Case Study

Inventory Management

BrightLife and Solaris Offgrid developed a personalised solution to integrate PaygOps with the Inventory Management Platform Unleashed.

PaygOps
Last-Mile Management System

BrightLife
By FINCA International

PaygOps
Last-Mile Management System

PaygOps Custom Workflow for Inventory Management

About

BrightLife is an Uganda-based social enterprise founded by global microfinance pioneer, FINCA International.

Strengths

- Affordable, high-quality clean energy products
- Strong customer care
- Partnerships with best-in-class original equipment manufacturers (OEMs)

Region

East Africa (Uganda)

Industry

Solar Energy Distribution

Customer since

Summer 2018

Website

https://www.brightlifeuganda.com

Context

The last-mile distribution of consumer products requires careful management and monitoring of inventories and stocks. A product is first ordered from the supplier, delivered to a central warehouse, dispatched to a local warehouse, and handed over to a technician, who will finally install it in a client's home.

Challenge

In order to supply thousands of customers, every month, in remote areas, specialised inventory management tools are often necessary. Ambitious distributors thus often end up using several dedicated platforms for the management and monitoring of Paygo loans and of stocks, with increasing risks of errors when manually transferring information from one to the other. Already integrated with PaygOps and using its advanced Sales, Loan, Ticketing and Maintenance Management and CSV Extract features, Brightlife needed a turnkey solution to increase the efficiency of inventory processes that were formerly managed separately with the Inventory Management Software Unleashed, providing a flexible alternative to PaygOps already built-in inventory feature.

Solution

Taking advantage of the flexibility and interoperability of PaygOps, Brightlife and Solaris Offgrid developed a personalised solution to integrate PaygOps with the Inventory Management Platform Unleashed. The custom workflows automate the transfer of information between both tools, so that stocks are always up-to-date according to sales and lease values captured in PaygOps.

Benefits

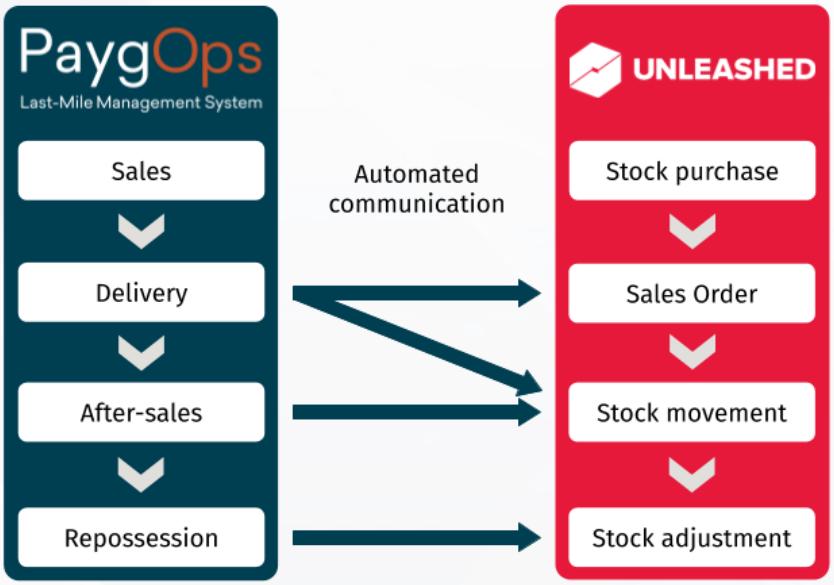
The automated synchronisation reduced not only the staff's workload, but also several risks. Thousands of customer entries, sales orders and stock adjustments are created automatically every month, largely reducing the need for weekly stock counts and manual reconciliations, as well as the risk of typos and inaccuracies in serial numbers, stock levels or valuation. Within the first three months after implementation, the cost of logistics and warehouse staff dropped by 85%. Faulty and repossessed products are better tracked and can be reused or claimed for warranty, resulting in savings of up to 98% of their value. Taking into account both the cost of the IT infrastructure and integration as well as the operational cost reductions, the total savings per year for Brightlife are estimated to 85% of the initial costs.

"I think it's an awesome integration that should really improve our ops here in Uganda, and I imagine it will also be a value-add to other Paygo partners of Solaris Offgrid in the future."
Stefan Grundman, CEO and Director of BrightLife

"With PaygOps custom workflows, such as what has been done with the inventory management platform Unleashed, everyone should be able to see value in terms of costs, savings, but also in terms of time."
Siraje Kamugisha, Head of Operations and Logistics, BrightLife

Integration Setup

The integration between PaygOps and Unleashed consists of three main information transfers over the customer journey.



1. When a product item is delivered to a customer, a sales order and a stock movement are automatically carried out to reflect the transfer of the product from a warehouse to the customer's house.

