Agenda

- Presentation
- Introduction to Lundbeck
- Introduction to External Supply Chain
- The SPMS journey
- The Optimization event with Dobber
- The outlook for SPMS
Who am I

- Tina Kirstein Thygesen
  - 2014- … Senior manager, External Supply Chain at Lundbeck
  - 2005-2014 Manager, CMO and Procurement at Lundbeck
  - 1999-2005 Production planner at Lundbeck / SAP
  - 1986-1999 Novo Nordisk

- Education
  - “Pharmakonom” from Østerbro Apotek, 1985
  - "Merkomom" / "Personale administration"
  - Management training

Lundbeck in brief

_We are a specialized pharmaceutical company engaged in discovering, developing and commercializing new and innovative treatments for brain diseases_

1915 founded by Hans Lundbeck in Denmark
6,000 employees worldwide
13.5bn DKK core revenue in 2014 (EUR 1.8bn and USD 2.4bn)
70% owned by the Lundbeck Foundation
2nd largest pharmaceutical company in Scandinavia and number 42 in the world
Treatment areas

**PSYCHIATRY**
- Alcohol dependence
- Anxiety
- Bipolar disorder
- Depression
- Schizophrenia

**NEUROLOGY**
- Alzheimer's disease
- Epilepsy
- Huntington's disease
- Parkinson's disease
- Stroke

Lundbeck’s 100th anniversary
EXTERNAL SUPPLY CHAIN
Who are we / What do we do
External Supply Chain

Facts / ESC (2009 – 2014)
External Supply Chain

How does the work of ESC impact the supply chain
SPMS JOURNEY
Implementation of a Supplier Performance management System

SPMS Journey  - uncovering the potential

Own processes (2007 - )

Flow cells

External Supply Chain

Standard processes

Mass changes
New prices

Automatic upload
of order confirmations

Work load

15

Related processes (2011 - )

Flow stopper/optimizer

External Supply Chain

+/– 10%

Confirmations

Leveling suppliers

Incoming Orders

Missing PM

+/– 10%

Confirms

Leveling suppliers

Incoming Orders

Missing PM

Text & Graphics

Suppliers

Warehouse

Quality

Planning

Prod.

Shipping

Subsidiaries

Patient

16
External processes (2012 - )

Continous Improvement

Automatic upload of confirmations

Missing confirmation follow-up

Quality Improvement

Time
On-time Delivery Performance

Delivery Performance for the same suppliers included in SPMS in 2013 and their continued performance in 2014.

% of Low / Med / High Quality Complaints

Performance for the same suppliers included in SPMS in 2013 and their continued performance in 2014.
Dobber Performance 2014

Leaflet supplier

885 sku's

2,295 order lines

90,9 % perfect orders

581 changes

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Next **STEP** in supplier development
Ensure **CLOSER CO-OPERATION**
with one of our
**ALIGNMENT** of external processes **ACROSS SITES**

**LEADING SUPPLIERS**
A **HOLISTIC VIEW** of the
**ENTIRE SUPPLY CHAIN**

**PEOPLE**

**SOLUTION**

**SUPPLIER OPTIMISATION**
Event

2 part event at **DIFFERENT LOCATIONS**, where relevant

**CHALLENGED** the status quo in each area

**CROSS-FUNCTIONAL/SITE** involvement and focus

**RELIABILITY**

**56**

35 ALREADY IMPLEMENTED
Incomplete boxes marked 'REST'

Color-dots added to delivery notes
Colli number and total colli number added to labels

All orders marked 'Launch' if needed
Fast confirmation of Launch orders

Launch items stacked separately
Only label the shrinkwrap, not the cartons

Reduce the number of samples with new specs

1 point of contact
Launch items stacked separately

Fast confirmation of launch orders

The back of the leaflets is highlighted

Easier goods receipt
ALIGMENT of artwork
Secure of launch
REDUCTION of supply chain costs
ALIGMENT of the ordering process

62.5 %
Ambition:
The Best Supply Chain in The Pharmaceutical Industry

Questions?
Back-up slides

THE OUTLOOK FOR SPMS
The continuation of the SPMS journey
Work in progress / Next step

▶ Own processes
  ▶ Automatic batch assignment – 4 clicks
  ▶ Cost

▶ Related processes
  ▶ MIGO solution
  ▶ Complaint alignment

▶ External processes
  ▶ Knowledge sharing/Portal development
  ▶ Stella event… New caps
  ▶ Forecast

About SPMS


▶ The SPMS is to focus on the operational, tactical and strategic aspects of improving a supplier’s performance and also to make sure that every entity in Lundbeck is aware of any supplier’s performance and pending changes and/or improvement plans.

