Introduction to Robotic Process Automation (RPA)

Adv. Advisory | ACCTG 528

MPAcc Class of 2025

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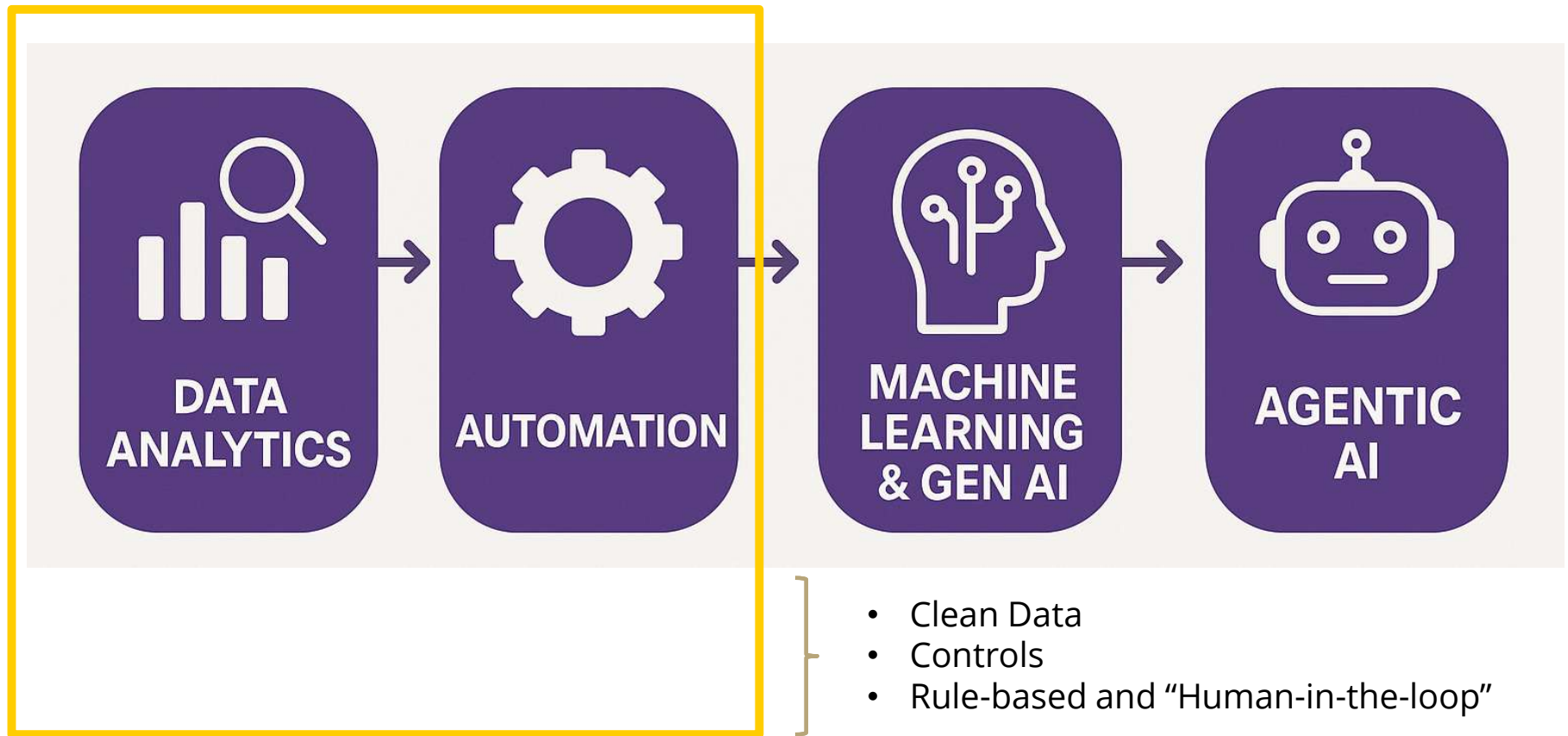
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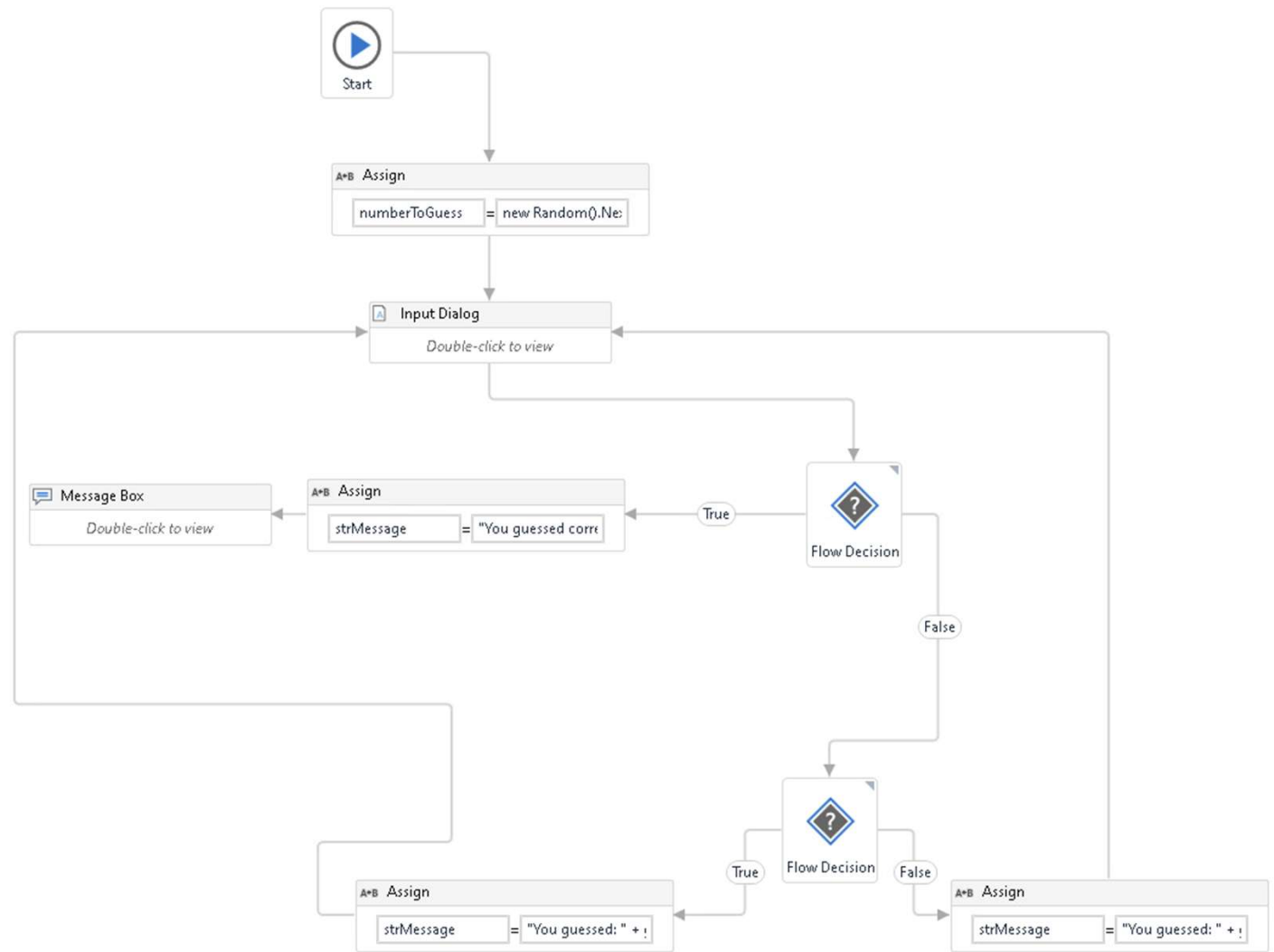
Agenda

