

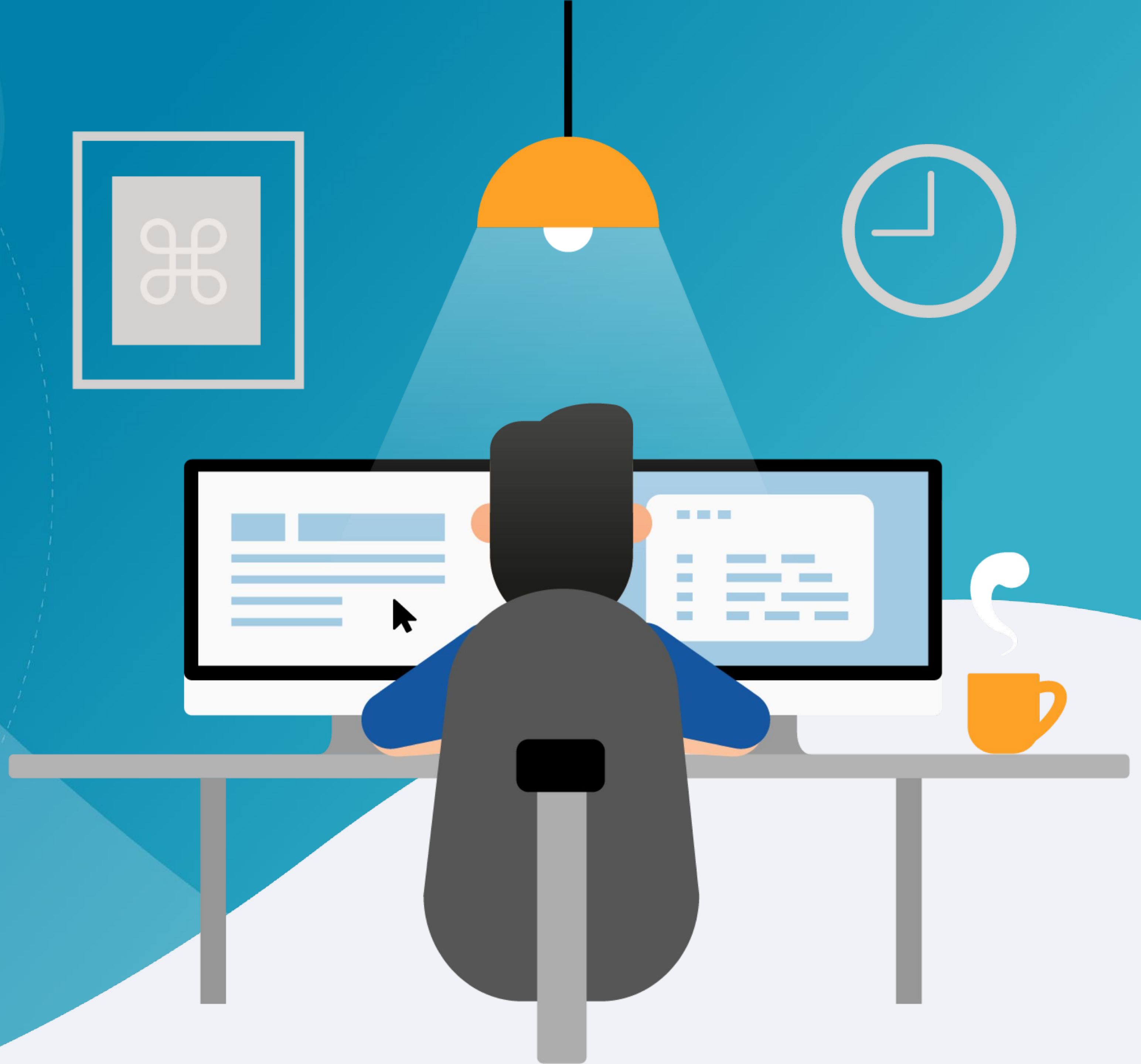
Building a BotBrain

Deploying Machine Learning and AI
in your Accounting Practice



Step 1

Engineers



Step 2

Find an Accountant



Step 3

Prepare A Computer



Warning!

Next Slide is not for

the Squeemish



Step 4

Put Accountant Brain in Computer



It's Alive!

