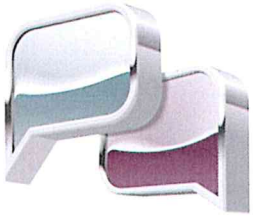
GRENZELOZE LOGISTIEK
Slimme grensregio in actie

FPC beyond packaging

PACKIMPACT project

Demonstration and implementation of the PackAssist® tool as the Packaging Control Tower for the entire supply chain of Philips Healthcare



PackAssist®

Name	BHCA van Dijck
Version	1.0
Company	FPC
Date	21 August 2014

Met de steun van:

beyond
packaging

Summary

This report handles phase 2 of the PACKIMPACT project for a supply chain wide packaging control tower. In this project the PackAssist® tool will be demonstrated as the bases for a packaging control tower. In the first phase FPC has performed a SCOPE process in order to research and analyse the complete supply chain of Philips Healthcare concerning packaging. Philips Healthcare spare part division is the first user of the tool **PackAssist®**. In this division 1,2 to 1,5 million products are sent annually and mostly single items!

PackAssist® is a state of the art and intelligent web based application which provides clear instructions how to pack your product for everyone, everywhere and at any time. This application provides the required information "to the point", "on the spot" and " on a need to know basis".

The main objective of this project is to demonstrate the effect of PackAssist® as a packaging control tower for the entire supply chain worldwide.

Apart from the successfully fulfilment of all predefined KPI's FPC went further and also realised additional features and activities for Philips Healthcare like

- automatic upload with a template of new products of Philips Healthcare
- Simplifying and creating improved packaging concepts for a robust packaging policy to get a grip on packaging worldwide
- Language independent instructions for worldwide coverage

The PackAssist® tool is implemented at Philips Healthcare, its logistics supplier and repair circuit. During the implementation of the packaging control tower tool a number of unexpected benefits were encountered:

- Less volume - less transport costs; The packaging selection tool of PackAssist® presents the package with the least volume. The annual revenue is estimated to be € 1 million.
- Easy and short packaging policy implementation at new sites; Before the PackAssist® tool it took an experienced Philips employee of Philips 3 weeks. With the current PackAssist® tool this time is reduced to 3 to 4 hours.

The philosophy of PackAssist® as the Packaging Control Tower for your supply chain is to simplify and standardise packagings. Philips Healthcare already adapted this philosophy in 2009, which resulted in:

- Reduced number of outer boxes from 600 to 25 boxes – lower price and less stock
- > 95% reduction of products in stock with different boxes for the same product
- The number of logistic related Dead on Arrivals decreased with more than 40%

The results of a 2013 scientific research study of the Rijksuniversiteit Groningen, in cooperation with FPC, on the Dead on Arrival demonstrated that over € 10 Million annually are to be saved!

Partner level
In test period at UPS unexpected events occurred which tested the PackAssist® tool to the full extend, such as power shutdown, movement of the repack location and fall out of experienced personnel (new personnel).
In all the events PackAssist® turned out to be an excellent tool. Within one hour new personnel understood the PackAssist® software and were able to pack according to the quality standard of Philips. These events demonstrated the intuitive and easy setup of PackAssist® to the full extend!!

Master level

At the end of the project the project teams of Philips Healthcare and FPC evaluated the PackAssist® Tool as the packaging control tower for Philips. Philips is very pleased with the current results which have led to the following path forward for the short term:

- Out roll to 5 locations of Sanmina worldwide (repair circuit)
- Out roll to 5 locations of UPS worldwide (logistics)
- Out roll to key supplier of Philips Healthcare (supplier)

For Philips the most added value of this tool and consultancy of FPC are:

- Language independency for worldwide uniform instructions
- Intelligent algorithm for the most economic volume but still hold on the required quality
- Easy and fast worldwide expansion of the packaging policy
- Upgraded and simplified packaging policy for a better grip on their packaging
- Highly improved image to their customers by uniformity of labelling and taping (first sight of your customer!!)

