<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Flooring</td>
<td>Laminate floors, engineered wood and vinyl</td>
</tr>
<tr>
<td>Panels</td>
<td>Boards, MDF and decorative panels</td>
</tr>
<tr>
<td>Insulation</td>
<td>Roofing elements and insulation panels</td>
</tr>
</tbody>
</table>

- 5000+ employees
- Turnover >1.5 billion
- 20 production units

- 39000+ employees
- Turnover >9.5 billion
- NYSE
- What is RPA
- Shapes & Forms
- Some examples
- Other automation opportunities
- Some takeaways
- Future
Production automation

Waves of industrial revolution...
From handmade to machine, assembly line automation, robots
Productivity increase of ...
Office automation

Introduction of typewriter, Personal Computer, Accounting software, workflow systems, Reporting tools, cloud solutions, ...
Productivity increase of 3%
Many organizations have applied technology to support automation of business processes but there still are gaps...and today many of these gaps are bridged by people using paper, manually copying data, ...
MIND THE GAP - Waste in our daily work

Scattered data
Develop own methods and systems

Left – Right screen
Switching between different applications
inputting data from one system to another

Print to paper, error correction
Excel-itis

Capable human resources
What if...
we can program a robot to do some of the work

Introduction of RPA
“Robotic Process Automation” are software “robots” that perform **routine** business processes by **mimicking** the way people interact with applications through a user interface and following **simple rules** to make decisions.

RPA is suited for processes with repeatable, predictable interactions with IT applications.

RPA can improve the efficiency of these processes and the effectiveness of services without fundamental process redesign.

**Routine activities**
- Mimicking the user
- Use existing user interface
- Simple rules to make decisions

**Take the robot out of the human**
RPA is an efficient way to execute rule-based and repeatable processes with limited human intervention

- Cross-functional & cross-application (System agnostic)
- Replacing humans performing repetitive rule-based tasks
- Computer coded software

- Open e-mail & attachments
- Log into web/enterprise applications
- Move files & folders
- Copy & paste
- Fill in a screen or form
- Read & write to database
- Follow business logic (if then else)
- Extract structured data from documents
- Make calculations
- Generate reports
- Collect information
- Call other systems API
Cross application macro

- Salesforce
- Oracle Applications
- SAP
- World Wide Web
- Office 365
- Adobe PDF
- Outlook
- Microsoft Dynamics 365
- RPA
Benefits of RPA

• Saving in manual hours (productivity increase)
  – Grow without increasing headcount
  – Free up employees to focus on the value added and more difficult tasks

• Error reduction
  – Reduce variance

• More streamlined and effective processes
  – Reduced execution time
  – Reduced bottlenecks
  – Improved employee morale and customer satisfaction
Types of RPA

**Assisted RPA**

- “Attended” RPA
- On demand

**Unassisted RPA**

- Scheduled time intervals
- Robot executes in background
Hello
my name is WANDA
Working All Night & Day
• Fixed assets creation
• Bank statement uploads
• Manual journal entries
• Intercompany reconciliation
• Ledger account reconciliation
• SAP attachments
Manual Journal Entries

**Requestor**
- Open Excel template
- Fill in & Save As

**WANDA**
- Check folders & Read Excel
- Check correctness
- Manual Journal Entry FB50
- Reversal ?
- Yes
  - Reversal booking FB08
- No
  - Add document number
  - Inform
## Ledger Account Reconciliation (AP & AR)

### Total AP

<table>
<thead>
<tr>
<th>Vendor balance</th>
<th>2018-01</th>
<th>2018-02</th>
<th>2018-03</th>
<th>2018-04</th>
</tr>
</thead>
<tbody>
<tr>
<td>2001560</td>
<td>-8 405,88</td>
<td>-8 593,22</td>
<td>-36 402,30</td>
<td></td>
</tr>
<tr>
<td>2001589</td>
<td>-353,06</td>
<td>-36 927,49</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200100</td>
<td>-15 668,34</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200520</td>
<td>1 385,48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200550</td>
<td>573,17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2570650</td>
<td>-5 636,01</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-28 104,64</strong></td>
<td><strong>-78 685,01</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### GL per account

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>830</td>
<td>-4 836,62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001560</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2001589</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200100</td>
<td>-4 414,63</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200520</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2200550</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2570650</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-4 599,63</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Difference

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>100</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>830</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>-327,00</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### 22 Company codes

### 2 Systems (both SAP)
Ledger Account Reconciliation

WANDA

Unattended

Prepare → Logon SAP → Download AP details → Download GL Details

Logon Dynea, B&M → Download AP details → Download GL Details

Difference?

