



Digitization in Procurement

Procurement 4.0: Examples how digital solutions can boost your performance

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CEE e-procurement Summit, Somorja, 11.04.2019

Agenda

Introduction, previously on Procurement 4.0	

- KPI visibility
- Robotic process automation

3

7

15

Our value proposition: Why Horváth & Partners for Procurement Topics?

Our Expertise

Long-term consulting experience & latest know-how

Training & Qualification

Our service offering for procurement

Performance Management & Reporting **Procurement Organization** & Employees **Processes & Systems**

Procurement Strategy

Category Management

Einkaufs-

Supplier Management

Latest Knowhow confirmed by scientific studies



Mit Controlling die Chancen & Potentiale der Digitalisierung im Einkauf nutzen (Controller Magazin 2016)

Einkaufscontrolling Instrumente und controlling Kennzahlen für einen höheren Wertbeitrag des Einkaufs (2016)

Renowned expert network & cooperation partners



Our References

Renowned customer trust us - every day anew

Performance Management & Reporting

Strategic goals, KPI, success measurements, reporting & planning **Bonafarm**[®]

areiner bio-one



Giesecke & Devrient Creating Confiden

Procurement Organization & Employees ThyssenKrupp Anlagenservice

Degree of (de)centralization, TOM, Outsourcing, roles & responsibilities, Change Mgt.

Category Management

Cross-functional concepts, cost engineering, Benchmarking, RFI/RFQ, BCC-Sourcing C mt AEROSPACE

hessenwasser

Bonafarm[®]

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Processes & Systems

Procurement Strategy

Steering Concept & Roadmap

Reference Process Models & Process Map. SIPOC, tools, templates & workshops

Supplier Management

Supplier selection, evaluation, classification and development, risk management and transfer

Training & Qualification

Skill assessment, in-house training, competence management





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Horváth & Partners Vision of Procurement 4.0 Several new technologies & methodologies will shape the procurement function of the future and drive innovative use cases



Horvath & Partners view on Digitization in Procurement Based on local and global surveys and practices there is an increased focus on RPA solutions

Overview of emerging technologies in procurement



The usage of RPA solutions are less infiltrated into procurement than into other functions. Implemented practices are emerging. A harmonized companywide spend cube is still a challenge for many SME's In procurement the usage of Big Data & Analytics still suffers from creative use cases

Still the potential of new technologies & methodologies is not fully exploited

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For existing Global Business Services organizations we see four key levers to further leverage potentials





Pulling the right levers of Performance Optimization generates additional value for GBS



Procurement dashboard demo – available at www.horvath-partners.com

HUN	Procurement Dashboa	ard	Lead time	Order analysis	Spend analysis	IFUA HORVATH & PARTNERS
01/01/2017 31/12/20	17		Date of order			Material group
0			All			\sim
	Average of requisition lead ti	ime (day)		Average of F	O lead time (day)	
	165.55		24.32			(k HUF) 50 000 <
		72.41	14.01			5 000 - 50 000
		36.25	2.88			1 000 - 5 000
		45.72	2.93			100 - 1 000
		81.70	0.85			0 - 100
Vendor	Max of Requisition lead time (day)	^			Vendor	Max of PO lead time (day)
Vendor_12		0	Total spend (HUF)	Vendor_ 3	9	3
Vendor_ 13		0		Vendor_4	0	0
Vendor_14		1	70 550 0414	Vendor_4	1	0
Vendor_ 15		396	78,550.6410	Vendor_4	2	204
Vendor_ 16		368		Vendor_4	3	23
Vendor_1/		385		Vendor_4	4	7





PROCUREMENT STUDY - 2018

"What really matters to the CFO – The CFO's expectations towards the procurement function

The empirical data collection took place in the **fourth quarter of 2017** with the help of a standardized online questionnaire comprising **20 questions**. The study was conducted as part of the CFO panel of Horvath & Partners. The survey results were evaluated using descriptive statistics.

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- The panel sample of 203 participants consisted of CFOs and executives from the finance and controlling departments of various industries. The majority of the participants came from Germany, Austria and Switzerland. The sector diversity of the companies surveyed ranges from manufacturing industries and financial services to the public sector.
 - The consumer and industrial goods industry was most strongly represented with a 33 percent share. Other participants came from the fields of chemicals, oil and pharmaceuticals, utilites, financial services, transportation and logistics, automotive manufacturers and suppliers, the public sector and other sectors.



Procurement study – 2018 - Editor: Horváth & Partners GmbH

From the CFO's perspective headcount reduction is not the primary goal of digitization initiatives in procurement



For CFOs, information and P&L-effective and non-P&L-effective savings is one of the central requirements for procurement reporting



CFOs consider a monthly or quarterly reporting cycle for procurement reporting as optimal



Target state and current implementation status for the optimal reporting cycle in procurement differ significantly Cycle Target state Implementation status Weekly 19 6 50 Monthly 38 44 Quarterly 13 Half-yearly 19 Yearly 13 Fig. 10: Optimal reporting cycle for procurement reporting, figures in percent

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Robotic Process Automation (RPA) / Robotics **Robotic solutions imitate human behaviour and connect to existing IT solutions through established Frontends**



"Robot-based process automation (RPA)", or robotics, denotes the extensive usage of software to simulate operations, normally performed by human employees.

Target

 The target is the automation of high-grade repetitive and rule-based processes, which rely on structured data.



Functions

Robotics...

- ... imitates human process steps in existing applications
- ... operates "minimally invasive" on existing applications und infrastructure
- ... is controlled by production control
- ... can be simply implemented by operations and IT
- ... can be a resistant und automated solution, **operating up to 24/7**
- ... requires like a human workforce a user ID and generates costs

Robotic Process Automation leads to huge savings of time and budget especially when applied to prioritized process areas



RPA is on its way to mainstream

Figure 1. Hype Cycle for Artificial Intelligence, 2018 Deep Neural Nets (Deep Learning) VPA-Enabled Wireless Speakers Prescriptive Analytics Graph Analytics Machine Learning **Digital Ethics** Intelligent Applications NLP Conversational User Interfaces Robotic Process Automation Software Smart Robots Virtual Assistants Deep Neural Network ASICs Cognitive Computing AI PaaS FPGA Accelerators Chatbots O Natural-Language Generation O Speech Recognition Computer Vision Human-in-the-Loop Ensemble Learning Predictive Analytics Crowdsourcing expectations Autonomous Vehicles AI-Related C&SI Services 00 0 Neuromorphic Hardware **GPU** Accelerators Knowledge Graphs O Commercial UAVs (Drones) Al Developer Toolkits O Virtual Reality Artificial General Intelligence Knowledge Management Tools Al Governance Augmented Reality As of July 2018 Peak of Innovation Trough of Slope of Plateau of Inflated Trigger Disillusionment Enlightenment Productivity Expectations

time

O less than 2 years ○ 2 to 5 years ● 5 to 10 years ▲ more than 10 years ⊗ obsolete before plateau

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Source: Gartner (July 2018)

Plateau will be reached:

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Let's see the example

Example from different business function

Demo on 2 data gathering life-like issues



RPA Benefits

During a Proof of Concept project we decreased the human resource need in an invoicing process by 70 percent

		Without RF (min)	PA*		With RPA* (min)	-7	
	Launch robot					2	
	Identify records to invoice, check matching	10	D †		4,5		
	Check SAP BP data and record data	20			3,4	3	
	Mass invoicing	9	Ť		0,1	6 🛉	
End		39	• †	-72%	8 -	- 11 🛉	

In our demo we are modeling data gathering for life-like information demand with RPA solution

Case studies for demo

- We have a great number of suppliers in our ERP system, that was exported to an Excel database file with supplier name, registration number and tax number.
- We want to know, or periodically update the operational information about these suppliers.
- We need to have the operative positive, negative information right now, and within 2 years. We need updates on headcount data, seat data, date of completion of operation, registered capital. Source is Opten (official company registration system).

- We would like to have a risk financial information to prepare analyses on defined suppliers. We know the supplier name, registration number and tax number.
- We want to know, or periodically update the annual financial and indeptedness information to be aware of the risk of potential cooperation with the supplier.
- We need to have information from Balance sheet / income and loss statement.
- Source is Opten (official company registration system).

By using RPA in the demo you can execute the data gathering process 12 times faster



Comperism of manual and RPA based data processing

3,2 minutes	On 10 supplier	36,1 minutes
~ 0,1 day	On 500 supplier	1,25 day

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