Overall conclusion

This project demonstrates that PackAssist® is an effective tool for packaging control in a worldwide supply chain. Its use at Philips Healthcare is an enormous success and Philips will implement the PackAssist® tool worldwide at its logistic and manufacturing suppliers!!

beyond packaging

Contents

1 Introduction

1.1 History

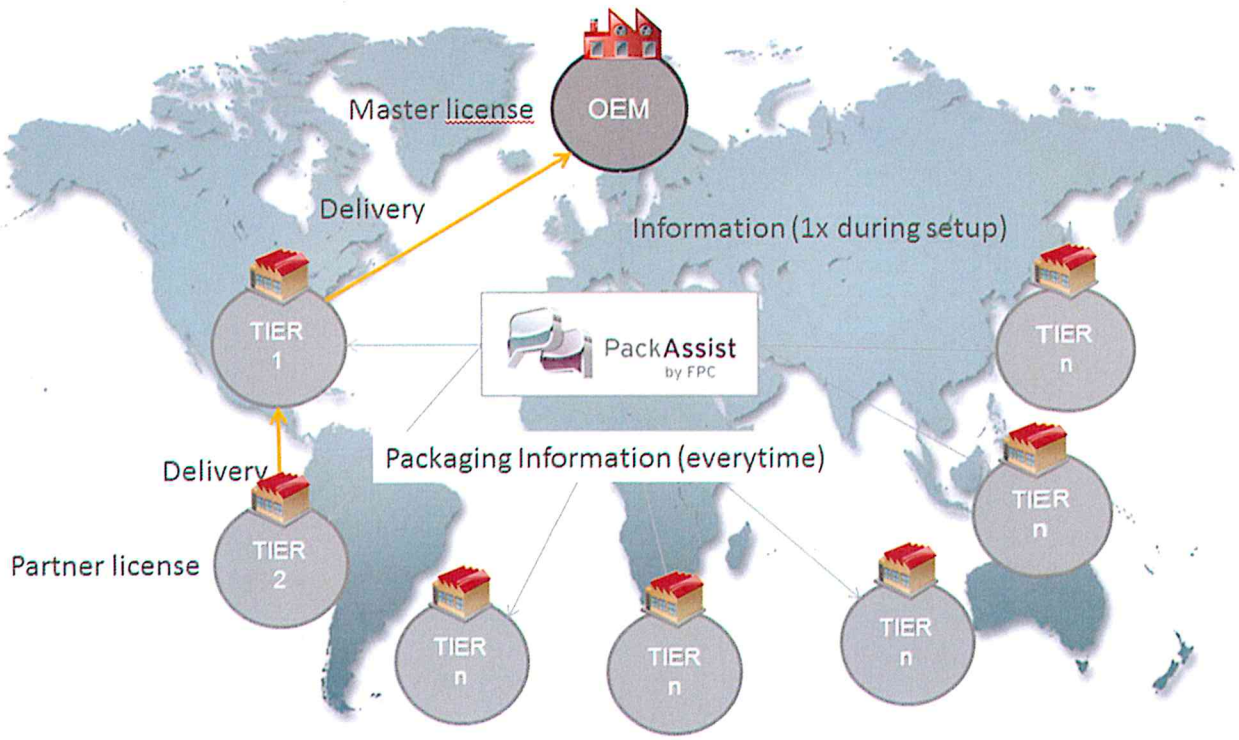
This report handles phase two of the PACKIMPACT project for a packaging control tower in which the PackAssist® application will be the base for this packaging control tower.
In the first phase FPC has performed a SCOPE process in order to establish the complete supply chain of Philips Healthcare concerning packaging.
In the SCOPE trajectory the complete supply chain, all logistic and packing risks and circumstances, potential benefits and registration requirements are analyzed.
Based on this analysis KPI's are defined for this phase in which PackAssist® will the base for the packaging control tower for Philips Healthcare.

PackAssist® is a state of the art and intelligent web based application which provides clear instructions how to pack your product for everyone, everywhere and at any time. This application provides the required information "to the point", "on the spot" and "on a need to know basis".

