Business Processes
smart | fast | simple

Process-Mining as a Service
How do you know how your business processes actually work?
How do you know about bottlenecks, inefficiencies and compliance violations?

How quick do you learn about problems in your processes?

How do you identify levers to fix your processes?
Ways To Gain Insights

- **Analyze data, use BI**
  - Define KPIs
  - Monitor KPIs
  - Gather and analyze process data

- **Review process documentation**
  - Operating procedures
  - Business rules
  - Process models

---

- **Slow**
  - (6 – 12 months)

- **Expensive**
  - (> 100k €/USD)

- **In-complete**
  - (few process variants)

- **Static**

---

Process-Mining as a Service

© Ralf Peters Management & Consulting
Switch The Light On

- Analyze data, use BI
  - Define KPIs
  - Monitor KPIs
  - Gather and analyze process data

- Common methods of Business analysis
  - Interview experts, key-users, …
  - Workshops
  - Consulting

More Insights

Process-Mining
100% Transparency
Drill down
Max. Insights

Fast
(Weeks vs. months)

Reasonable
(< 30 k €/USD)

Complete
(all the variants)

Dynamic

Less Insights

Review process documentation
- Operating procedures
- Business rules
- Process models

Process-Mining as a Service
Business processes are conducted using IT-systems.

IT-based work generates data logs.
Process-Mining – Use Activity Generated Data

Extract activity / transactional data

Create eventlogs and data modells

Process-Mining tool generates process-modell

Source: Celonis Process Explorer
Process-Mining – Harvest Information

Explore processes

Optimize processes

Manage processes

Governance, Risk, Compliance Mgmt

100% Transparency

smart | fast | simple

Agile business processes

Compliant business processes
Process-Mining – Explore Actual Processes

Happy Path

Variants

Full Picture

Source: Celonis Process Explorer

© Ralf Peters Management & Consulting
Process-Mining – Process Explorer Example
Process-Mining – Use Cases / Applications

- Identify the actual processes in your company.
- Identify re-work, root-cause and corrective actions.
- Discover bottlenecks and delays and resolutions.
- Look at the rate of automation, identify problems, improve the rate of automation.
- Discover throughput-time, identify delays, improve throughput / delivery / service time.
- Identify and eliminate compliance violations (e.g. Maverick Buying, … ).
- Check conformance vs. planed process modell.
- Documentation of actual processes (ISO, FDA, … ).
- Benchmark processes inbetween plants, companies, business-units.
- Support reengineering of business processes.
- Execute / enforce business rules and processes (e.g. Post-Merger, standardisation).
- Support process-analysis prior to IT-systems evaluation, selection, implementation, integration.
- What-If analysis of throughput times based on actual past process data (e.g. supplier performance, …).
- …
rpmc Process-Mining as a Service

One Process of your choice (Purchasing, Sales, Logistics, …)

Results delivered 6 weeks after availability of data

100% process transparency
Kick-Off immediate improvements

low internal resource requirements (ca. 3 pd providing data)
rpmc: flat charge or 100% performance based, use of rpmc Celonis PM licence

➔ smart | fast | simple business processes with low effort @ no risk to your budget or resource.
By business process there will likely be improvement potential by:

- reducing re-work
- improving rate of automation
- reducing throughput time
- reducing the number of activities
- applying / enforcing business rules
- identifying data quality problems
- improving service quality
- …

Next are 4 business cases based on the purchasing business process (P2P).
**Business Case: Manual Order Change**

**Example / Illustrative**

<table>
<thead>
<tr>
<th>Analysis</th>
<th>How often are orders changed manually?</th>
</tr>
</thead>
</table>
| **Result** | 15,000 changes identified p.a.  
75% of changes conducted manually  
⇒ 11,250 manual changes |
| **Action** | Common changes and causes were identified and analyzed.  
40% reduction is plausible. |
| **Benefit Value** | Time per manual change: 20 min.  
Change p.a.: 15,000  
To be improved 40%  
Value: 11250*0,4*0,33h = 1485 h p.a.  
@ 1650 h p.a. => 0,9 FTE = 63,000 €  
Benefits: Improved service level, reduce service time, fewer work stopps. |

Purchase order changes slow down the P2P process, increase process cost, complexity and number of errors.

Note: all Screenshots are illustrative. No real customer data is used.
How often does re-work occur in the purchasing process?

25,000 cases p.a. of re-work p.a. identified.

Re-work delays the process and requires manual intervention.
Common re-work items were identified using Process-Mining.
50% can be omitted.

Cost of re-work:

<table>
<thead>
<tr>
<th>Activity</th>
<th>#</th>
<th>Time</th>
<th>Sum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Refuse PO Release</td>
<td>15,000</td>
<td>10 Min</td>
<td>150,000 Min</td>
</tr>
<tr>
<td>Delete PO Item</td>
<td>5,000</td>
<td>3 Min</td>
<td>15,000 Min</td>
</tr>
<tr>
<td>Cancel Invoice</td>
<td>2,000</td>
<td>10 Min</td>
<td>20,000 Min</td>
</tr>
<tr>
<td>Cancel Goods Receipt</td>
<td>2,000</td>
<td>10 Min</td>
<td>20,000 Min</td>
</tr>
<tr>
<td>Refuse Release of PO Requisition</td>
<td>1,000</td>
<td>20 Min</td>
<td>20,000 Min</td>
</tr>
</tbody>
</table>

Savings: 225,000 Min * 50% = 1,875 h p.a.
=> 1.14 FTE = 79,800 € p.a.

Assumption: 1 FTE / VZÄ = 1650 h p.a. @ avg. total cost of 70,000 € p.a.
What is the rate of automation and can it be improved?

Rate of automation improvements have been identified for 68% of 100,000 order items p.a.

Rate of automation can be improved for these activities:
- Purchase Requisition Creation
- Purchase Order Creation
- Goods Receipt
- Payment Block Removal
- Purchase Order Approval

Result: 68% of 100,000 order items p.a.

Time saved/activity: 10 Min.

Benefit: Improved throughput and process quality

Savings: 68,000 * 10 Min = 11,334h p.a.
=> 6,87 FTE = 480,900 € p.a.

Assumption: 1 FTE / VZÄ = 1650 h p.a. @ avg. total cost of 70,000 € p.a.
### Business Case: Reduce Maverick Buying

Example / Illustrative  
(non-conformant purchasing)

<table>
<thead>
<tr>
<th>Analysis</th>
<th>Result</th>
<th>Action</th>
<th>Benefit Value</th>
</tr>
</thead>
</table>
| How many purchasing activities are conducted without involving the purchasing department? | 20% of 25 Mio. € spend were ordered without involvement of the purchasing department. | Celonis Process-Mining easily identifies activities and sequences. Professional purchasing reduces spend.  
=> Reduce Maverick Buying. | Result:  
Maverick PO volume 5 Mio €  
To be improved 75 %  
Price / Term improvement 5 %  
Benefits:  
Lower spend and risk  
Improved market strength  
Improved supplier management  
Savings: 5 Mio * 75% * 5% = 187.500 € |

Assumption: 1 FTE / VZÄ = 1650 h p.a. @ avg. total cost of 70.000 € p.a.

Note: all Screenshots are illustrative. No real customer data is used.

© Ralf Peters Management & Consulting