A DYNAMICSCON PRESENTATION

DYNAMICSCON.COM

Power Apps in the Real World

Christopher Cognetta

Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

Speaker Intro

10x Microsoft Dynamics 365 MVP/MCT
ccognetta@congruentx.com

- Business Solutions MVP
- Dynamics 365, CRM/CE , Power Platform Architect
- Azure, Infrastructure Enterprise Architect
- Technology Evangelist & CRMUG Medic Founder
- SummitNA Programming Board, D365UG All-Star & Granite Awards, USF Cybersecurity Board
- Over 250 Dynamics 365 Deploy/Upgrades Since Ver 1.0

Chris Cognetta
CTIO & Founder of congruentX
ccognetta@congruentx.com
www.congruentX.com
www.getcrmright.com

Blog: www.CognettaCloud.net | Twitter: @ccognetta

Microsoft

congruentX
PEOPLE | TECHNOLOGY | ALIGNED

CYBERSECURITY
FOR EXECUTIVES CERTIFICATE PROGRAM
USF MUMA COLLEGE OF BUSINESS UNIVERSITY OF SOUTH FLORIDA

POWERED BY DUG
DYNAMICSCON VIRTUAL

Today's Agenda

Quick Poll
High level Overview of PowerApps
Demo & Discussion of Real World Uses for PowerApps
Open Q&A

Microsoft
INNOVIA CONSULTING
POWERED BY DUG
DYNAMICSCON VIRTUAL

Quick Poll

What level of experience do you have with PowerApps?

- First Heard of It?
- Novice/Basic
- Intermediate
- Advanced

Power Platform & Power Apps Overview

POWERAPPS PLATFORM WAS DESIGNED TO EMPOWER CITIZEN DEVELOPERS TO QUICKLY INTERACT WITH THEIR DATA SOLVING BUSINESS CHALLENGES THEIR CURRENT SYSTEMS WERE NOT DESIGNED TO HANDLE

A CITIZEN DEVELOPER COULD BE THAT PERSON THAT KNOWS EXCEL REALLY WELL, OR THE POWERPOINT WIZ. THE POINT IS THAT FAMILIARITY WITH OFFICE TOOLS AND YOU CAN START BUILDING POWERAPPS!

POWERAPPS ARE ALSO BEING COINED AS “NO CLIFF” DEVELOPMENT TOOLS. MEANING ONCE YOU REACH YOUR TECHNICAL LIMITS ANOTHER CAN STEP IN AND CONTINUE TO ADD/EXTEND YOUR SOLUTION.

Microsoft

INNOVIA CONSULTING

POWERED BY DUG
DYNAMICSCON VIRTUAL

PowerApps Overview

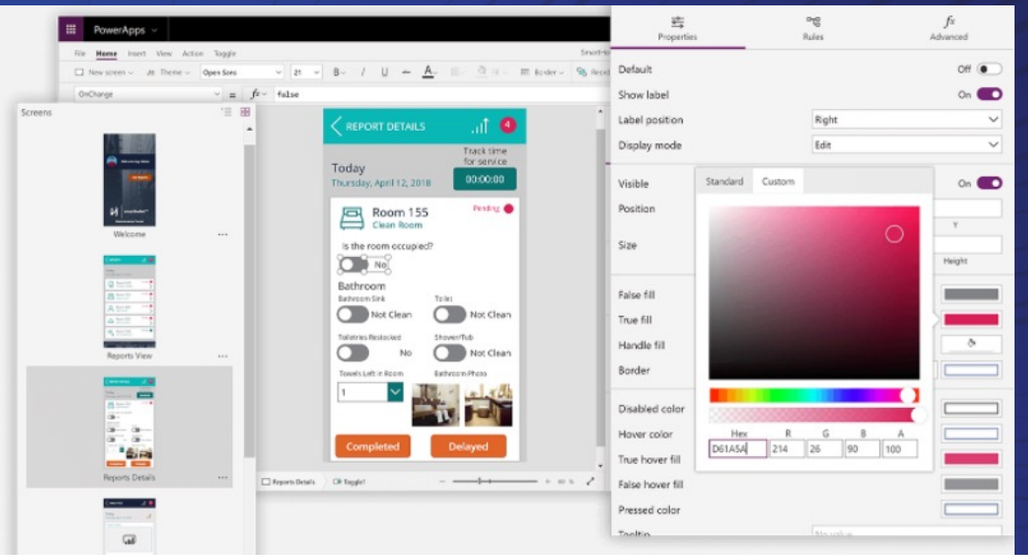
- *Microsoft PowerApps is delivered as a PaaS Service or Platform as Service on top of the Azure platform*
- *Microsoft has started referring to Power BI, Power Apps and Microsoft Flow as the "Power Platform" suite of tools for Dynamics 365*
- **A lot of new announcements were made are coming 2023 Release Wave full of updates to PowerApps and The Power Suite –**

