



COMBINING PROCESS MINING AND RPA TO BOOST THE DIGITAL TRANSFORMATION

Protiviti & Celonis

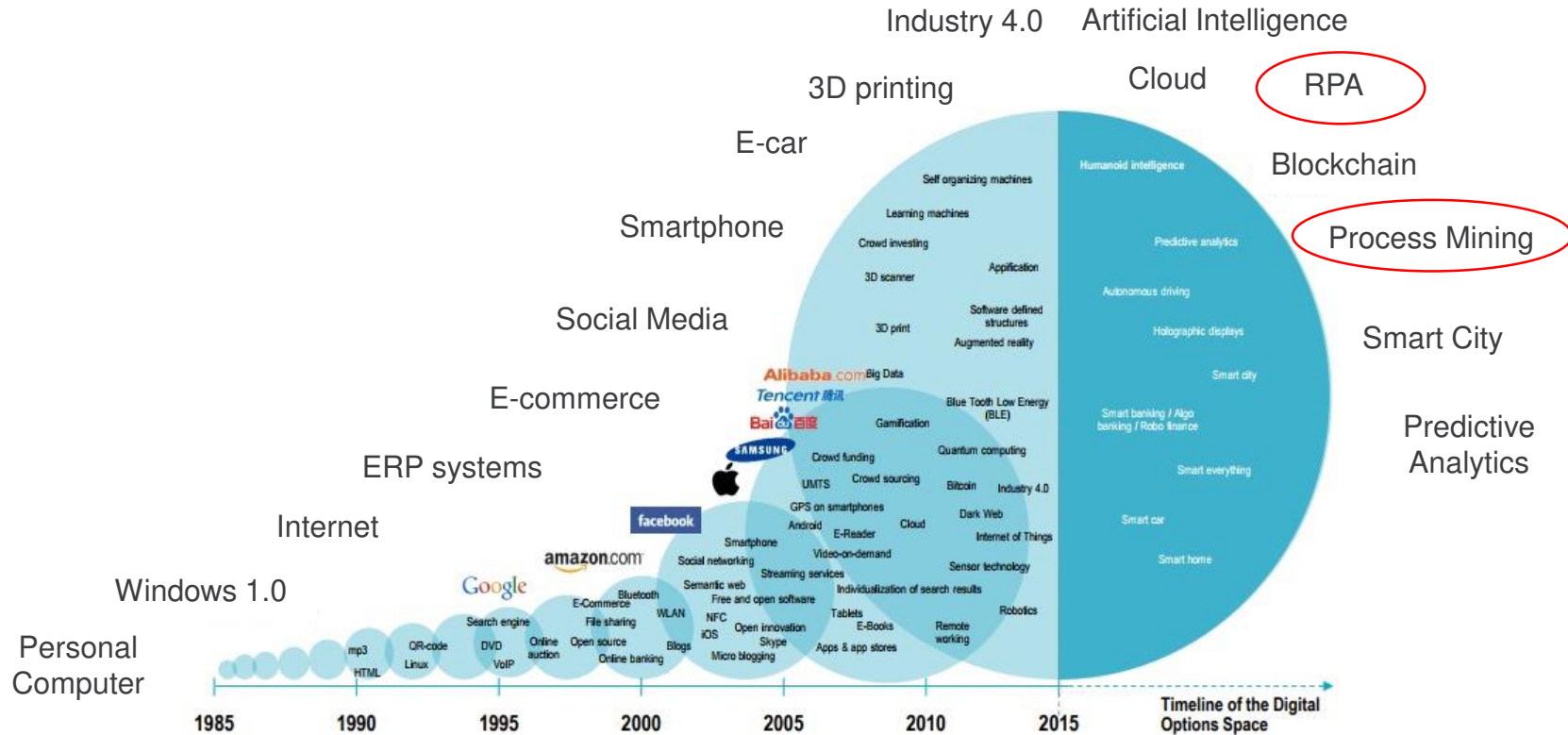
ISACA Risk Event 2019 – Amsterdam, 11 April 2019