1.2 Objective

The main objective of this project is to demonstrate the effect of PackAssist® as a packaging control tower for the entire supply chain worldwide.

Philips Healthcare spare part division is the first user of this tool called PackAssist®. In this division 1,2 to 1,5 million products are sent annually, mostly single items!



2 Approach

2.1 General

In order to successfully and transparently implement the packaging control power at Philips Healthcare structured and professional project management is required. This is carried out by project management of FPC.
At the start alignment of all parties involved is essential. Agreements, team set up etc. are registered in the project plan and signed by all parties involved.

One of the agreements is a weekly progress meeting in which planning, progress and all relevant issues are handled. Meetings are recorded in so-called Minutes of Meetings (MoMs) and the planning has been updated on a weekly base. This is carried out throughout the entire implementation phase.

A professional step-by-step test schedule was set-up for a throughout and extensive testing of the PackAssist® tool:

1 Key users of Philips Healthcare were trained to use PackAssist® and learned how to implement their packaging policy
2 FPC fully implemented the packaging policy in PackAssist®
3 Key users perform extensive test before release to the supply chain
4 Supply chain (UPS Roermond) were trained
5 Two month test period
6 Out roll to other supply chain suppliers of Philips

Apart from the minutes of meeting separate documents were created for the testing of the PackAssist® tool, all according to the test plan. Approved items from the test plan were signed both by Philips as FPC and stored digitally. This holds for key users tests as well as for the supply chain supplier test.

2.2 Project plan

The first step in the implementation was an agreement between all parties on scope, responsibilities and deliverables of the project. These agreements are described in the project plan and signed by all parties.

In the project plan apart from the PACKIMPACT deliverables more specific deliverables for Philips Healthcare were set on paper.

2.3 Project team

The project team consisted of the following participants:

Philips Healthcare

Name	Function	Role
Eric Ermstrang	Global director Packaging & transport	Project leader Philips
Ruud Ludding	Global sr. purchaser packaging materials	Purchase and testing of tool

FPC

Name	Function	Role
Bart van Dijck	Project manager	Overall implementation
Ruud Hendrickx	Consultant	Guidance process implementation & training
Oscar Dekkers	Managing director FPS	Functional & Software expert

BOM

Name	Function	Role
Twan van Lankveld	Programme manager Logistics	Project manager BOM (2014)
Marc de Haas	programme manager Logistics	Project manager BOM (2013)

2.4 Project planning

The project has successfully progressed according to the steps in the initial planning.
No additional control steps were required compared to the initial planning; only additional wishes (functionality) were integrated in the planning.

The lead time has been extended by the following factors:

- Longer testing time mainly due to limited capacity within the Philips Healthcare team
- Cleaning up and upgrading the quality of IRT packaging instructions

2.5 KPI's

In phase 1 the expectations for PackAssist® as the packaging control tower were already set. These expectations have been defined by the following KPI's:

- Increased uptime of the system (> 99%)
- Language independent instructions
- Web based
- Visualisation of product and operation
- Increased capacity ; current threshold is 17.000 products
- Improved and standardised registration process (product – pack combination)
- Faster approval process
- The validation of new product – packaging combinations should be properly registered and carefully effected
- Predefined responsibilities in pack management decision process
- Data transfer of IRT data to PackAssist®
- Development of training manual and training of users

3 Results

3.1 KPI's

In the previous chapter the KPI's were given. Here beneath the results of each KPI is presented.

KPI	Result	Remark
Increased uptime of the system (> 99%)	Fulfilled	
Language independent instructions	Fulfilled	Dutch, English, Hungarian, Chines, Japanese and German language implemented
Web based	Fulfilled	
Visualisation of product and operation	Fulfilled	
Increased capacity ; current threshold is 17.000 products	Fulfilled++	Unlimited capacity
Improved and standardised registration process	Fulfilled++	Simplified and visualised registration for easy but accurate data retrieval from operators: • Repack registration • Dead on Arrival (defects) • Improvement suggestions
Faster approval process	Fulfilled++	Direct email to reviewers and approvers established
The validation of new product – packaging combinations should be properly registered and carefully effected	Fulfilled++	After each initiation all relevant data is directly sent to a predefined reviewer and approver. Every actions on the approval process is logged and stored
Predefined responsibilities in pack management decision process	Fulfilled	Per department a separate reviewer and approver can be defined, also an overall reviewer and approver is implemented which will analyse all remaining issues
Data transfer of IRT data to PackAssist® (17.000 products)	Fulfilled++	Extended to 116.000 spare part products
Development of training manual and training of users	Fulfilled++	On line and off line training set up and given for operator, managers and contributors. Manuals are online available through PackAssistance which can be directly accessed in PackAssist®