2. If the product fails during its warranty period, the customer will be provided with a replacement device. The stock will automatically be adjusted to reflect the transfer of a new item from the warehouse to the customer, and of a broken item from the customer to the warehouse.

3. If the customer returns the product (for example in case of contract termination or default), the transfer of a used working item into the warehouse will be captured.

Process Improvement

The process improvement that has been implemented consists in fact in 3 steps:

1. **Initial process: Monitoring of stocks is done quantitatively, and inventory movements such as stock adjustments, transfers between warehouses and from warehouses to customers are created manually.**
   I have 2 devices in stock in the main warehouse and 3 devices installed at customers' houses. For each product sale recorded in PaygOps, I create a sales order for one single generic customer, and I record a stock transfer of 1 device from the warehouse to the customer.

2. **Moving from a quantities-based inventory management to the serialization of individual product items: Each product has a unique serial number and its location is known at every point in time.**
   I know that the devices with serial numbers 114 and 115 are in stock in the main warehouse, and the devices with serial numbers 111, 112 and 113 are installed at clients' houses.

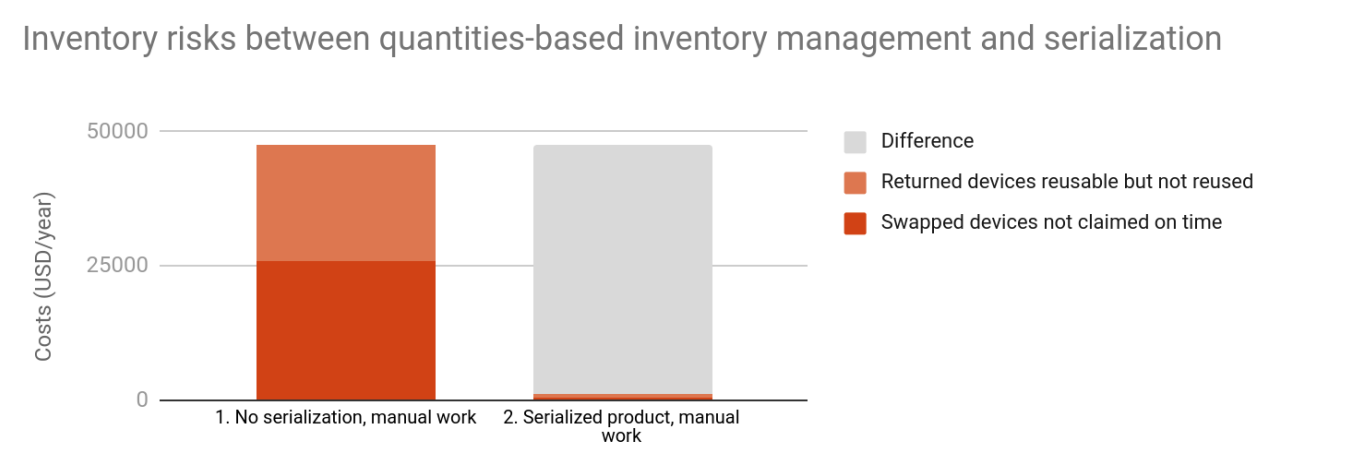
3. **Moving from manual inventory transactions to automation:**
   A device has just been registered for a client in PaygOps, a customer, a sales order and a stock transfer are automatically created in Unleashed and the stock levels are updated.

Benefits for Operations

The value of each step can be estimated through costs and risks. In the initial situation (step 1), stock movements are processed manually and are subjects to typos, mistakes and oversights, so that items in stocks must be regularly counted in order to remain in control of the inventory, taking up to 7 man-days per month i.e. 17000 USD per month.