Power Apps Models: Canvas Vs Model

Build highly tailored applications

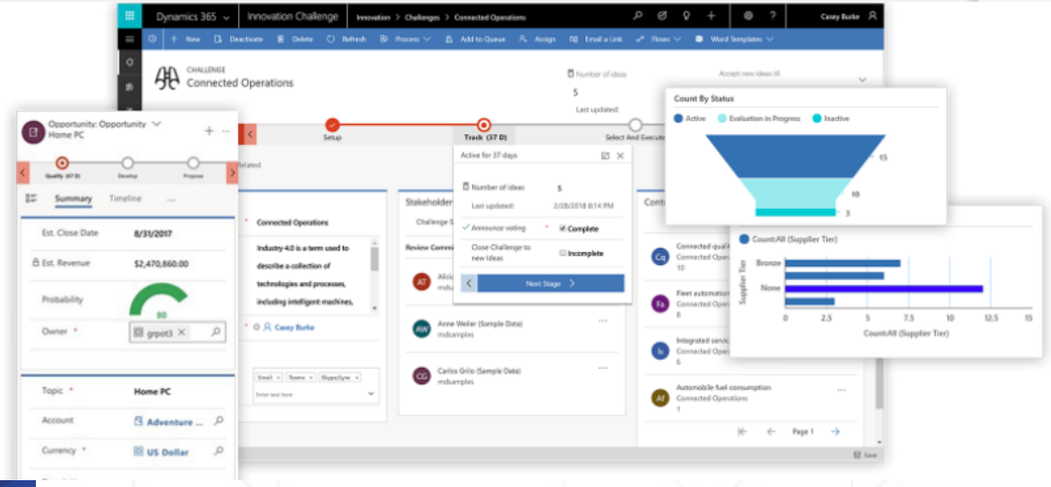
Start by designing your user experience on the Power Apps canvas. Customize every detail of your app to optimize for specific tasks and roles. Create apps for any device that uses a wide variety of controls including cameras and location, or start from a sample app showcasing common business scenarios, like expense reporting or site inspections.

LEARN MORE ABOUT CANVAS APPS >



Custom Look & Feel

D365 Look & Feel



Create sophisticated apps from your data

Begin with your data model and business processes to automatically generate immersive, responsive applications that can run on any device. Use a simple drag-and-drop designer to customize business entities and tailor the user experience to specific roles.

LEARN MORE ABOUT MODEL-DRIVEN APPS >

Microsoft

INNOVIA CONSULTING

DYNAMICSCON VIRTUAL

How I get started with PowerApps?

PowerApps is embedded with your Office365 or Dynamics 365 Subscription. Depending on your license type for D365, Power Apps may be included. Trial is free right now!

You can either build PowerApps directly for the web browser or you can download the studio to your desktop

Apps that you build are automatically available to your organization and your admin can control the settings of who can use and distribute apps to the organization.

Everyone (within your organization) can create simple power apps in minutes.

Microsoft

INNOVIA CONSULTING

DYNAMICSCON VIRTUAL

Time Tracker

Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

PowerApps #1: Tracking Time - Challenge

- Company has a remote workforce checking into from clients around the globe
- Currently use a paper process to submit hours, but no way to prove the employee was onsite causing fraud concerns for clients and the company
- Outdated phone-based time management systems barely work, without the ability to customize, also requiring data imports into the Dynamics 365 system
- Consultants out in the field need to record time to their projects as they work remotely versus waiting till end of the week

PowerApps #1: Time Tracker - Solution

01

Develop a Power App that could run on anyone's device to record the time

02

Enable the device settings to capture location with GPS, time with simple buttons for tasks associated onsite

03

Use Client On-Site Survey to Geo-fence in the location per client within the CRM database. When locations don't match the record workflow is triggered to alert account managers