Protiviti Perspective provided by Jimmy W., Toronto



THE WORLD
IS BECOMING
DIGITAL

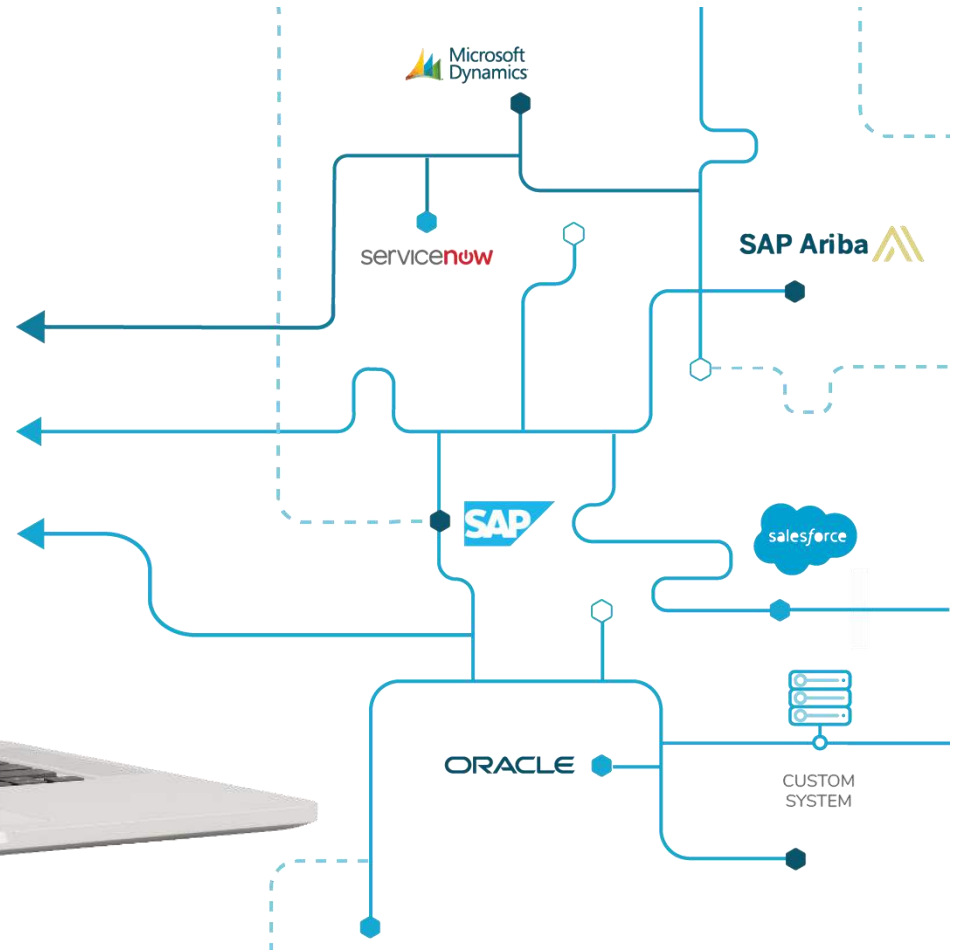
TECHNOLOGY IS EVERYWHERE AND GROWING EXPONENTIALLY



PROCESS ANALYSIS & VISUALIZATION THE “TRADITIONAL WAY”



PROCESS MINING



PROCESS MINING CAN BE USED IN MANY AREAS



ROBOTIC PROCESS AUTOMATION (RPA)



RPA is ...

- the use of ‘software robots’
- that simulate user activities
- and drive efficiencies
- by automating high volume, repetitive tasks
- across multiple systems.