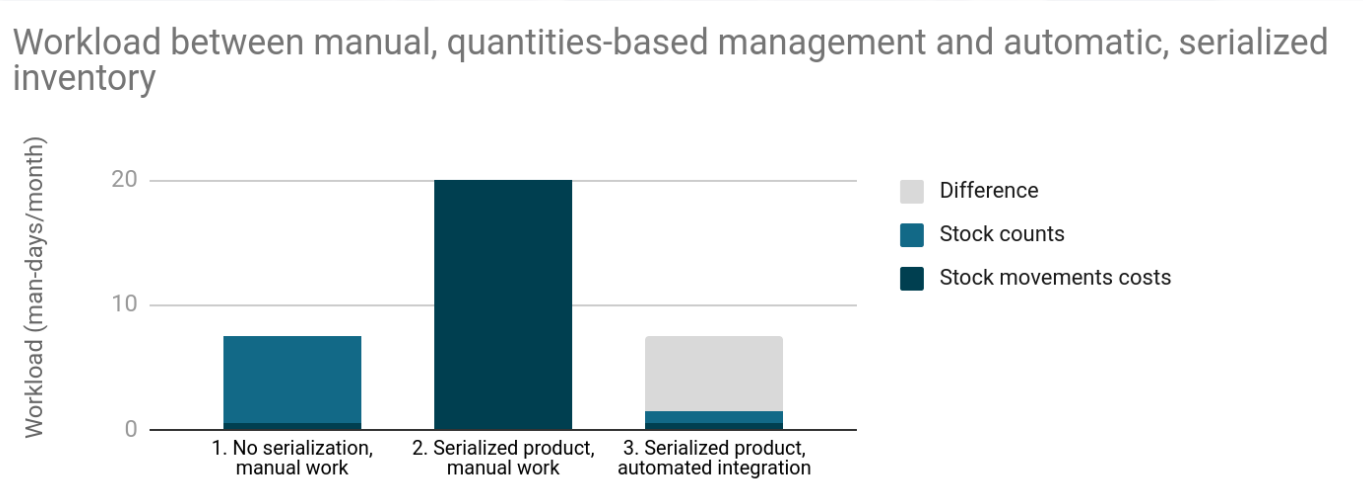
It is estimated that 20% of the broken devices - which should be sent back to the manufacturer for warranty claim - cannot be claimed on time because they are not in the expected warehouse, and that 50% of the returned devices that could potentially be refurbished are lost in the storage of broken devices. **This is translated into a lost value of nearly 50000 USD per year based on average numbers of devices that would be lost or wasted**. Serializing the product items however allows to accurately know where every device is, whether in working condition, refurbished, or broken and to be sent back to the manufacturer.

Hence the saving on lost value per year is estimated to 98% between step 1 and step 2.

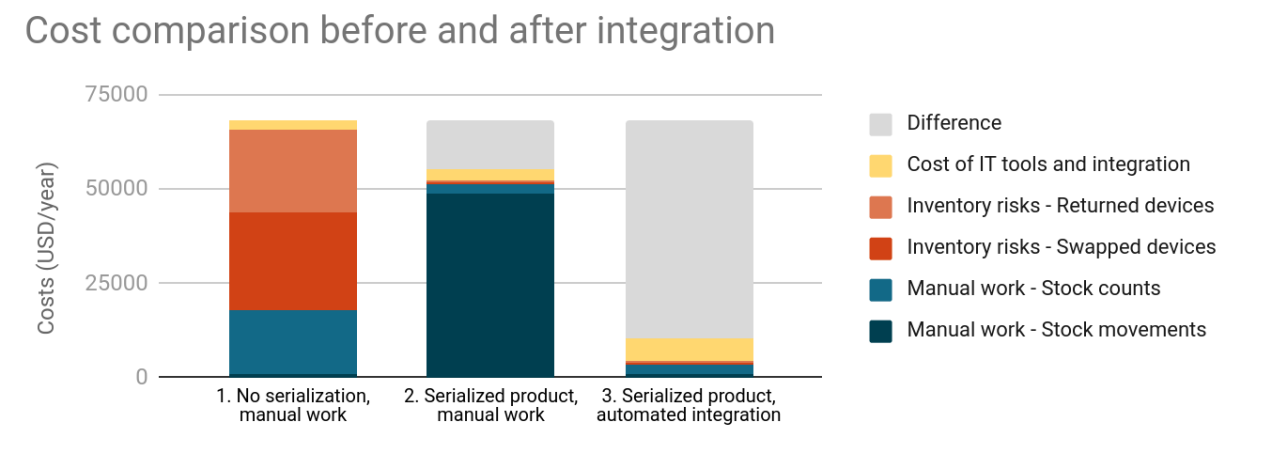


If the inventory management was done manually at step 2 however, it would require exceedingly high workload to process every single device movement between warehouses and clients - estimated to 50000 USD per year if every movement takes 10min to process by a logistics agent. This very tight tracking of stock movements would however greatly reduce the need for manual stock count, down from 7 to 1 man-day per month, since we would not expect any variation from what is recorded. In practice, the serialization can hence only be implemented together with a process automation as captured in step 3.

The cost of workload to create sales order and stock movements is reduced to 3500 USD per year, conservatively maintaining 1.5 man-day per month for checks, error corrections and stock counts.



Finally, the cost of the IT tool for inventory management and for its integration with PaygOps are also added to the cost/risk picture.



This last chart combines the numbers discussed above and represents the breakdown of costs savings through each of these 3 steps. It clearly highlights how **a slightly higher investment in IT, integration and automation have brought a substantial total cost and risk reduction for Brightlife's operations, shrinking by 85% from an estimated 68000 USD per year to 10500 USD per year.**

Watch Brightlife's Video Interview!

Get in touch with our Customer Success team at enquiries@paygops.com to learn more about the opportunities for your business!