3.2 Added features

Apart from the KPI's FPC went further and developed additional features and activities were performed for Philips Healthcare.
Here beneath a short summary of the additional features are presented:

- Automatic upload of new products
- Handling hazardous material
- Conversion programme for registered data to fit in Philips Business Object software
- Cleaning up and simplifying old packaging data (upgrade in quality)
- Simplifying and creating improved packaging concepts for a robust packaging policy to get a grip on packaging worldwide

In the last point the experience and point of view from FPC is adapted by Philips Healthcare to really get a grip on their packaging in the world wide supply chain. Main topic is simplifying packaging and standardise the packaging materials and thereby prevents exceptions and uncontrolled growth of packagings when not necessary.

3.3 Unexpected benefits

During the implementation of the packaging control tower tool we encountered a number of unexpected benefits.

Less volume - less transport costs
The packaging selection tool of PackAssist® presents as a first option the package with the least volume. Packaging volume is 1:1 related to transport costs for the volume of Philips Healthcare spare part division. The annual revenue is estimated to be € 1 million.

Easy and short implementation
Philips Healthcare is a large company which acts worldwide. Every year several new warehouse locations and companies are taken over. All these new companies and warehouses have to become acquaintance with the Philips Healthcare packaging policy.

Before the PackAssist® tool was operational this took an experienced employee of Philips 3 weeks per implementation including travel and hotel costs. With the current PackAssist® tool this is reduced to 3 - 4 hours and no travelling is required anymore.
This is already realised at 5 locations in China.

3.4 Business case

The philosophy of PackAssist® as the Packaging Control Tower for your supply chain is to simplify and standardise your packagings. A simple but well known example is not to use hundreds of different box sizes but hold on to a well-defined limited number of boxes. Don't overload your supply chain and warehouse contractors with an uncontrolled number of packaging:

STANDARDISE

This way your suppliers will keep stock of this limited number of packagings and you will get every time the same packaging for a product.

For Philips Healthcare this philosophy was already adapted in 2009 and through the years implemented worldwide.

This leads to the following results:

- Reduced number of outer boxes from 600 to 25 boxes resulted in:
- Higher volume per box – lower prices
- Less stocking volume
- 90% reduction of products in stock with different boxes for the same product
- The number of logistic related Dead on Arrival decreased with more than 40%
- Less hidden costs for DOA contamination

The results of a 2013 scientific research study of the Rijksuniversiteit Groningen, in cooperation with FPC, on the Dead on Arrival topic underline these kinds of savings.
In this study 3 high-tech companies were subjected to a DOA cost research, which demonstrated that over € 10 Million annually will be saved, in terms of turnover the DOA costs cover 4%; not even taken into account costs for:

- Internal organisation
- Image damage
- Packaging costs

3.5 Knowledge distribution PACKIMPACT project

Part of this project is the expansion and distribution of PackAssist® as a control tower tool. The target was to spread the approach and results in two meetings. This target is expanded to 4 meetings:

- SLF Summit in November 2013
- Ondernemerscafe de Kempen in January 2014
- KB dag at LCW (Logistiek Centrum Woensel – Luchtmacht) in January 2014
- Workshop for UPS Roermond in March 2014

4 Evaluation

Evaluation is done on two levels; Partner level (UPS) and Master level (Philips).