▶ The SPMS Cell is to handle and coordinate communication towards suppliers and securing a quick and uniform management of issues. By joining forces with other parts of the organization the SPMS will ensure a faster solving of issues and give better support to the production departments.

▶ Other key focus points of the SPMS are:
  ▶ Improve delivery performance through better communication and planning with the supplier.
  ▶ Improve product quality through product and production development and a faster response time to quality claims.
  ▶ Enable higher supplier flexibility through dialogue with the supplier and a better understanding of the supplier’s limitations and possibilities.
  ▶ Create savings through cost improving projects and product development.
SPMS Concept

-The Perfect Order Index (POI) is Lundbeck’s overall supplier performance management KPI that sums up a supplier’s overall performance, and is to be understood as the percentage of perfect delivered order lines.

POI

-The POI is a combined KPI based on both delivery and quality KPI’s, and when looked upon as groups, they are referred to as the ‘Perfect Delivery Index’ (PDI) and the ‘Perfect Quality Index’ (PQI)

PD | PQI

SPMS Concept

-The sub-level delivery KPI’s and the sub-level quality KPI’s help the viewer of the BSC to understand which performance areas and which sub-level KPI that needs improving.

On time | In-full | Conf. - Rep | Low | Med. | High

-With the PDI, the PQI and the breakdown of these two into sub-level KPIs, it is easy to pinpoint which area of the supply chain that the supplier, together with Lundbeck, need to focus on in order to improve the overall POI.
**Improvements - External Supply Chain**

**EXTERNAL SUPPLY CHAIN**

**IMPLEMENTEREDE FORBEDRINGER**

**Mål (ØR pr. medfødt)**

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**MÅNEDENS FORBEDRING – Januar 2015**

**Team: ESC**

**Division: GSC**

**Problem:** Komponenter til Abilify Maintena kan ikke identificeres i varemodtagelsen, fordi informationen der hører til leveringerne er mangelfuld. Komponenter skal opmærkes for de kan lægges på lager.

**Løsning:** Oversigt med de tilgængelige informationer på pakkelister, samt opmærkning på varerne videregivet til OPEL. Denne er brugt i forhandlinger med deres leverandører.

Der har ikke været noget overblik over hvilken information der bliver leveret af hver af de 8 underleverandører OPEL bruger til at få de komponenter, vi bestiller til pakning af Ability Maintena. Der mangledes en guide til varemodtagelse for hvert enkelt materiale, samt en accept fra kvalitetschef om at varer kunne modtage på baggrund af informationer indhentet via mailkorrespondance.

Oversigten samt samarbejde med QFGP har allerede resulteret i klare forbedringer i opmærkningen, således at 3 materialer nu kan varemodtages uden at skulle opmærkes på SDC efterfølgende. Estimeret besparelse for 2015 med de allerede opnåede resultater:

- Én medarbejder er frigjort i 25 arbejdsdage
- Forsætter forbedringerne kan besparelse nå op på 60 arbejdsdage for 2015

**LIVING PRINCIPLES**

Hvilke Living Principle bliver understøttet af denne forbedring?

- Respekter den enkelte
- Vær ydemægtig i din lederstil
- Skab værdi for kunden
- Fokus på processen
- Stræb efter perfektion
- Flow og time værdi
- Byg kvalitet ind i processen
- Brug videnskabelig tilgang
- Skab fælles langsigtet formål
- Tænk på helheden

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**Månedens Forbedring 2015**

**Ændre til:** Marker princip og ALT+HU
**IMPROVEMENT OF THE MONTH – March 2015**

**Team:** External Supply Chain  
**Division:** Global Supply Chain  

**Problem:** Manuel Batch Assignment  
When creating purchase orders a Lundbeck batch number needs to be manually created and assigned to each order line, so the supplier can print the batch number on all documentation ensuring easier goods receipt and later quality release of the same products.

