Terumo Corporation

- Global Headquarters: Tokyo, Japan
- Founded in 1921
- 96 consolidated subsidiaries
- Employees: 23,319 (Consolidated) (FY ended 03/2018)
- Consolidated Net Sales: € 4.5 Billion in over 160 countries (FY ended 03/2018)
- Business: The development, manufacture and marketing of medical devices and pharmaceutical products
Business Overview

Cardiac & Vascular Business

The Cardiac & Vascular Company contributes to cutting-edge treatments including cardiac and vascular surgery, and interventional procedures performed inside blood vessels.

General Hospital Business

The General Hospital Company strives to improve safety and ease of use in therapy devices used in hospitals and in homes.

Blood Management Business

Offers systems for the high-quality, efficient collection and processing of donated blood on a global basis.
Project structure

- **Strategic objective:** ‘Information on tap’
  - Process mining QPR (IT innovation)
  - Kick Off

- **Workshop 1 (2 - days)**
  - QPR - ERP data model creation
  - Internal process & system expertise

- **Workshop 2**
  - Model finalization
  - KPI definition & dashboard

- **Go live**
  - Operational daily interface
  - User access / training (ongoing)
Process Mining Project

Project structure

Jan 18

- Strategic objective: ‘Information on tap’
  - Process mining QPR (IT innovation)
  - Kick Off

March 18

- Workshop 1 (2 - days)
  - QPR - ERP data model creation
  - Internal process & system expertise

April 18

- Workshop 2
  - Model finalization
  - KPI definition & dashboarding

May 18

- Go live
  - Operational daily interface
  - User access / training (ongoing)
Business case of process mining

KPI

how well are we performing?

DURATION ANALYSIS

how long does it take?

FLOW CHART

how efficient are we working?
Dashboard: order to cash KPI's

OTD - Last Confirmed DD: 82.9%
OTD - Last Requested DD: 57.5%
On time payment: 66.7%
OTD - Original Confirmed DD: 82.9%
OTD - Original Requested DD: 54.1%
% of Sales orders rejected: 8.8%
% of Sales orders changed: 23.1%
% of Deliveries changed: 100.0%
% of Sales orders claimed: 0.9%
KPI: requested delivery date – actual delivery date
Business case

KPI

how well are we performing?

DURATION ANALYSIS

how long does it take?

FLOW CHART

how efficient are we working?
Duration: sales order – delivery - POD

QPR ProcessAnalyzer

Sales order item created

1h 22min

Delivery created

14h 47min

Proof of delivery

Cases: 61%

Events: 19%
Duration: sales order – delivery - POD

QPR ProcessAnalyzer

Case Attribute: Month_OrderCreated

Sales order item created

22h 32min

Delivery created

0s

Proof of delivery

14h 18min 0s

Case Count: 83105

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Duration analysis: sales order – delivery

QPR ProcessAnalyzer

Median Duration: 23h 17min
Std. Deviation: 17d 0h
Duration analysis : sales order – delivery

Median Duration: 23h 17min
Std. Deviation: 17d 0h

<table>
<thead>
<tr>
<th>Case Attribute</th>
<th>Attribute Value</th>
<th>Cases #</th>
<th>Selected %</th>
<th>Contribution %</th>
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Totals                           |                 | 83,105  | 25 %       |                |
Duration analysis: sales order – delivery: product allocation
Duration analysis: sales order – delivery: no product allocation

QPR ProcessAnalyzer

Sales order item created

Delivery created

Case Attribute: Item_ProductAllocation

Case Count: 33269
Business case

KPI

how well are we performing?

DURATION ANALYSIS

how long does it take?

FLOW CHART

how efficient are we working?
Perfect flow vs. process deviations
Changes between sales order – delivery creation: product allocation
Changes between sales order – delivery creation: no product allocation
Process Mining Project

Summary

- KPIs & Duration analysis – *Effectiveness*
- Changes *vs.* First time right – *Efficiency*
- Perfect flow – *High Profit*
Process Mining Project

Lessons learned

**Complexity**
- Importance of process/system expertise combination
- Trade-off: 100% model detail vs transparency

**Scope**
- Start small

**Goals**
- Benefits realization
- Training