04

Connect to Dynamics PSA to allow to track for consultant time management

Microsoft

INNOVIA CONSULTING

POWERED BY DUG DYNAMICSCON VIRTUAL

Time Tracker Demo

Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

Solution Component Explorer

Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

PowerApps #2: Components - Challenge

- Customer build various solutions for other clients all over the world. They have so many projects going on, they can hardly keep track of all the new solutions being developed
- On site requirement gathering leaves the engineers wondering which components we have already built for customers
- Not having this data in a readily available format, doesn't make it useful resulting in waste, and rebuilding components that already exist in our library

PowerApps #2: Explorer/Finder Solution

1

Develop a Power App that customer software engineers could use to search their solution library

2

Provide a location for people to enter data about the solutions created to harvest the knowledge for other projects as well as make it easy to update

3

Provide a remote solution our field engineers could use to access the library for concepts and ideas when onsite with clients

Solution Explorer Demo

Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

Win the Yard
US Lumber

Microsoft

INNOVIA CONSULTING

POWERED BY DUG
DYNAMICSCON VIRTUAL

PowerApps #3: Win the Yard - Challenge

- Need a way to prepare for visits to remote lumber yards. A laptop was not a friendly option
- Data existed in many different systems with no way fast way to see it all. Result was calling into operations center for real-time data updates.
- With impacts to the supply chain from Covid customers had many questions about orders, when they would arrive, status. Leaving the Sales Agent on the hook…
- US lumber wanted to change their customer experience.

Microsoft

INNOVIA CONSULTING

congruentX
PEOPLE | TECHNOLOGY | ALIGNED

PowerApps #3: Win the Yard

1

Develop a Power App that allowed the team to solve common problems for clients

2

Provide a location for customers, along with travel instructions, routes and use the time on sight for timecard management.

3

Provide a remote solution that could pull together many different data points. “Edge” solution via the Power App – tech did not matter