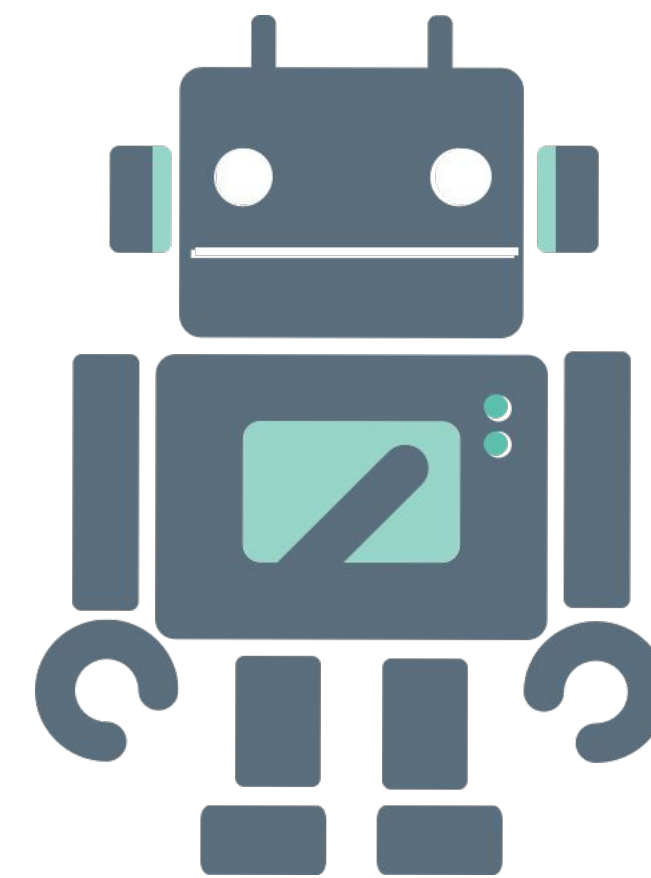


Let's Talk Bots

Two kinds of
bots

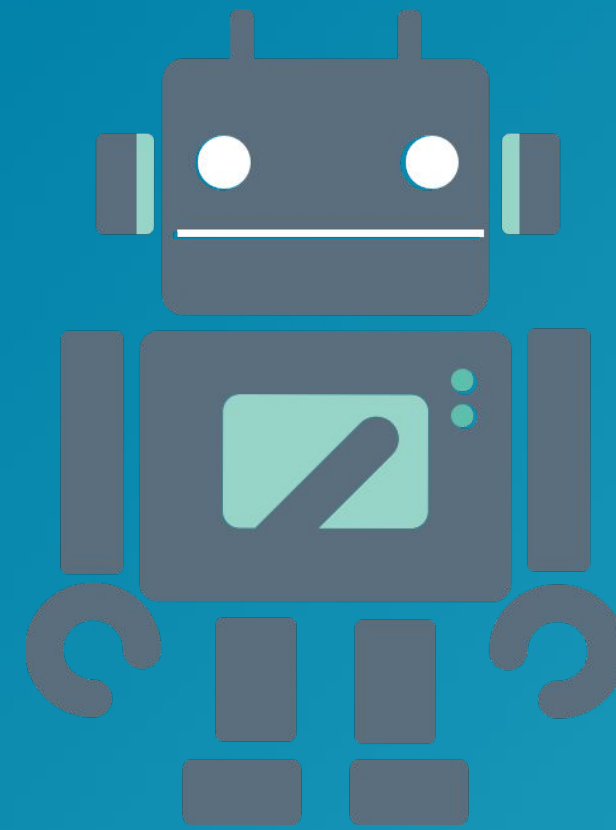


Software bots (code)



Mechanical Robots

Software Bots - Lightyears Ahead of Where You Think



Mechanical Robots

give software bots
a bad name

[see example
here](#)



Software
bots
far more capable
than people realize

[see example
here](#)

**Are you Afraid
of the Bots?**



Don't Be –
bots are here to help!

Take busy, mundane tasks off your plate

Provide you with scale

Make work more enjoyable

Provide free time for family and doing the things you love

Make you more profitable

Increase your accuracy

Provide your clients with more value

Save you money!



What is AI?