- **Review**
- Pure Reformed Oils Cas: Overview
- Lab Part I: Introduction and Mapping the Process

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Course Overview

- Clean Data
- Controls
- Rule-based and "Human-in-the-loop"

Our First Bot

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Case Overview

Read Case Brief and the Table which lists the existing process to be automated (see end of document).

https://www.ashercurtis.me/teaching/courses/acctg528/RedemptionCase1.html

Step	Task Name	Currently performed by	Software and System(s) utilized	Notes
1	Monitor for New Order	Skylar	Etsy Seller Portal (online/browser)	Skylar collects new orders from Etsy dashboard, if an order is received, move to next step.
2	Extract Order Details for shipping	Skylar	Etsy Seller Portal: Order Page (online/browser)	Information retrieved includes item(s), address, timestamps and inventory amounts, shares inventory requested from order with Victoria. Downloads orders in csv and saves information to orders.xlsx.
3a	Generate Shipping Label and Send Confirmation Email	Skylar	excel: Orders.xlsx and email system: e.g., Gmail	Skylar emails customer to confirm order with expected shipping time.
3b	Update Inventory File	Vicotria and Skylar	Excel (or Google Sheets)	When Vicotria receives and email from Skylar, she updates the inventory_level.xlsx file by reducing the item quantity based on orders received.
4	Prints and ships physical product	Skylar	Etsy / USPS API	Skylar can use either Etsy's integrated label services or a service by the delivery company of his choice (e.g., USPS API). He manually inputs customer address information and prints. One he has shipped the item(s) he confirms with Victoria item has been shipped.
5	Mark Order as Shipped in systems	Victoria and Skylar	Etsy Dashboard and excel: shipping.xlsx	Skylar updates Etsy dashboard to record shipping of item, Victoria updates shipping.xlsx assigning "shipped" for each order and includes tracking number entry obtained from Skylar.

6	Initial Post to Accounting System	Victoria	QuickBooks (we will use Excel)	Victoria posts initial JEs to reflect A/R, Unearned Revenue, and Inventory/COGs JEs.
7	Receive Shipping Confirmation	Skylar and Victoria	Gmail	Skylar monitors email for tracking information confirming delivery to customer, Skylar forwards email to Victoria. Victoria updates shipping confirmations log ("shipped" items to "delivered").
8	Final Post to Accounting System	Victoria	QuickBooks (we will use Excel)	Victoria posts revenue recognition JEs. This completes the cycle, and the cycle starts again at item #1 (above) during the month and moves to item EOM (below) at the end of the month.
EOM	Reconciliations	Victoria and Skylar	QuickBooks (we will use Excel), all local Excel Files, Etsy Dashboards	At the end of each **month** Victoria and Skylar Reconcile all of the excel files in their system with both QuickBooks and the Etsy Dashboard. They also examine any returns, customer complaints/feedback, and missing order information at this point. They update their accounting system at this point to recognize any returns with reversing JEs and recognizing shipping expenses for returned items. This is when they also spend time discussing how to grow their business, and minimize returns, but they wish that they could do this in real-time, using a much more automated system.

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Mapping the process

Objective:

Using LucidChart, outline a proposed RPA solution to the workflow and make notes of the inefficiencies that are solved via automation.

Questions to discuss:

- What systems/software are interacted with? (map these first)
- Who interacts with the software? (ask: do they need to be mapped?)
- Where is their duplication, inefficiencies, or areas where human errors could occur?

Thank you