Yes → E-mail

No → Set WANDA Approved + PDF
RPA in action

General Ledger Reconciliation
To RPA or not to RPA

RPA is just another automation tool but ... game changer as you extend multiple systems and can bypass IT

Both a blessing and a curse
Some takeaways

- RPA infrastructure hosted by IT
- IT-savvy Configuration profile
- Business process ownership
- Detailed analysis – BPMN
- Stepwise approach - Methodology
- Risks
  - Shadow IT
  - Automation non efficient process vs Lean out first
- RPA to the desktop – front end
- Extensive Excel automation
  - Macro’s
  - Formulas
  - Conditional formatting
  - Data validation
- Start small – branding – focus on efficiency increase rather than hard savings. Follow the ‘Lean’ thinking principles
• RPA front-end
  • Merge with iBPMS or DPA (Digital Process Automation)
  • Forms – Workflow
  • Chatbots - strong in capturing the what
    RPA is strong in how to execute

• IBM Watson & Microsoft / Google Intelligent Services
  • NLP Natural Language Processing
  • Vision (OCR – Facial recognition – Handwriting)
  • Translation

• AI or Artificial Intelligence
Take the robot out of the human
What is RPA
Shapes & Forms
Some examples
Other automation opportunities
Some takeaways
Future
For Your Information

OTHER SOURCES OF INFORMATION
To Robo-Accounting and Beyond: AI in Online Accounting

First there was double-entry accounting. Then came the age of Excel sheets. This was followed by online accounting. And now, barely a few years later, the accounting industry is on the verge of total automation thanks to the involvement of AI (artificial intelligence), resulting in a revolution that transforms every thought we had about accounting so far.

And as painful as it sounds from the accountants’ point of view, even they will benefit from the changes – if they are willing to accept that they have to adapt to the new, ‘robotized’ world.
Accountants: Transform!

Moving to the cloud is a must for everyone involved with accounting, mostly any current and future accountants but this is especially true for SMB owners. However, if only the software is provided and the user has minimal accounting and/or IT knowledge, then the final result will still become a huge mess. That’s why online accounting programs are only half the solution – the other half must be you, the accountant. And whether you like it or not, you have to accept this new role if you want your accounting business to stay afloat.

The reason is simple: as online solutions take more and more processes into their ‘hands’ – in other words as more and more tasks are partially or fully automated – the less work you will have. However, as much as this is a huge asset for SMB owners, AI also has a huge disadvantage: it prepares the necessary information, but doesn’t make it ‘digestible’. This is where accountants step in: by providing value-added analysis you interpret the data created by a piece of software and communicate it to clients in an understandable fashion. To make things even better, the extended automation provides you with more work: since you’ll spend less time on the tedious validation process (which is also being phased out thanks to blockchain technology), you can drop accounting costs significantly, allowing SMBs with fewer funds to finally retain your services.
AI Behind the Software

Although the inclusion of AI has a huge impact on human resources, the biggest and most visible changes will occur in the accounting systems themselves. An implementation of this that exists already is the Hey Xero chatbot, which uses Facebook Messenger to display certain data stored in the accounting software after receiving the right text command. Now imagine the same with voice commands: according to the developers of Pegg, a chatbot integrating into Sage One accounts, the software is already capable of this – albeit a security issue regarding voice recognition (to prevent unwanted users from accessing the feature) has yet to be solved.

Returning to Xero, however, the company will also integrate AI into its invoicing and bank reconciliation processes. Since the AI can learn from a gigantic database (built from anonymous data, of course) and from observing your actions and behavior, it will be capable of automatically creating your invoices and reconciling your bank transactions in a short period of time with an almost perfect accuracy.
Als werknemer ben je waarschijnlijk geneigd om automatisering als een bedreiging voor je job te beschouwen. Onheilspellende berichten in de media over nakend barneverlies en robots die ons werk zullen overnemen, doen daar natuurlijk geen goed aan. Toch is er helemaal geen reden tot paniek. Ten eerste zullen er altijd getalenteerde werknemers nodig zijn. Ten tweede kun je heel wat taken gewoonweg niet door computers laten uitvoeren, aangezien zij jouw emotionele intelligentie missen. Benieuwd naar de impact van automatisering op jouw boekhoudingsskills? Lees snel verder!

**Welke accountancyvaardigheden worden minder belangrijk?**

Het ACCA (de Association of Chartered Certified Accountants) voorspelt dat bepaalde boekhoudkundige taken en vaardigheden aan belang zullen inboeten door de opkomende automatisering. De vakorganisatie denkt daarbij vooral aan:

- handmatig rekenen
- aangeven van inkomstenbelastingen, erfbelastingen, loonbelastingen, …
- routinematig backofficewerk
- bepaalde rapporteringen

Ook de verspreiding en afhandeling van facturen zal in de toekomst minder door boekhouders en meer door boekhoudprogramma’s afgehandeld worden. Elke kmo kan tegenwoordig namelijk al vrij goedkoop een ERP-systeem aanschaffen om de facturatie te beheren. De inkomende facturen worden dan automatisch gescand en ter goedkeuring voorgelegd aan de juiste persoon.

Uit de uitgaande facturen wordt automatisch een heleboel nuttige informatie gefilterd, zoals het totaalbedrag, de factuurdatum, de crediteur, etc. Die informatie wordt rechtstreeks opgenomen in de boekhouding. Hoewel de boekhouding zo gegarandeerd actueel en op orde blijft, komen hier opvallend weinig menselijke handelingen aan te pas. Is dit dan slecht nieuws voor boekhouders?