Components of AI

Applied



Wisdom

Context



Knowledge

Meaning

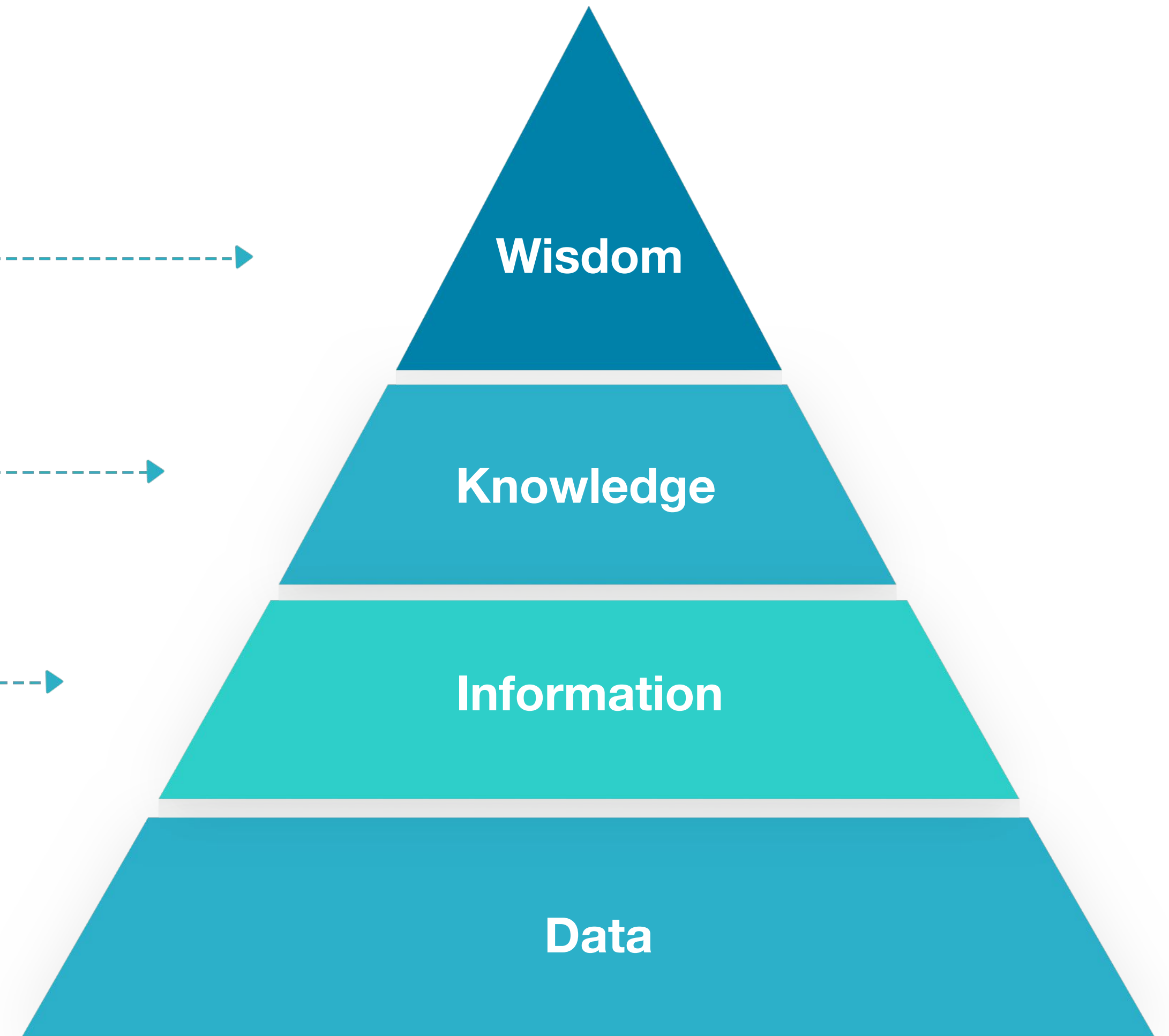


Information

Raw

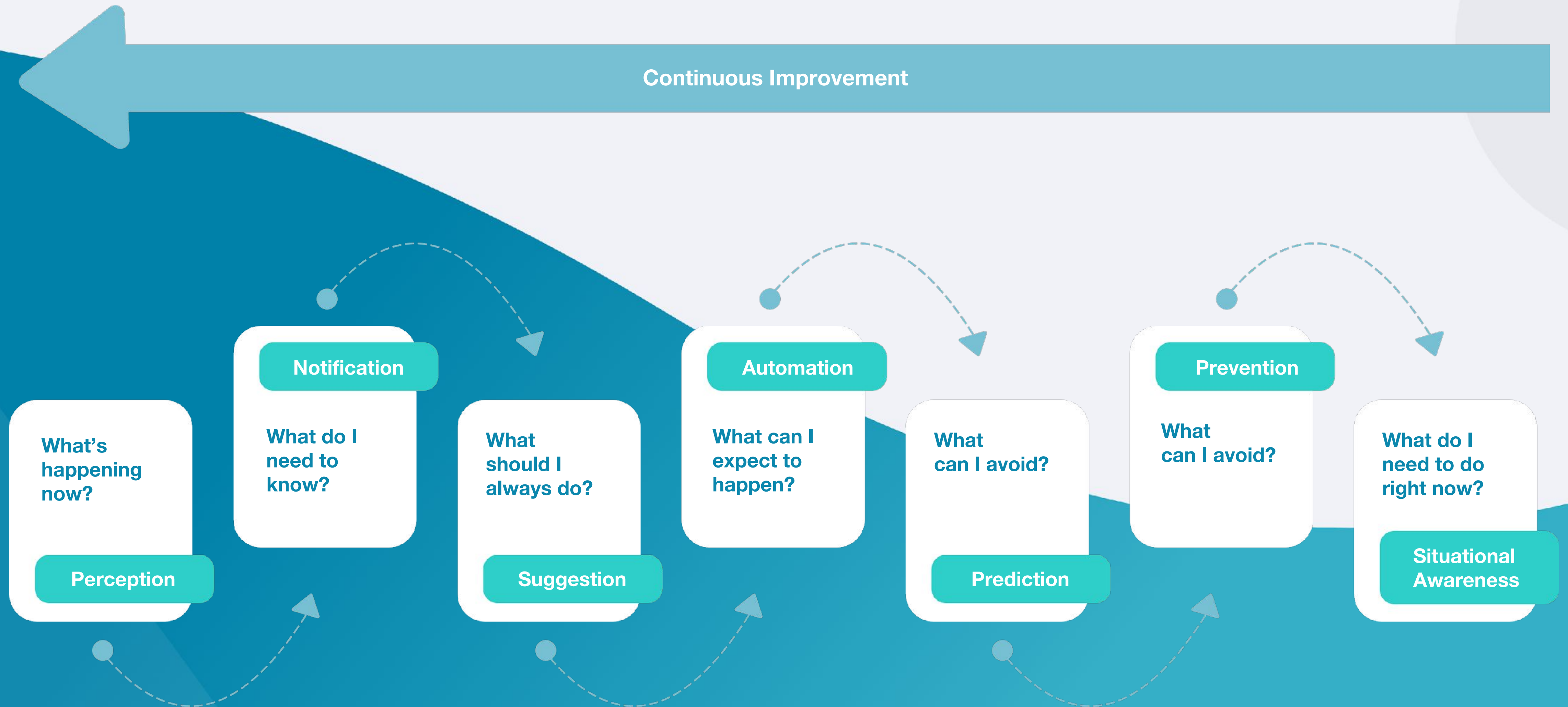


Data



Moving Along the AI Spectrum

Continuous Improvement



What AI is NOT

- **Intuit rules mapping is NOT AI – it is just 1:1 Vendor Mapping**
- **Zapier is NOT AI**
- **Blue Prism is NOT AI**

**“RPA – is applied rules not wisdom (must be programmed if this then that)
Does not automatically learn and apply”**

Now that we understand it, Let's Build It!

- What task should we automate?
- How about automating Categorization?

Data

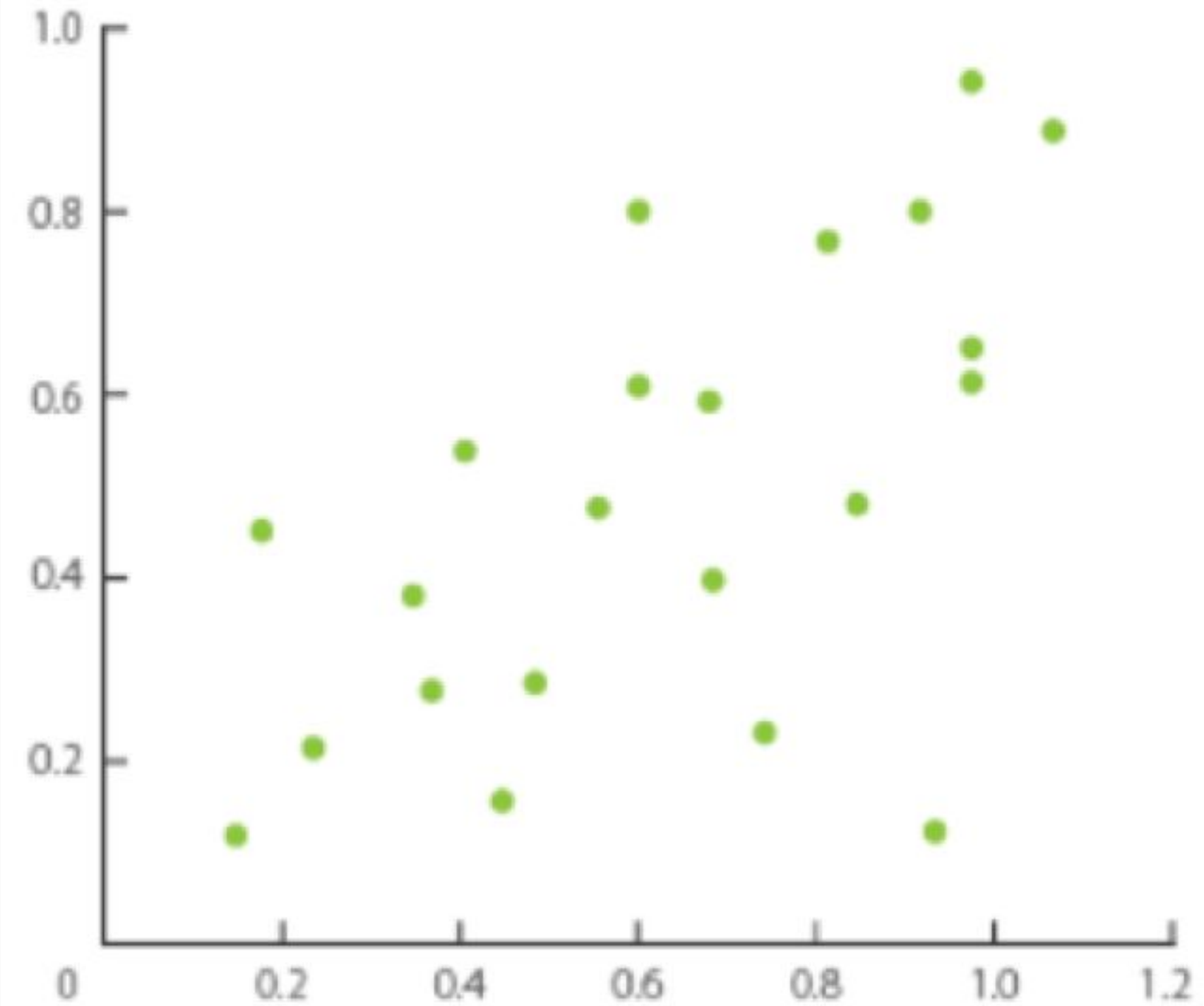
Custom Transaction Detail Report

Customize Report Share Template Memorize Print E-mail Excel Hide Header Refresh

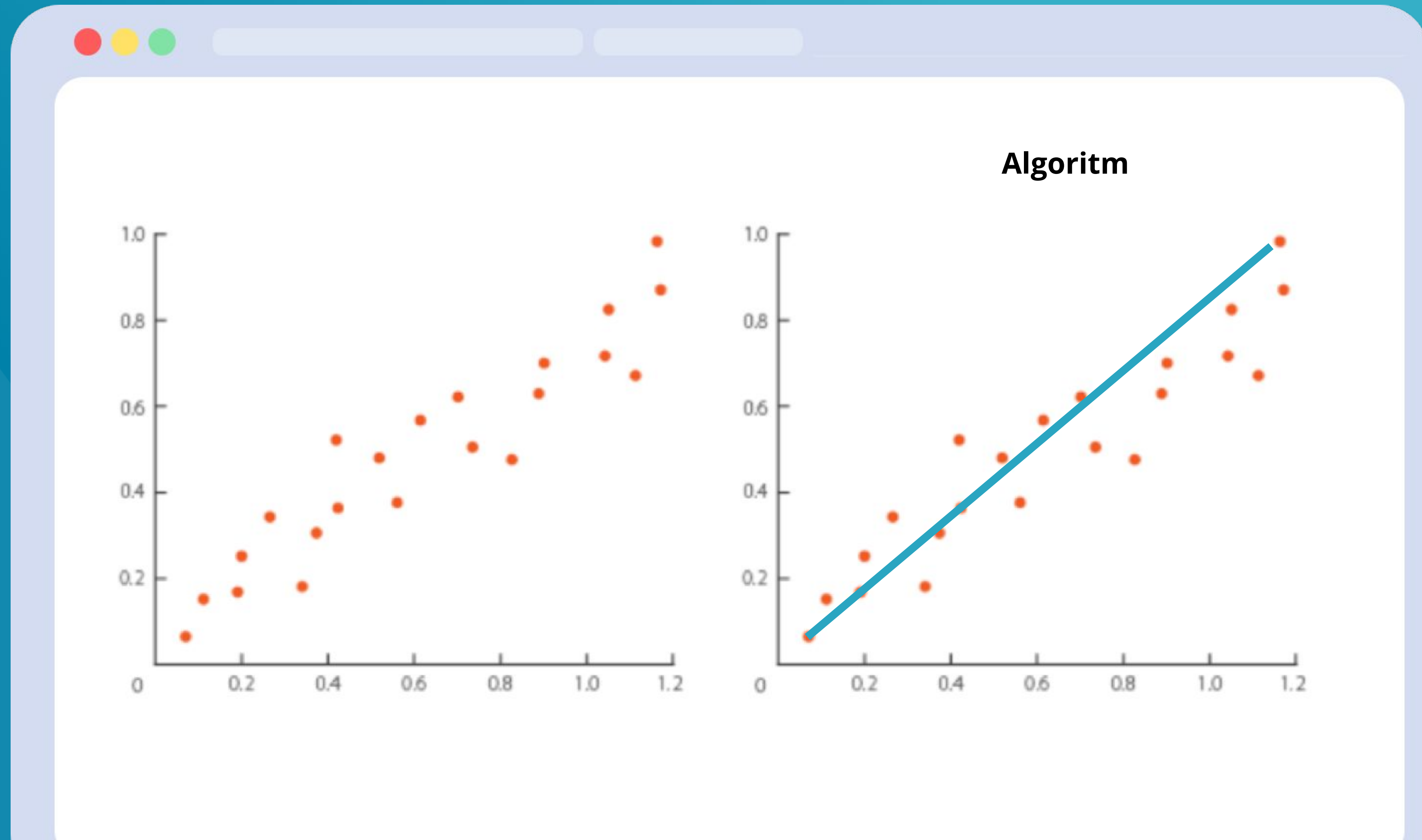
Dates Custom From 12/01/2017 To 12/17/2017 Total By Total only Sort By Default

9:29 AM
12/15/17
Accrual Basis
Rock Castle Construction
Custom Transaction Detail Report
December 1 - 17, 2017

Type	Date	Num	Name	Memo	Account	Split	Debit	Credit	Balance
Dec 1 - 17, 17									
Deposit	12/02/2017			Deposit	10100 - Checking	-SPLIT-	4,706.01		4,706.01
Payment	12/03/2017		Teschner, Anton S...		10100 - Checking	11000 - Accounts Receivable	1,200.00		5,906.01
Payment	12/05/2017	56321	Teschner, Anton S...		10100 - Checking	11000 - Accounts Receivable	5,000.00		10,906.01
Deposit	12/10/2017			Deposit	10100 - Checking	12000 - Undeposited Funds	1,000.00		11,906.01
Deposit	12/12/2017			Deposit	10100 - Checking	-SPLIT-	4,936.12		16,842.13
Deposit	12/14/2017			Deposit	10100 - Checking	-SPLIT-	4,700.00		21,542.13
Payment	12/15/2017		Abercrombie, Kria...		10100 - Checking	11000 - Accounts Receivable	7,633.28		28,175.41
Payment	12/15/2017	42000	Natiello, Ernesto K...		10100 - Checking	11000 - Accounts Receivable	13,560.39		42,735.80
Deposit	12/15/2017			Deposit	10100 - Checking	40110 - Design Income	2,320.00		45,055.80
Deposit	12/16/2017			Deposit	10100 - Checking	12000 - Undeposited Funds	2,000.00		47,055.80
Dec 1 - 17, 17							47,055.80	0.00	47,055.80