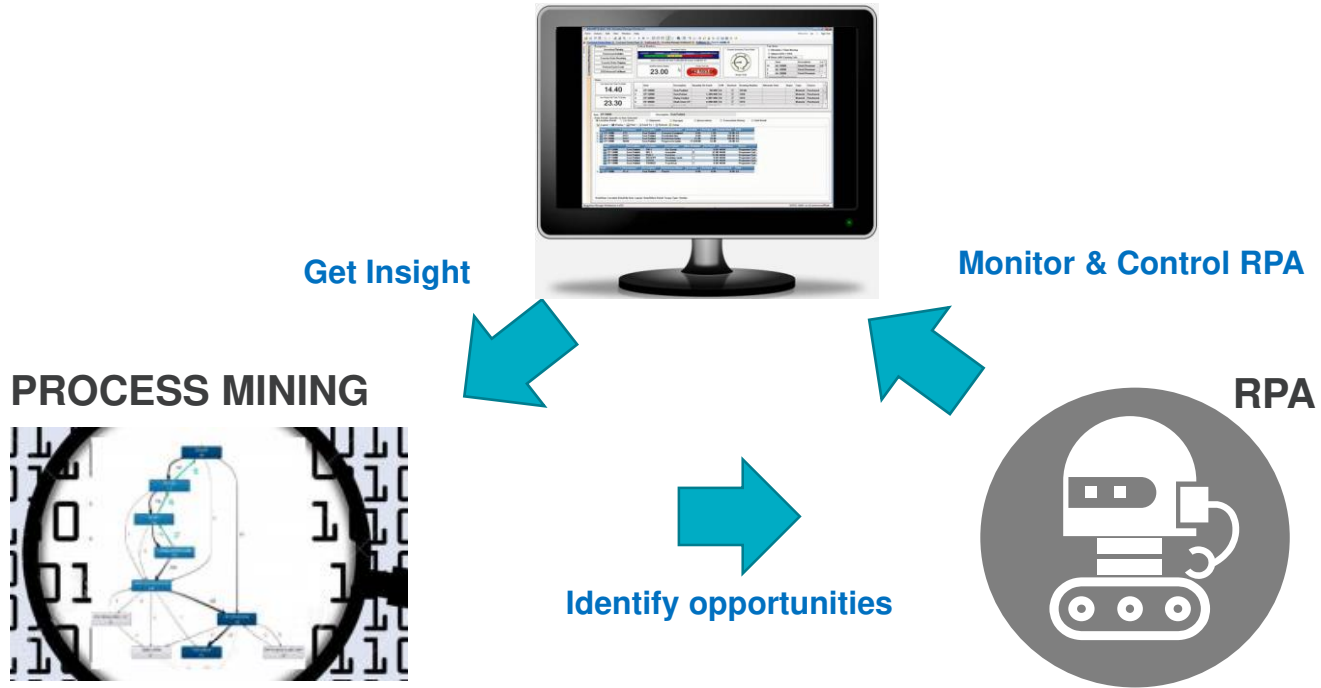
Automation applied to an efficient operation will magnify the efficiency.

Automation applied to an inefficient operation will magnify the inefficiency.

– Bill Gates

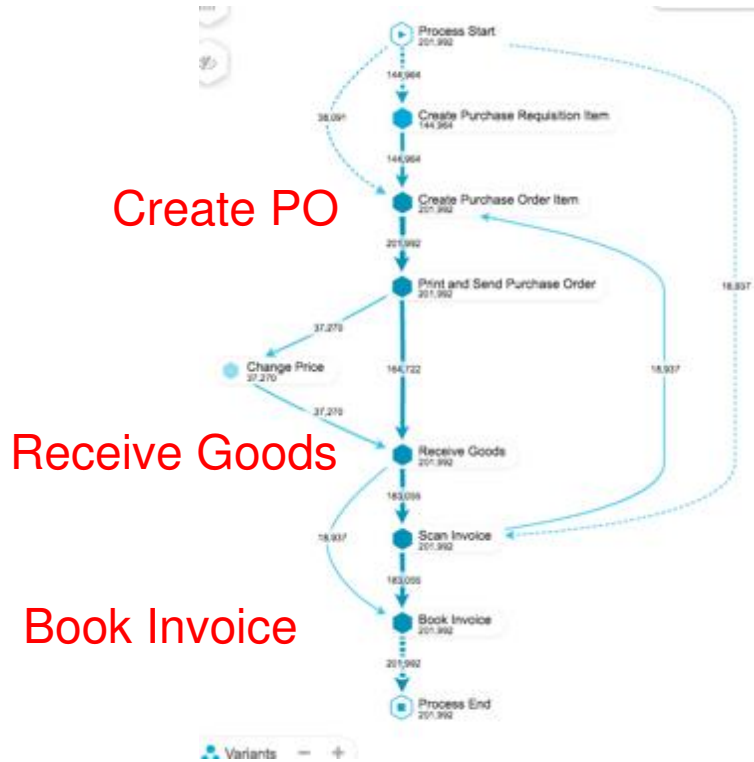
USING DATA AND TECHNOLOGY TOGETHER TO ACCELERATE