Partner level
In the test period at UPS some unexpected events occurred which tested the PackAssist® tool to the full extend. The following events occurred:

1 Power shutdown for several hours
2 Movement and reorganization of the repack location
3 Fall out of experienced personnel – new personnel was introduced

In all these events PackAssist® turned out to be an excellent tool.
In case 1 the system of Philips was the complete day out of order and PackAssist® only during the shutdown. Even with the reorganization of the packaging location and (unexpected) new personnel PackAssist® turned out to be very successful.
Within one hour new personnel understood the PackAssist® software and were able to pack according to the quality standard of Philips, the most problems new personnel experienced was with the registration of the UPS system (not PackAssist®).

These events demonstrated the intuitive and easy setup of PackAssist® to the full extend!!

Master level
At the end of the project the project teams of Philips Healthcare and FPC evaluated the PackAssist® Tool as the packaging control tower for Philips.
Philips is very pleased with the current results which have led to the following path forward for the short term:

- Out roll of PackAssist® to 5 locations of Sanmina worldwide (repair circuit)
- Out roll of PackAssist® to 5 locations of UPS worldwide (logistics)
- Out roll of PackAssist® to key supplier of Philips Healthcare (supplier)

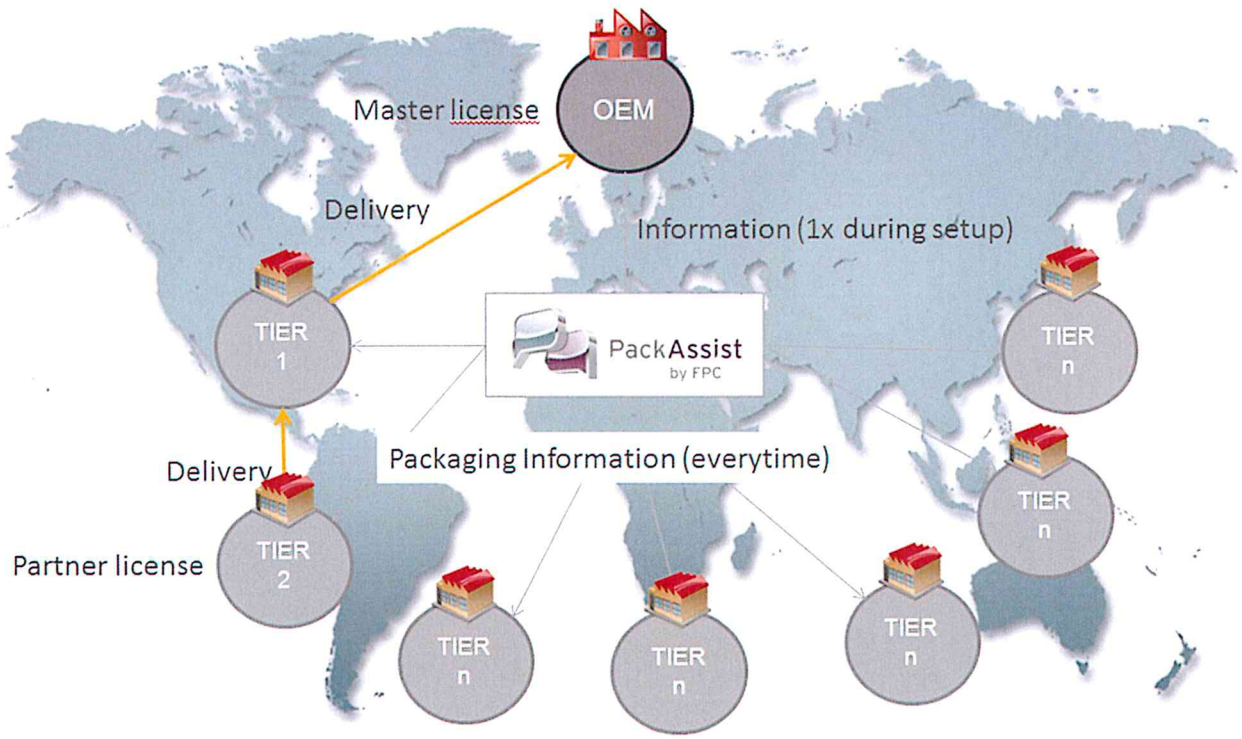
Philips has agreed to promote and create testimonials for the PackAssist® tool as well as demonstrate the added value of such packaging tool on the Philips location.