Microsoft

INNOVIA CONSULTING

POWERED BY DUG DYNAMICSCON VIRTUAL

Win the Yard App

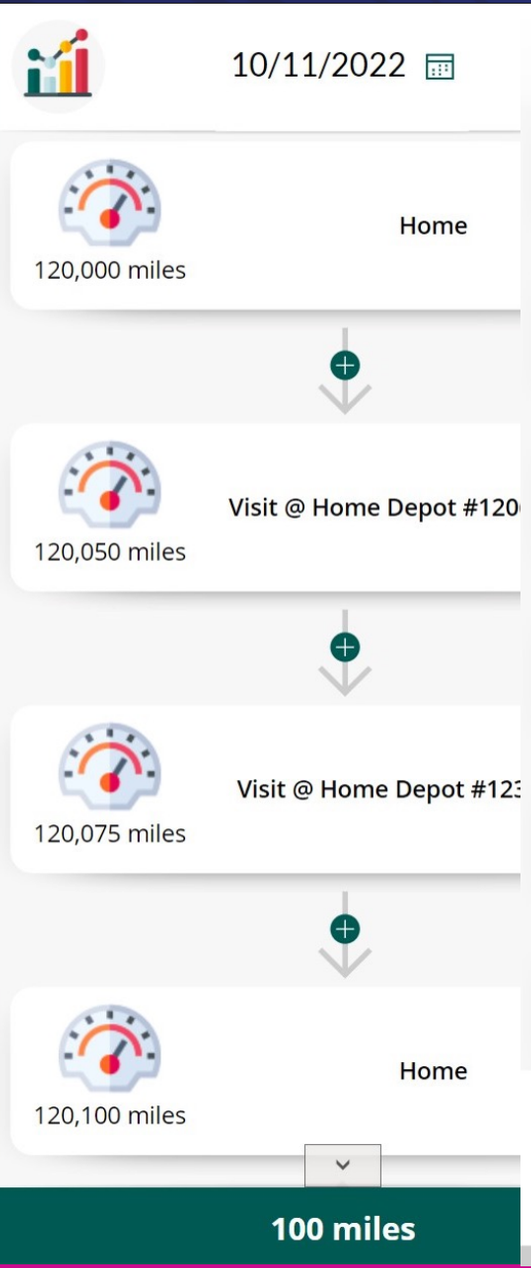
Microsoft

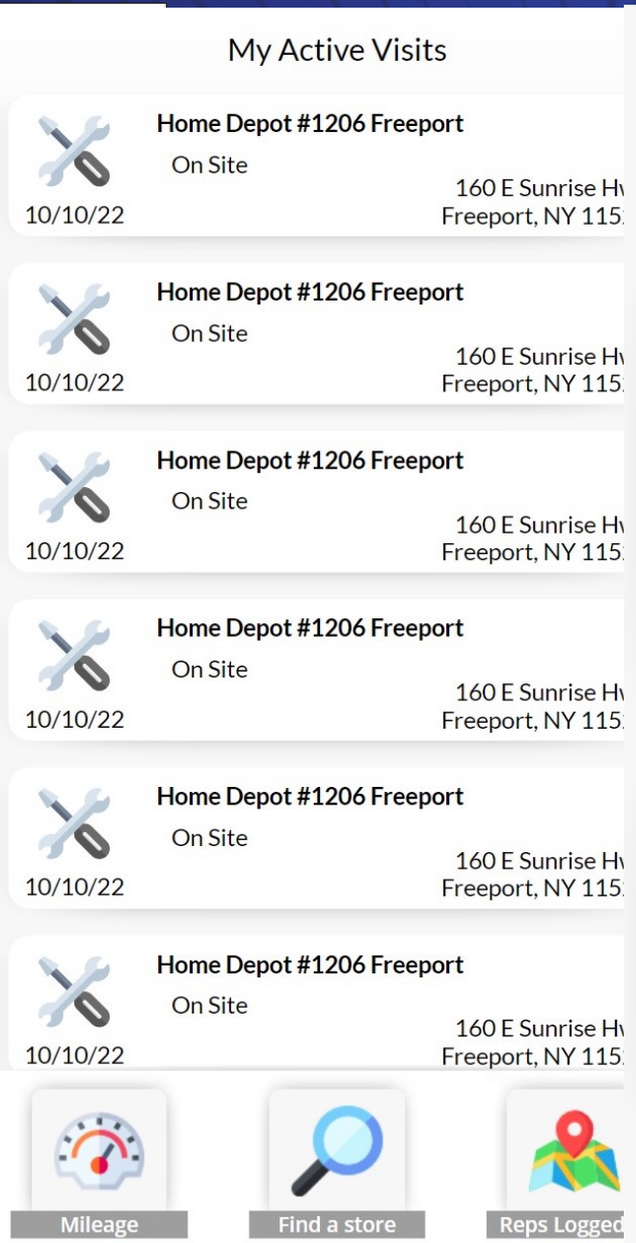
INNOVIA CONSULTING

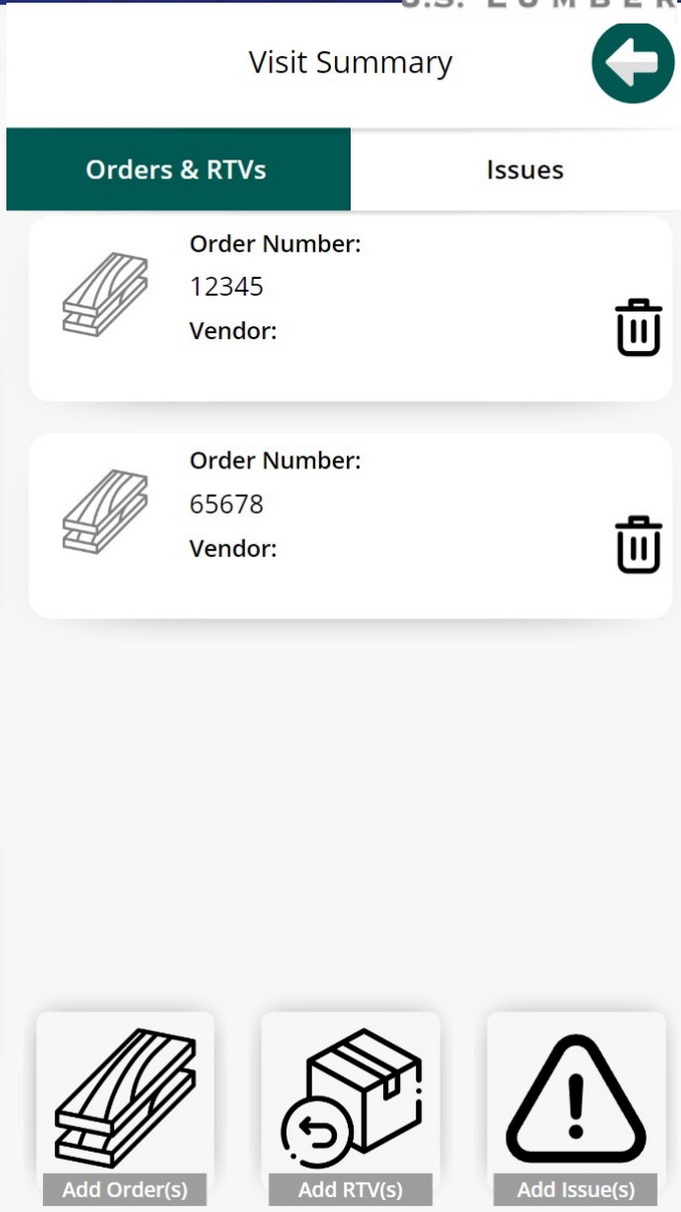
POWERED BY DUG

DYNAMICSCON VIRTUAL

US Lumber – Win the Yard, Copyright & Property of US Lumber







Class/Lab CheckIn

Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

PowerApps #4: Location Check In

- Home Room Teacher was not getting enough time to complete the lesson of the day due to the time it was taking to record attendance.
- My son wanted to think of way to use technology to solve this problem for schools.
- We also had a problem with college, where students were attending labs but didn't sign the sheet on the wall.

PowerApps #4: Location Check in

Develop a Power App that is trigger by event

Flow is running an application on the user's phone – this could be imbedded into a school app

Recognize the location automatically

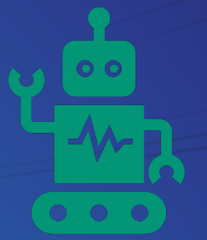
Provide a remote solution our field engineers could use to access the library for concepts and ideas when onsite with clients

Check In - Demo

Power Apps AI

BIG DATA is being collected everywhere. Unfortunately, we do all don't have the data scientists on our teams that are able to build AI models in order to take advantage of this data

Microsoft has provided several Azure based AI tools like Azure ML, Azure AI for Analytics and Predictive Analysis. These models are complex, usually not user friendly to maintain and deploy, and we don't have the knowledge of how the models work



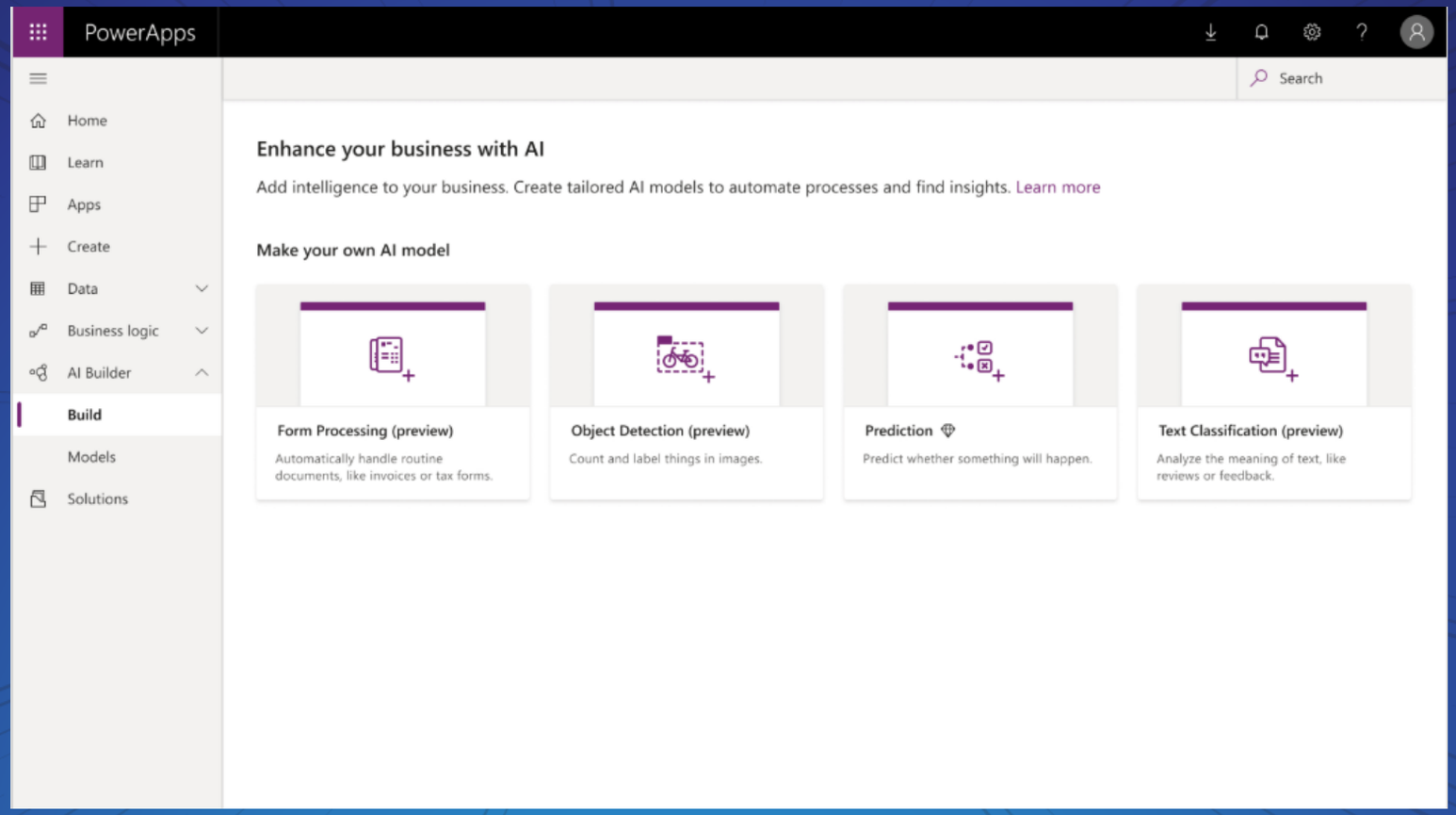
PowerApps AI takes several different models along with automated ways to train these models by end users. TODAY.