TRANSACTIONAL SYSTEM



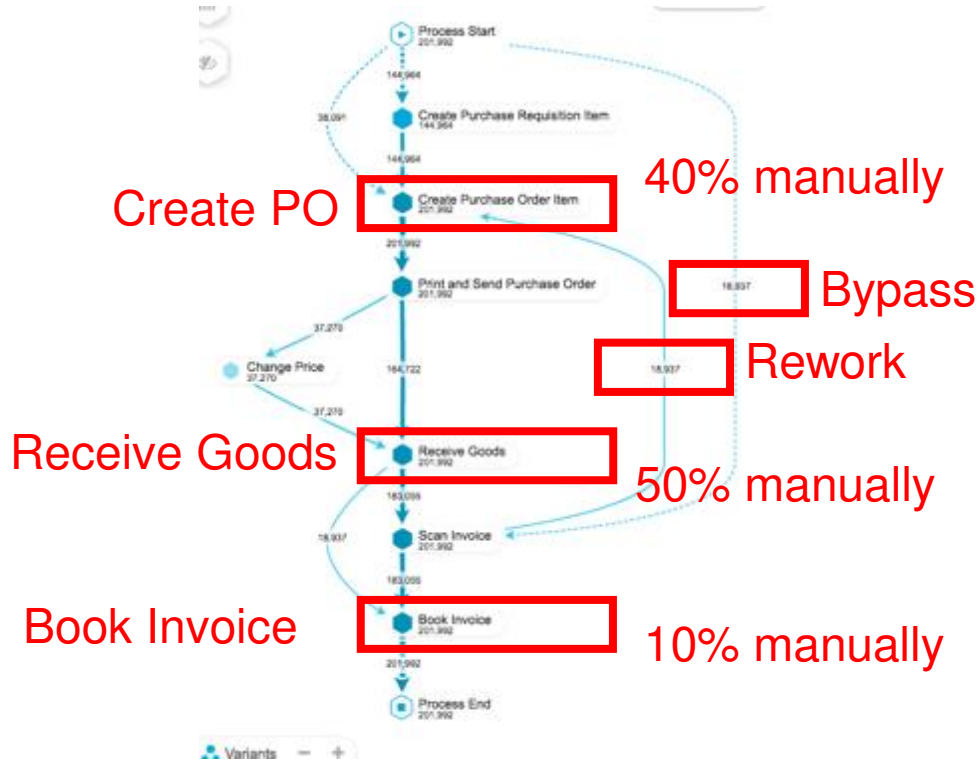
INSIGHT IN THE REAL PROCESS

Get Insight



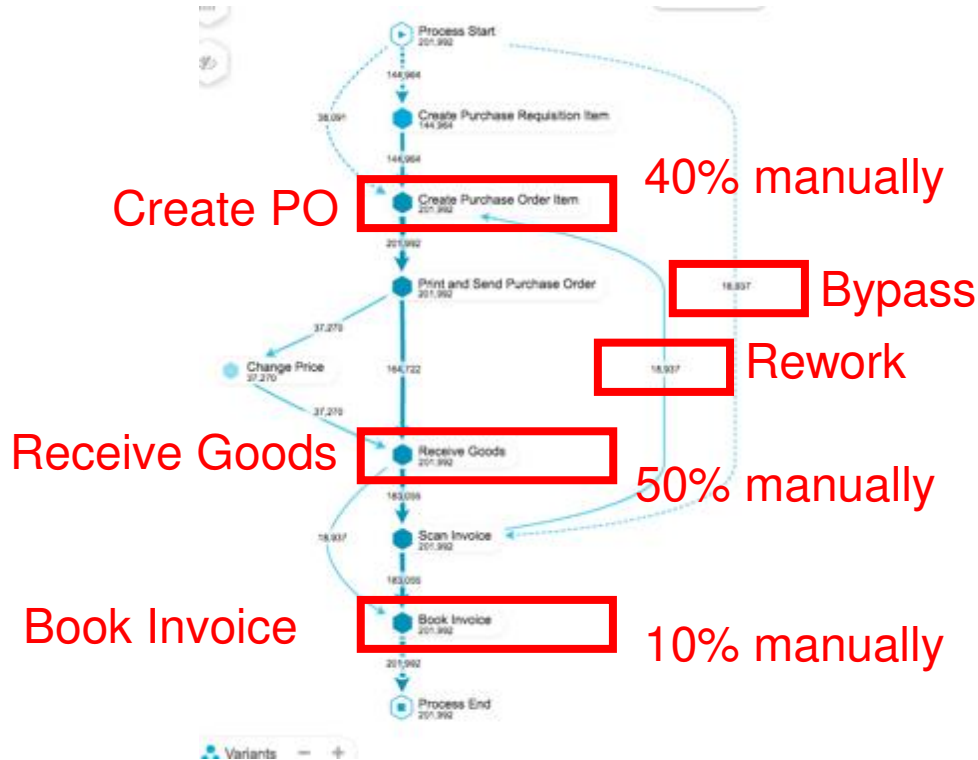
IDENTIFY IMPROVEMENT OPPORTUNITIES

Identify opportunities



ASSESS THE BEST SOLUTION

Identify opportunities

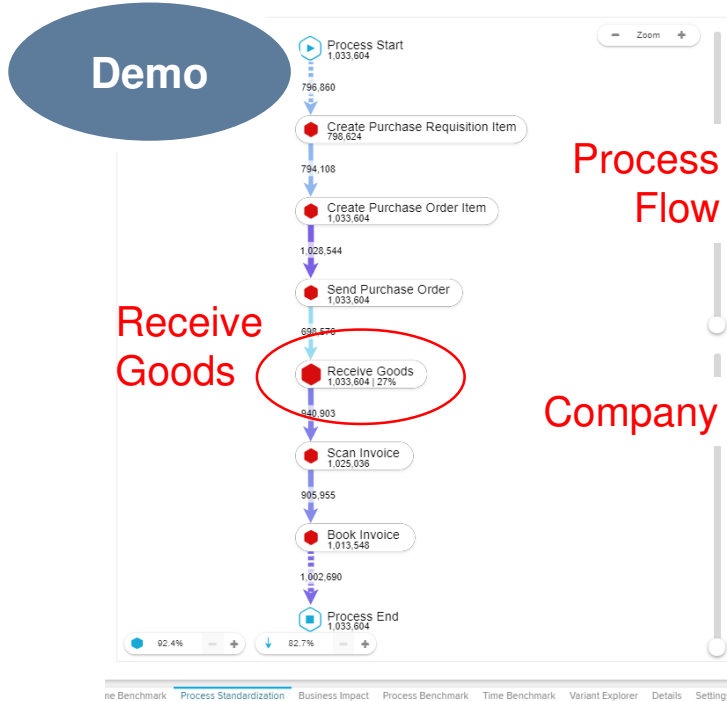


Process improvement solutions

- Process standardization
- Training of (new) employees
- Invest in technology
- Business Process Redesign
- Insourcing/Outsourcing
- Automation (e.g. RPA)
 - High volume
 - Repetitive tasks
 - Estimated savings

AUTOMATION ASSESSMENT

Identify opportunities



Choose a process step whose process flows should be analyzed

Select Activity Current Selection: **Receive Goods**

Process Flows to 'Receive Goods'

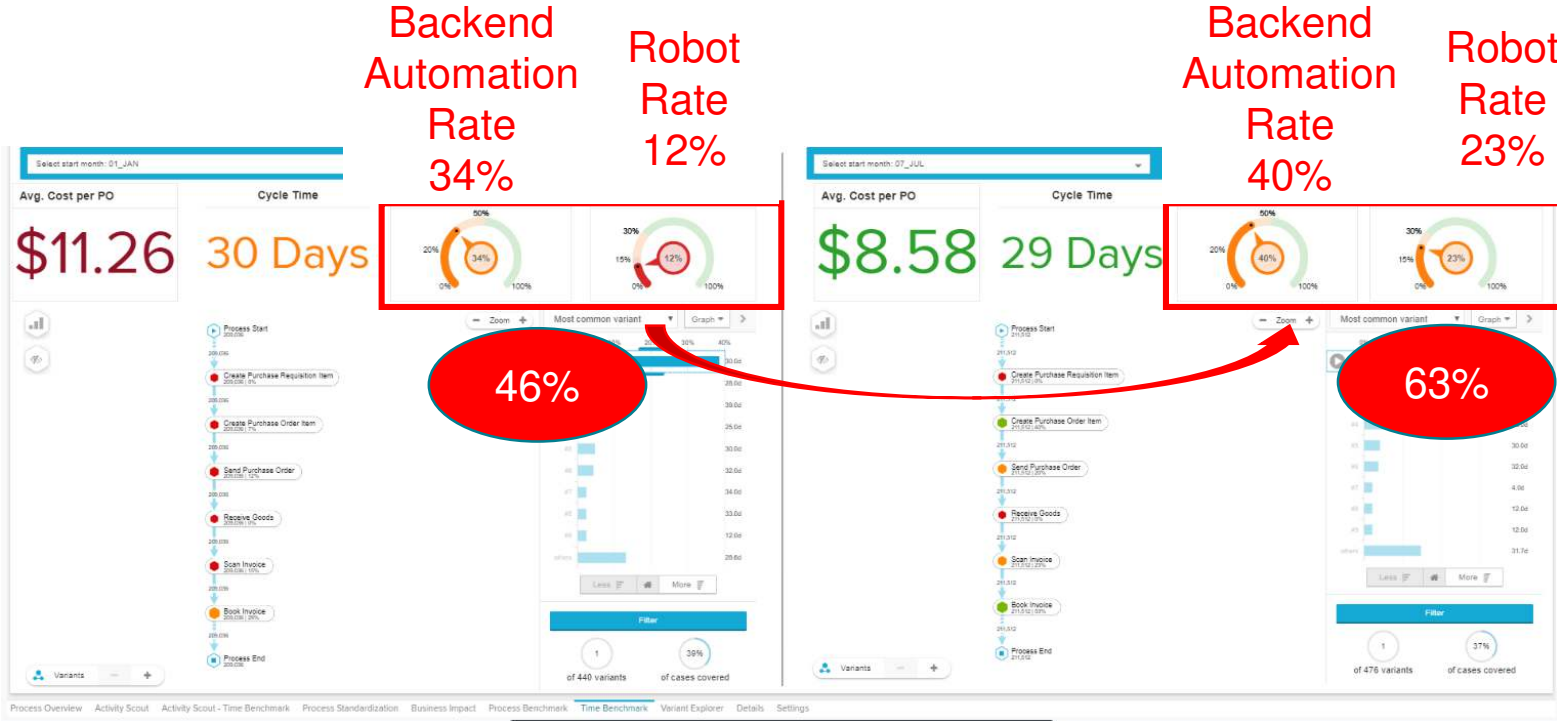
Process Flow	# Purchase Orders	# Manual Activities	Manual Cost
Send Purchase Order -> Receive Goods	698,576	509,335	\$1,632,484
Change Price -> Receive Goods	126,200	114,171	\$305,933
Receive Order Confirmation -> Receive Goods	103,332	75,734	\$242,737
Reactivate Purchase Order Item -> Receive Goods	25,824	19,070	\$61,122
Send Purchase Order Update -> Receive Goods	25,756	18,437	\$59,093
Change Currency -> Receive Goods	25,900	18,255	\$58,510
Change Quantity -> Receive Goods	2,540	1,972	\$6,321
Cancel Goods Receipt -> Receive Goods	1,344	1,009	\$3,234
Send Overdue Notice -> Receive Goods	72	54	\$173

Drilldown by Company Code

Company Code	# Purchas...	Manual Rate	Robot Rate	Backend Autom...	Realized Savi...	Estimated Saving...
1000 - IDES AG	519276	95%	0%	5%	\$0	\$788,853
R300 - IDES Retail IN ...	196604	34%	0%	66%	\$0	\$107,635
3000 - IDES US INC	178568	48%	0%	52%	\$0	\$138,771
R100 - IDES Retail Gm ...	123188	81%	0%	19%	\$0	\$159,103
2310 - Sdad NOVA For...	4360	79%	0%	21%	\$0	\$5,532
2315 - Sdad NOVA 15 ...	1644	80%	0%	20%	\$0	\$2,103
-	1396	81%	0%	19%	\$0	\$1,814
6000 - IDES México, S...	972	79%	0%	21%	\$0	\$1,224
2322 - Sdad NOVA 22	972	81%	0%	19%	\$0	\$1,256
2314 - Sdad NOVA 14	796	77%	0%	23%	\$0	\$987
2318 - Sdad NOVA 18	720	78%	0%	22%	\$0	\$904
2317 - Sdad NOVA 17	516	84%	0%	16%	\$0	\$699
2316 - Sdad NOVA 16	472	75%	0%	25%	\$0	\$571
CPFO - Good Food	436	87%	0%	13%	\$0	\$609