The highest added value for Philips of this tool and consultancy of FPC are:

- Most economic volume but still hold on to the required quality
- Easy worldwide expansion of the packaging policy
- Upgraded and simplified packaging policy
- Uniformity of labeling and taping giving the packaging worldwide a highly professional appearance (first sight of your customer!!)

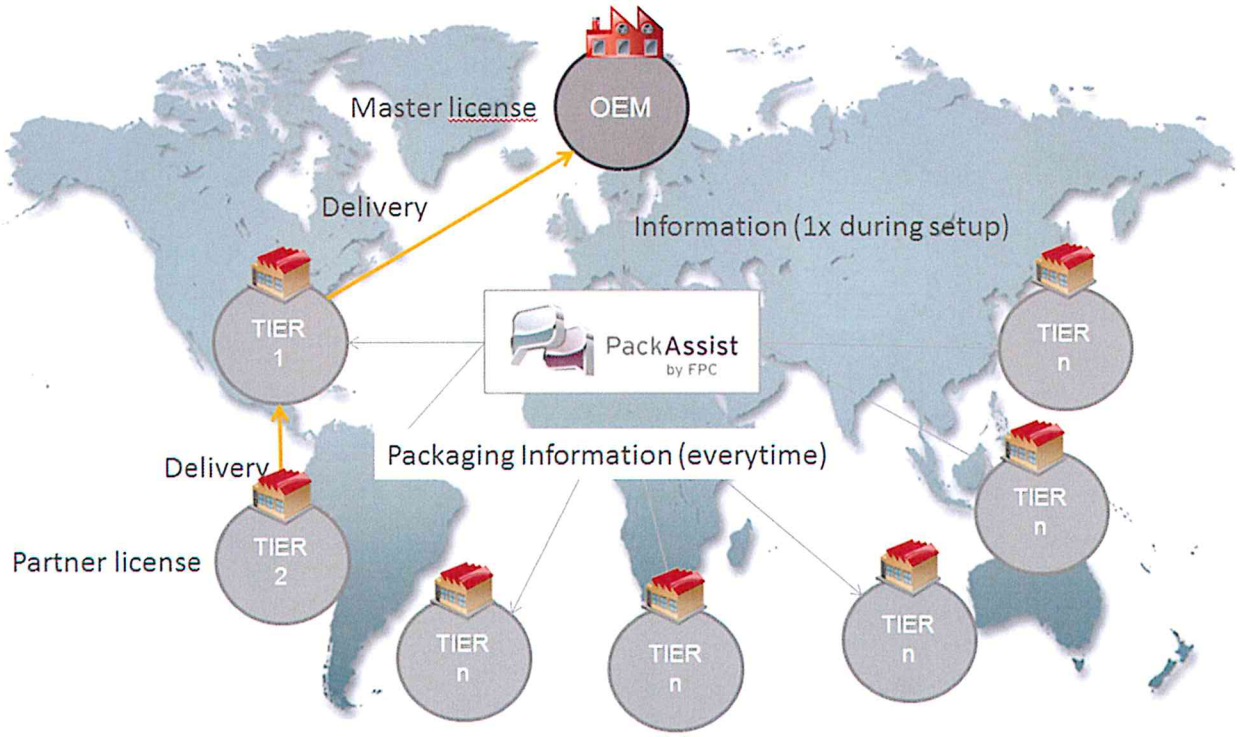
Overall

This project demonstrates that PackAssist® is an effective tool for packaging control.
Its use at Philips Healthcare is an enormous success and Philips will implement the PackAssist® tool worldwide at its logistic and manufacturing suppliers!!



“Simplicity in a complex packaging world”

Kostenbesparingen, standaardisatie, kwaliteit, uniformiteit en eenvoud voor verpakken binnen uw wereldwijde supply chain!



Met de steun van: