting at delivery offices into more centralized and automated sorting we need to significantly reduce the number of missorted mail items in the postman's sack.

S.: The Printed Media Sorting Machine (PMSM) is one of the key features of Platon. What does it encompass and how will it address specific challenges?

P.L.: Platon tests and verifies that the PMSM is suitable for our customer needs and that it fits into Posti's sorting strategy for the coming years. After successful verification, we are planning to implement more PMSM machines into our sorting network.

With the PMSM's new technology, we are planning to sort small letters, big letters

PMSM – Helsinki sorting centre

and open magazines into delivery route sequence with a reduced need for manual sorting at delivery offices. The specific challenge is to get the content of the postman's sack sequenced as much as possible with high sorting quality.

S.: Why did Posti choose SOLYSTIC and its XMS™ as a solution to implement PMSM and in what context will they be used?

P.L.: Posti has worked successfully with SOLYSTIC for several years now. Our sorting network uses SOLYSTIC LSM and FSM machines along with the CRP* software platform. After successful PMSM trials with our test material in Valence in 2014, we are now in a test phase (pilot phase)

inside our own sorting centre. In the very first phase, we are planning to test PMSM machines to sort a wide spectrum of mail, for example small and large letters, holiday cards, open magazines and plastic-wrapped mail items in outward sorting.

"SIMPLIFY THE PROCESS AND PRODUCE ONE BUCKET IN DELIVERY ROUTE SEQUENCE FOR THE POSTMAN"

In the latter pilot phase we will concentrate on sequence sorting for selected delivery offices. Together, with OCR-supported manual sorting, the target is to simulate a few different process variations of inward sorting and delivery.

S.: Can you explain what Printed Media does and the main interest for this functionality?

P.L.: Today, we are using different sorting machines and manual process phases for small letters (LSM), large letters and open magazines (FSM), and finally manually sorting and combining all the materials in to the delivery route sequence. We want to simplify the process and produce a bucket containing different mail types in delivery route sequence for the postman.

S.: What percentage of press/media mail volume does Posti expect to process with the PMSM?

P.L.: We expect to process 80-85% from the mail volumes with the PMSM machines. ■

* Common Reading Platform: a reading and videocoding national infrastructure supplied by SOLYSTIC.

Soly™ changes the game

In September, SOLYSTIC launched its new concept Soly™ and highlighted two main applications: delivery round preparation and parcel sorting.

SOLYSTIC has taken the ongoing circumstances of a robust and growing e-commerce marketplace to address the real challenges facing postal, express, e-commerce and transport operators today, specifically within the domain of parcel processing. The need for maximised efficiency, profitability, and ensured customer satisfaction has emerged.

As SOLYSTIC has acquired the experience of mail preparation for the postman's rounds, the company's parcel assessment focuses on last mile efficiency. However, parcel processing is even

more crucial due to greater associated logistics, customer demands, and space requirements. The current last mile process for parcels is entirely manual, giving Soly™ a remarkable amount of added value in the context of delivery rounds preparation.

"EACH PARCEL REQUIRES AN INDIVIDUALISED LEVEL OF PROCESSING"

Contrary to mail, where machines are able to handle objects in batches, the challenge with parcels is that each one of them requires an individualised level of processing. By developing Soly™, SOLYSTIC decided to respond to this challenge. Each robot is associated to several trolleys and as the number of robots expands, the solution becomes increasingly productive. Soly™ is simple and fast to implement, truly changing the approach towards the parcel domain.

Currently, parcel processing is based on high physical demands and relies upon the memory of the drivers. Not only are they expected to memorise their route, they are also expected to manually locate, sort, and organise every parcel in the proper distribution order as they physically load them, one by one, onto the delivery truck. Clearly, this process is physically demanding, time consuming, inflexible and costly.

Soly™ automates sorting and preparation for last mile parcel delivery drivers. She sorts and arranges parcels in the correct delivery order so that the drivers simply load them before leaving for their rounds. Using a driver-oriented approach, she keeps driver priorities at the centre of her performance. The parcels are placed on ergonomically-positioned trays so that drivers simply fetch the items and load them. The end-result is better performance, reduced injuries and lower employee turnover.

"NO SPECIFIC INSTALLATION NO NEED FOR PRE-EXISTING EQUIPMENT"

Part of the originality behind Soly™'s flexibility is that she requires no specific installation; there is no need for pre-existing equipment, only a simple guidance system based on QR codes to the floor. Once the fleet of independent shuttles is organised, users are up and running for the preparation phase. Soly™ enables them to adapt their system, either expanding it during peak periods or reducing it over the slower ones.

"PRECISION TRACKING AND TRACING IS OFFERED FOR EVERY INDIVIDUAL OBJECT"

Soly™ is also an excellent solution for automatic parcel sorting in the large sorting hubs where she can sort objects directly into the sacks or other containers. With Soly™, precision tracking and tracing is offered for every individual object. Unlike the majority of existing systems, Soly™ stores the exact location of every parcel and makes it readily available at any given moment. This ensures the retrieval and arrangement of each object upon command and in accordance with destination instructions.

The ongoing industry challenge is to optimise parcel processing at every phase.

While Soly™ will be initially applied within the realm of delivery preparation and sorting, a broad range of purposes is conceivable, as her flexibility addresses numerous needs.

Furthermore, as organisations place emphasis on eco-friendly solutions, Soly™ is easy to configure in contrast to the large parcel sorting conveyors that must be kept running, even when activity is low. Soly™ runs only as needed and her fleet adjusts to fluctuating volumes, therefore saving energy and reducing costs.

SOLYSTIC developed Soly™ by merging its industry awareness with advanced robotic technology. With Soly™, parcel distributors are certain to achieve better performance and greater customer satisfaction. As she makes her debut, SOLYSTIC envisions widespread industry adoption of Soly™, THE optimised parcel processing solution. ■

For more information:
www.soly.eu

XMS™ affirms its prevalence

postnord

PostNord -the merger of the Swedish and Danish postal services- has confirmed the choice of XMS™ for its TFM (Two Format Machine) automation program, ordering 2 units for sorting of flats in Denmark. Delivery is planned for the second half of 2016.

posti   **bpost**

In Finland, the XMS™ is currently being tested by Posti -formerly known as Itella- as a pilot unit of the PMSM program (Printed Media Sorting Machine). The functions of labelling, printing and sequencing today available on the XMS™ machine are used in order to offer to the magazine publishers the management of the addressing and the delivery to their customers. These functions will be shortly activated for Posti (PMSM program) and bpost (MSM program). This illustrates the postal industry's trend of "moving up in the value chain", taking over new complete services.
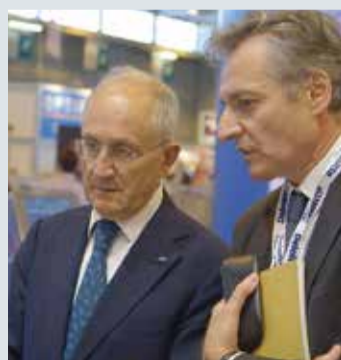

XMS™ in Finland

POST-EXPO 2015
POSTAL ▪ COURIER ▪ EXPRESS

The SOLYSTIC booth was designed to pay homage to innovation. The contemporary layout and Oculus Rift demonstration were aimed at conveying SOLYSTIC's commitment to innovation. Careful attention was also given to represent the company's know-how to process different formats, materials and volumes.

POST-EXPO was held in Paris from September 29 to October 1. The SOLYSTIC booth showcased 144 square meters dedicated to innovation. SOLYSTIC leveraged the event to introduce its newest product and brand of its own – the Soly™ parcel solution.

In addition, SOLYSTIC demonstrated a broad scope of comprehensive solutions for letters and flats processing that highlighted better productivity and cost reduction. The event was an overall success for SOLYSTIC and the booth received numerous important visitors.

A digital video table illustrated the SOLYSTIC range for supporting postal and logistic operators' delivery process. The value proposition today is essentially based on XMS™ for sorting, sequencing and merging letters and flats coupled with assisted manual sorting (CAMS) or "rest mail sorter" (CPS); an efficient reading and coding infrastructure to resolve addresses at the finest depth.

The Oculus Rift virtual reality demonstration was developed with SOLYSTIC's in-house simulation software SOSi™. Visitors immersed themselves in a logistics building dedicated to the drivers' delivery round preparation and performed a maintenance operation. The demo illustrated the strong value of immersing oneself within a real solution via virtual reality.

Philippe Wahl, CEO and Group Executive Vice-President from La Poste and Pierre Igou, CEO from SOLYSTIC.

Norway Post rewarded its internal teams for the increased performance achieved with the TIKI project (*see Solynews N° 19*). 15 employees got the chance to discover POST-EXPO and Paris.

The new Soly™ solution generated great interest and demonstrated how SOLYSTIC is applying its expertise to the parcel domain. In this image, Soly™ sorts parcels in sack outputs.