INTELLIGENT AUTOMATION ANALYSIS TO MONITOR RPA AND OVERALL AUTOMATION

Monitor RPA

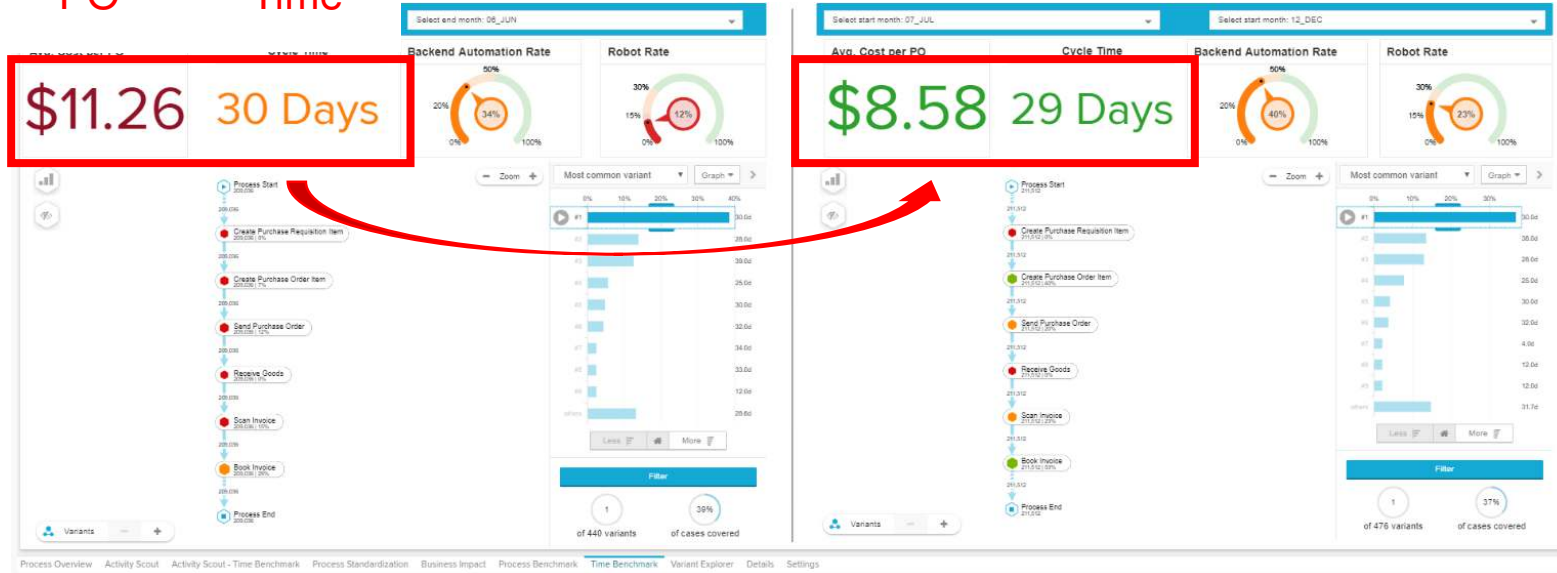


INTELLIGENT AUTOMATION ANALYSIS TO MONITOR RPA AND OVERALL AUTOMATION

Monitor RPA

Cost per
PO

Cycle
Time



Demo Celonis



Benefits

- Improved process efficiency (cost, speed, quality)
- More effective control environment



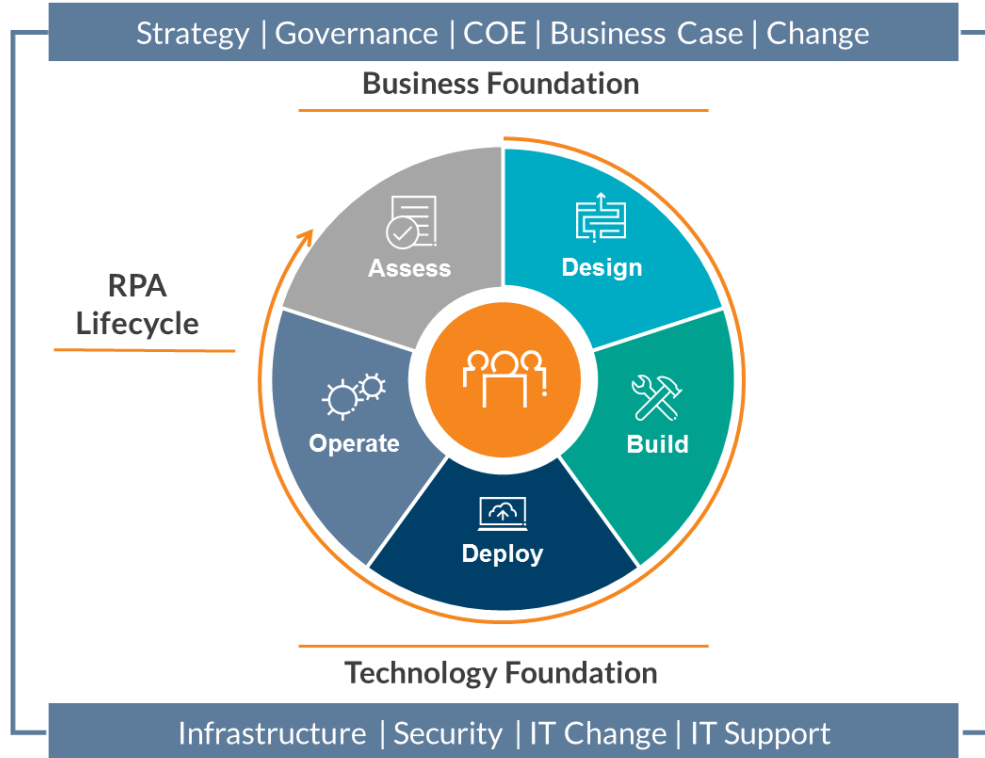
Risks

- Bot does the wrong thing
- Bot is wrongfully updated
- Bot changed by unauthorized staff



HOW TO MANAGE RPA RISKS?

Control RPA



CONCLUSIONS



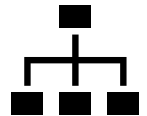
Process Mining benefits (IT) Risk Mgt, Internal Audit and the Business



Consider the best way to automate: “a Bot is not a hammer”



Process Mining can strengthen RPA and v.v.



RPA programs bring new risks and need Governance



Your job as an (IT) risk manager or auditor is changing

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