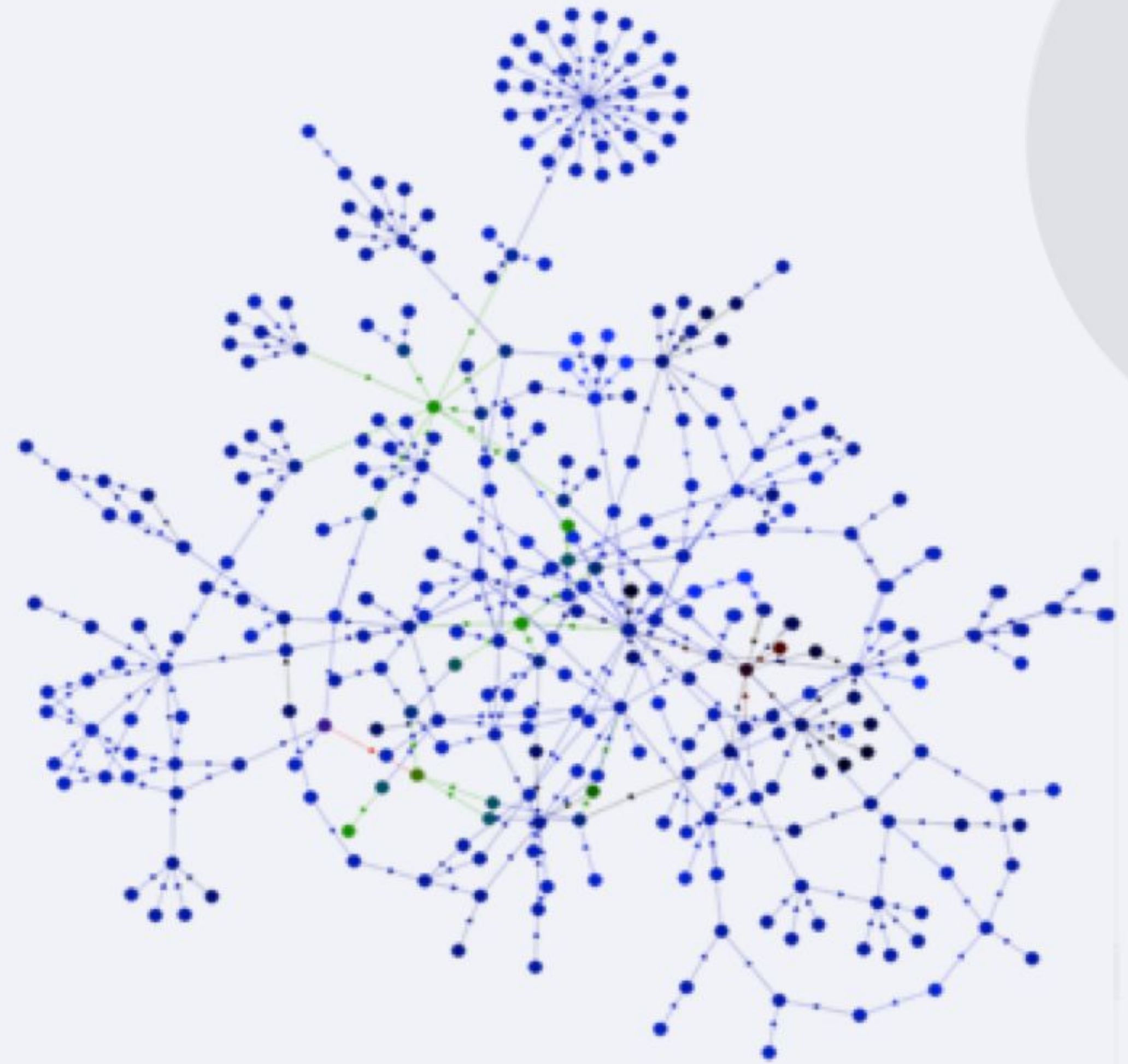


Normalize and Identify Correlation

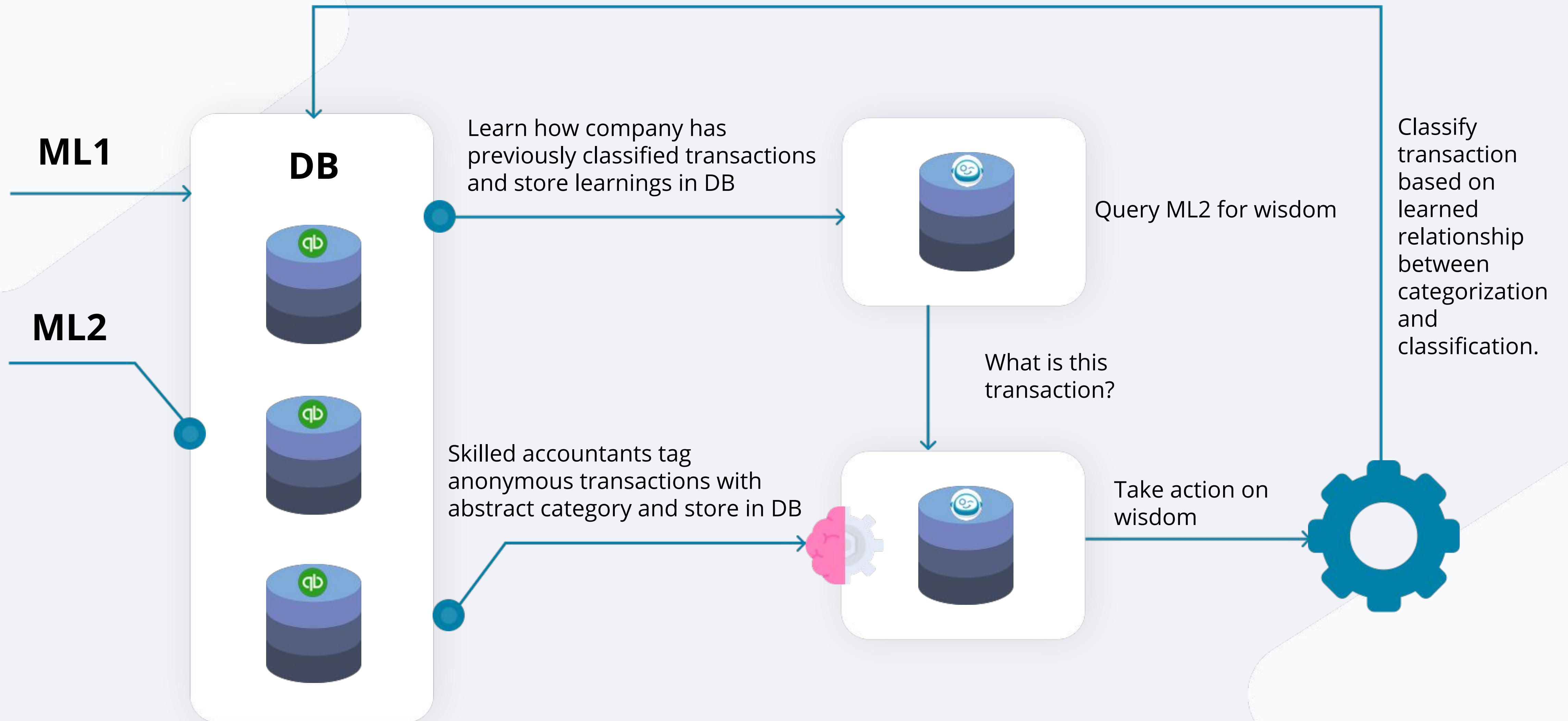


Train and ReTrain

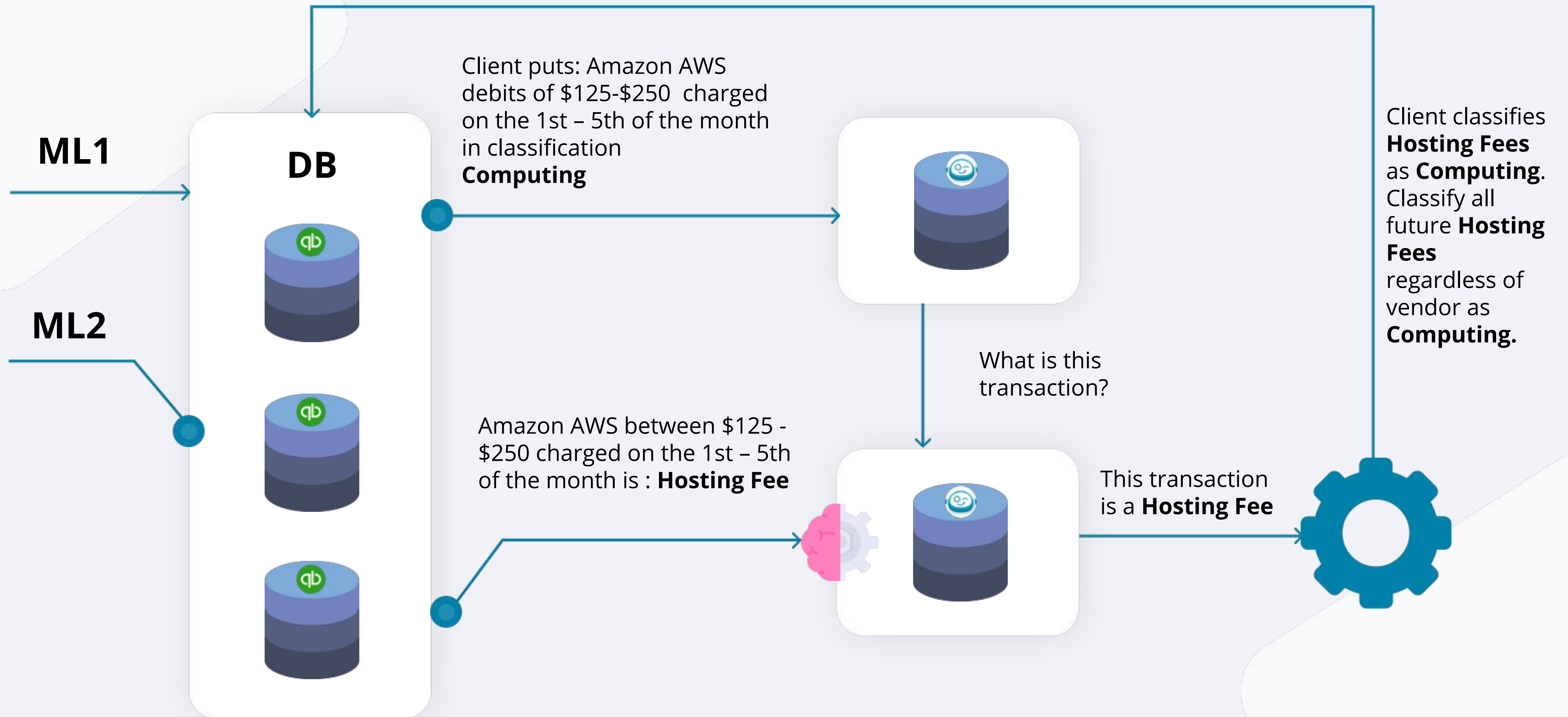
Teach algorithm to recognize similar patterns in different data sets



What does it look like for Categorizations



What does it look like for Categorizations



What is ML & AI Good For?