Microsoft

INNOVIA CONSULTING

POWERED BY DUG DYNAMICSCON VIRTUAL

Power Apps AI Models



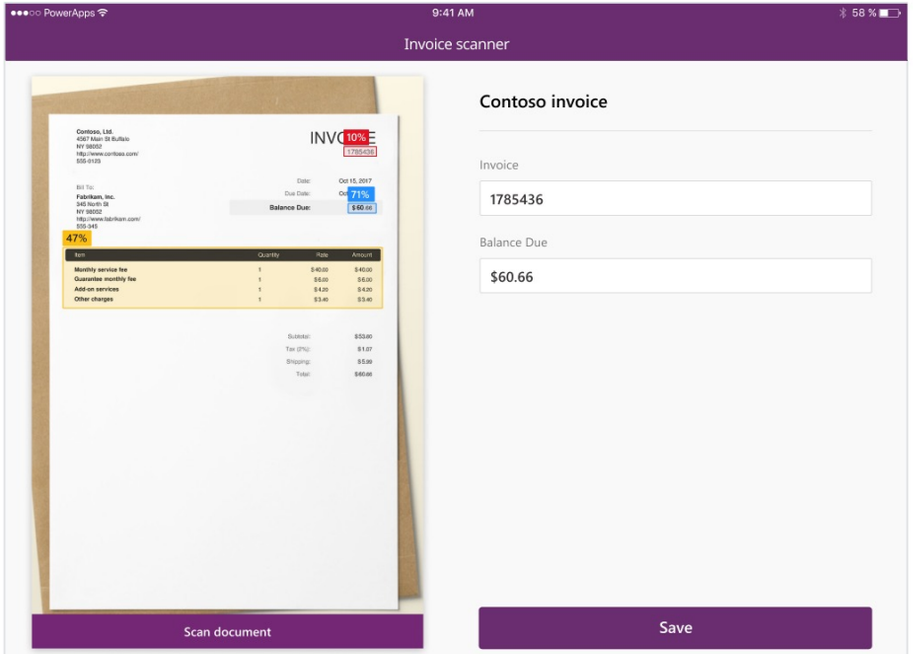
Microsoft

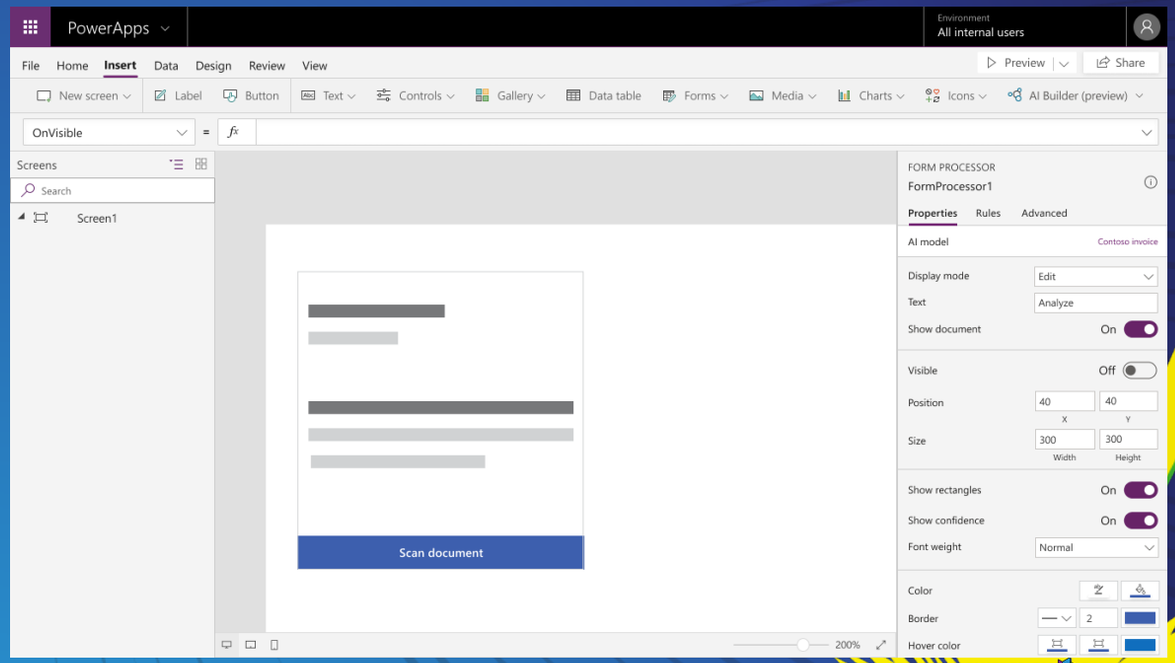
INNOVIA CONSULTING

POWERED BY DUG DYNAMICSCON VIRTUAL

PowerApps AI Model: Form Processing

- *Form processing allows you to create and use models that use machine learning technology to identify and extract key-value pairs and table data from form documents*
- *Next generation OCR add data into your applications with an interface to correct it!*