**Automatisering: wat blijft er over voor boekhouders?**
Boekhouding zit op de eerste rij bij veranderingen

De digitale revolutie is in volle gang en geen enkel bedrijf wil achterblijven. Het cliché dat ‘stilstaan’ gelijk is aan ‘achteruitgaan’, was nooit méér van toepassing dan op deze situatie. En het ACCA voorspelt dat CFO’s en financiële departementen hierin een voortrekkersrol zullen opnemen. Door de digitalisering zijn er meer en meer data beschikbaar, en die zullen CFO’s niet alleen aanwenden om hun traditionele jobinhoud te realiseren, maar ook om echte ‘business intelligence’ te creëren die de prestaties van werknemers bevordert, het marktaandeel verhoogt, de winst opdrijft, etcetera.

Ook al is het niet jouw concrete verantwoordelijkheid om veranderingen door te voeren, toch is het belangrijk om als boekhouder de juiste mentaliteit te hebben en te begrijpen hoe change management werkt. Als je informatie van verschillende bronnen kunt bundelen om het management en de investeerders te helpen om beslissingen te nemen, ben je gegarandeerd efficiënter, productiever en proactiever. Bovendien is het als werknemer cruciaal om het gevoel te hebben dat je kunt bijdragen aan veranderingen, in de plaats van erdoor gestuurd en overrompeld te worden.
APPROACH
**Project Approach & timing**

**Discovery**
- Approval POC

**POC**
- Wave 1 Approval
- Approval POC
- Wave 1 Approval
- Roll out 1 Approval

**Wave 1**
- Roll out
- 3 m
- 6 m
- 1 m

**Full potential**
- IT
- HR
- Sr Management

**Other**
- RPA Intro
- Partner selection
- Tool selection
- Select focus domain
- RPA Lab
- Select process
- Automate
- Tool confirmation
- Select 10 processes
- Automate
- Built up expertise
- Ramp down external consultants
- RPA on tour
- Multi departments
- List opportunities
- Set priority
- Execute
- Buy-in
- Setup infrastructure
- Align
- Built RPA team
- RPA Buy-in
- Attend POC closing meeting
- Attend status meeting
- Awareness efficiency increase
- Continuous support
- Lean - Just do it
Long tail of change

- Procedural Automation
  - Previously uneconomic processes
  - Short-term Regulatory Requirements
  - Rapid Response

- Operational Ownership
  - eg Off-shoring, eg people
<table>
<thead>
<tr>
<th>RPA</th>
<th>INTEGRATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIMPLE</td>
<td>COMPLEX</td>
</tr>
<tr>
<td>Worker's steps in</td>
<td>Requires rethinking on</td>
</tr>
<tr>
<td>executing a process</td>
<td>an architectural level.</td>
</tr>
<tr>
<td>are documented and</td>
<td></td>
</tr>
<tr>
<td>taught to the robot.</td>
<td></td>
</tr>
<tr>
<td>LIGHT</td>
<td>ROBUST</td>
</tr>
<tr>
<td>If the UI changes, the</td>
<td>Communication happens</td>
</tr>
<tr>
<td>robot likely needs to</td>
<td>on data layers.</td>
</tr>
<tr>
<td>be updated.</td>
<td></td>
</tr>
<tr>
<td>EASY TO LEARN</td>
<td>SPECIALIZED</td>
</tr>
<tr>
<td>The user building the</td>
<td>Requires a system</td>
</tr>
<tr>
<td>robot doesn't need to</td>
<td>integration engineer</td>
</tr>
<tr>
<td>have a programming</td>
<td>with a broad set of</td>
</tr>
<tr>
<td>background.</td>
<td>skills.</td>
</tr>
<tr>
<td>FAST</td>
<td>TIME CONSUMING</td>
</tr>
<tr>
<td>A simple RPA solution</td>
<td>Building the</td>
</tr>
<tr>
<td>can be implemented in</td>
<td>communication takes</td>
</tr>
<tr>
<td>days.</td>
<td>time.</td>
</tr>
<tr>
<td>CHEAP</td>
<td>EXPENSIVE</td>
</tr>
<tr>
<td>The solution is</td>
<td>The investment is</td>
</tr>
<tr>
<td>inexpensive since the</td>
<td>expensive up front due</td>
</tr>
<tr>
<td>building is fast and</td>
<td>to required time and</td>
</tr>
<tr>
<td>less complex.</td>
<td>specialised skills.</td>
</tr>
</tbody>
</table>
Making computers do intelligent things

- Decision based on learning
- Feed with many cases
- Learn the variables & desired outcome
- Train the system
- Result based on decision taking

Examples: Netflix, autonomous cars

Solving problems with humanlike thinking

- Try to simulate the human like thought process
- Natural language processing
- Sentiment analysis
- Built upon AI