- Consolidating data from many systems into one system
- Entering data digitally from analog images
- Performing actions based on if this then that
- Continuous incremental improvement FOREVER
- Seeing patterns in large data sets
- Scale – speed, accuracy, reliability



How do you build your own AI?

- Hire a team of engineers, ML & AI specialists, and data analysts
- Spend years and \$Millions building your own ML & AI
- Use the ML & AI to save your firm money
- Why typically only huge firms build their own ML & AI



Alternative to building your own ML & AI

- License ML & AI from another company
- Use ML & AI nearly right away on your clients
- Save money compared to hiring a bookkeeper or team
- Train ML & AI on the specific nuances of your business and clients
- Automate bookkeeping tasks freeing up time for advisory, biz dev, and fun
- Benefit from speed, accuracy and reliability of software



License, Train, and Increase Value

Implementing AI into your practice:

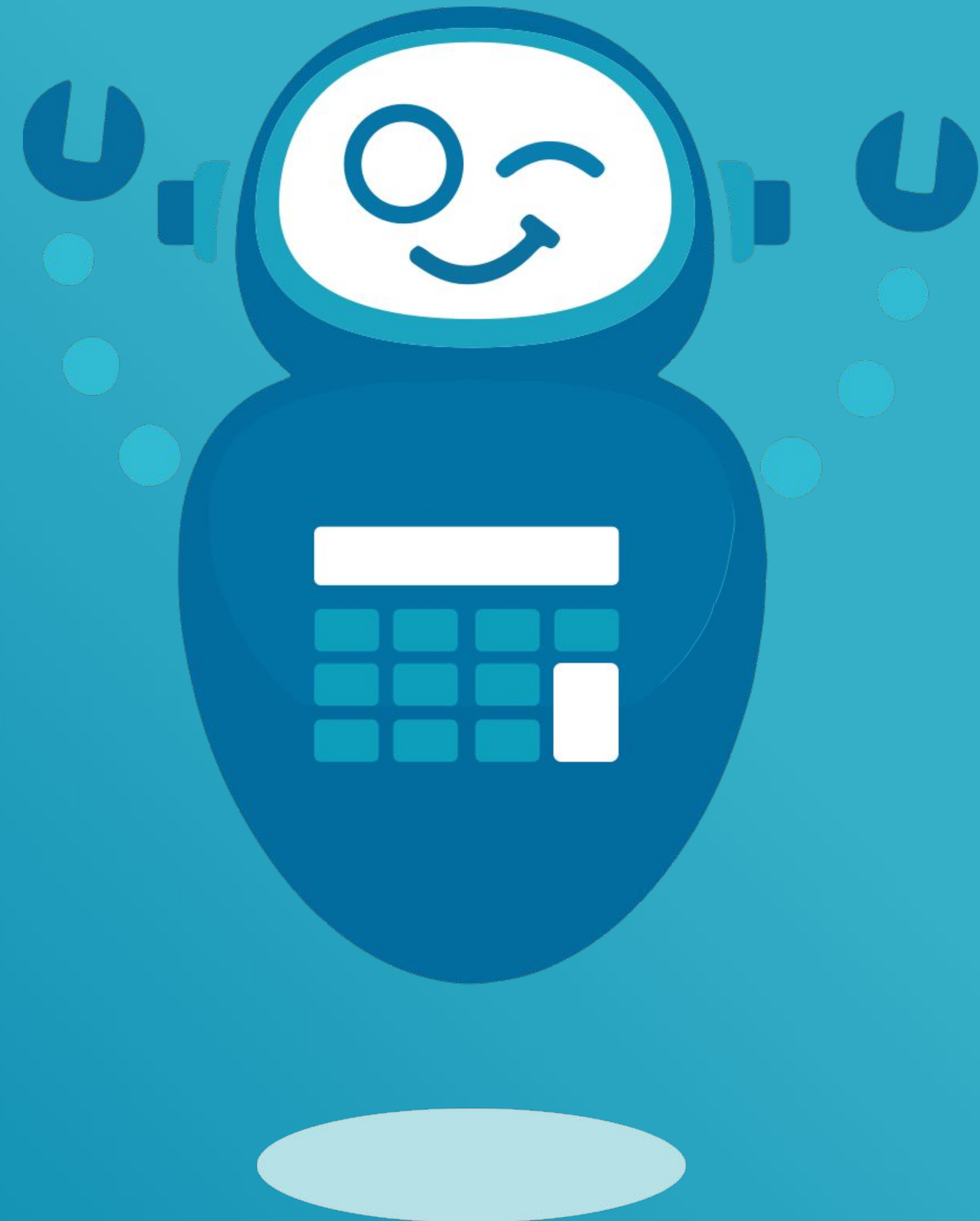
- Increases your margins
- Increases quantity of clients the same number of people can support
- Improves client happiness with faster and more accurate data entry
- Increases revenue by freeing up more time to sell and offer advisory services
- Increases happiness – vacation or work less while same or more work is getting done
- Provides ability to quasi retire while maintaining revenue stream
- INCREASES VALUATION OF YOUR PRACTICE FOR FUTURE POTENTIAL SALE

License, Train, and Increase Value

- **What task should we automate?**
- **How about automating Categorization?**

The bots are not coming...they are Here!

- Embrace them and benefit from them
- Don't avoid them or ignore them



What to expect from the bots?

- They are not perfect
- Take time to train – but train faster and remember longer than humans
- Still early but getting better rapidly
- Work with the bots not against them...patience



Questions?