If this batch number is not assigned upon creation of the purchase order, the identification of goods upon goods receipt takes longer time, causes flow stoppers and loss of time and resources at the warehouses and later also upon quality release of the same goods by the quality departments.

**Solution:** Automatic Batch Assignment
ESC have for a long time been working on optimizing the PO creation process, specifically the manual assignment of batch numbers before issuing a PO to a supplier.

Together with NNIT ESC have now come up with a solution, that automatically assigns a batch number to a PO upon creation.

When converting requirements to a PO, SAP will now look in a table maintained in this new transaction, ZBATCHASSIGN_PO. If the purchasing organization and vendor in the pur.req, about to be converted matches an input in this table, a batch will be automatically be assigned to the order line.

- This process update is a perfect example of poka-yoke (mistake-proofing).
- This new process saves 3 ‘clicks’ pr. order, and on a typical Monday this amounts to approx. 500 ‘clicks’.
- The new process also eliminates all flow stoppers at the warehouses and quality departments stemming from missing batch numbers.

**LIVING PRINCIPLES**  
Which Living Principles is supported by the improvement?

- RESPECT EVERY INDIVIDUAL  
- LEAD WITH HUMILITY  
- CREATE VALUE FOR THE CUSTOMER  
- FOCUS ON PROCESSES  
- SEEK PERFECTION  
- FLOW AND FULL VALUE  
- ASSURE QUALITY AT THE SOURCE  
- EMBRACE SCIENTIFIC THINKING  
- CREATE CONSTANCY OF PURPOSE  
- THINK SYSTEMICALLY

To change [ ] to ✓: Click on principle, hold down ALT and enter HU

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**IMPROVEMENT OF THE MONTH - February**

**Team:** External Supply Chain  
**Division:** SOE GSC  

**Problem:** Performance follow-up  
Since the implementation of the SPMS, the direct supplier’s performance have been calculated in Excel and the follow-up frequency on their performance was monthly.

The Excel file was prone to ‘user errors’ and difficult to adjust when new sites and/or KPI’s were to be included.

The monthly update of the Excel file was also very person dependent and therefore not very reliable on a long term basis.

The weekly performance follow-up was also done in Excel but in a different sheet and using a separate data extract from SAP.

The daily update of back-orders and non-confirmed orders was also done manually, based on an extract from SAP, and with 5 different Supplier Managing Departments across the Global Lundbeck Supply Chain, we also had 5 ways of following up on orders and 5 different data extracts.

With the implementation of the SPMS Portal the following have been achieved:

- A fully automatic data extract from SAP.
- Daily update of performance and order order overview.
- The one single data extract covers the need for the daily, weekly and monthly performance review.
- The same single data extract covers the need for a daily follow-up on the order situation.
- The Portal setup supported by a BW engine has eliminated the risk of ‘user errors’ due to the Portal’s ‘display only’ entry.
- The expansion of the Portal with new KPI’s and views is now based on a close collaboration with Lundbeck BW and NNIT.
- Time otherwise spent on manual data extracts can be spent on more value adding activities.
- The Portal solution removes data extracts can be spent on more value adding activities.
- The Portal solution removes a lot of manual processes and more will become automated over time as the span of the Portal increases.
- Last but not least, the SPMS Portal also helps to ensure alignment across all 5 Supplier Managing Departments with regards to flow cells and performance review.

**Solution:** SPMS Portal
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External Supply Chain

☆ External Supply Chain is a department within Lundbeck’s Global Supply Chain

☆ The responsibility of External Supply Chain is to ensure the availability of all externally supplied components for the various stages of our production in Valby.

☆ Furthermore, to ensure that finished pharmaceuticals from external partners is available at the right time

☆ Facilitates and drives Lundbeck’s Supplier Performance Management System