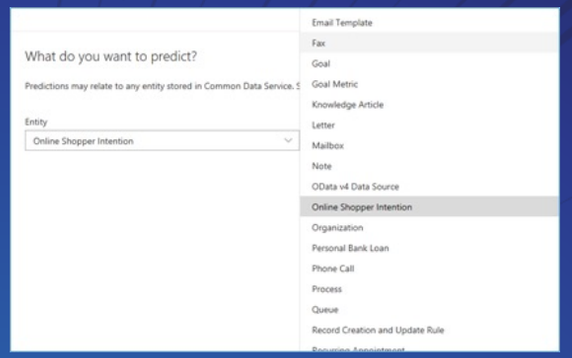


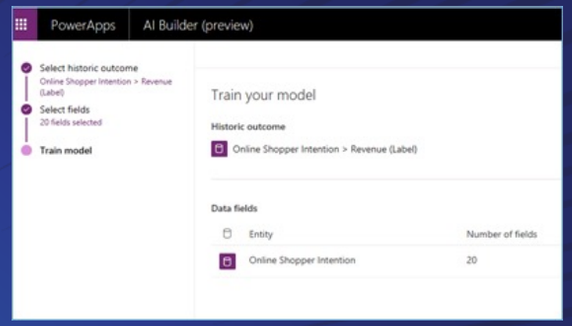
Microsoft

INNOVIA CONSULTING

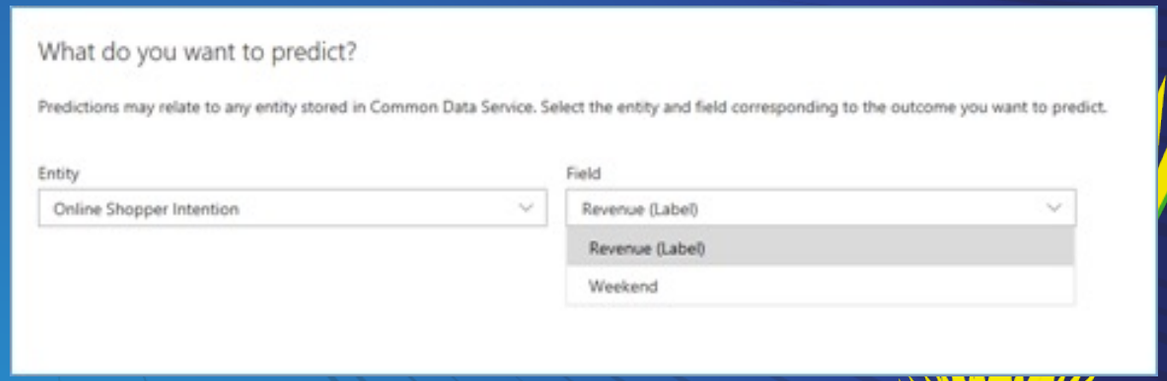
POWERED BY DUG
DYNAMICSCON VIRTUAL

PowerApps AI Model: Prediction





- Allows you to look at Text or a Field like a payment date in your system and predict for example if a customer would make a late payment.



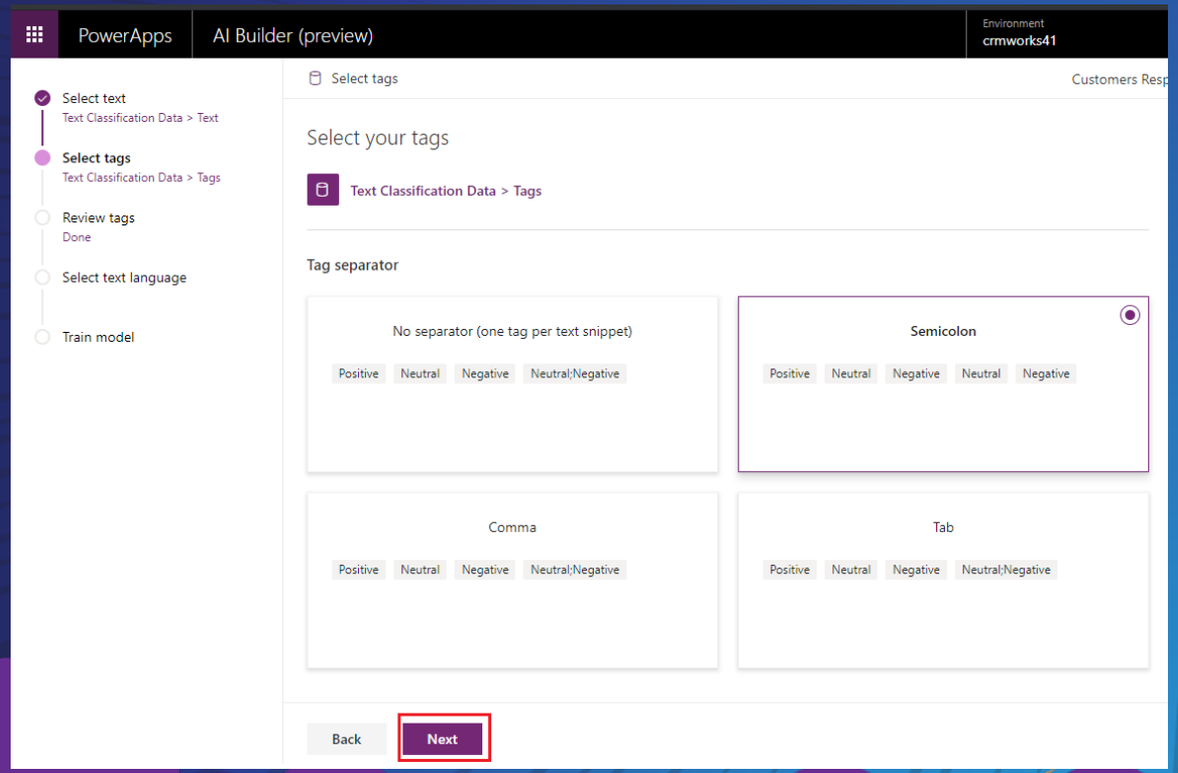
Microsoft

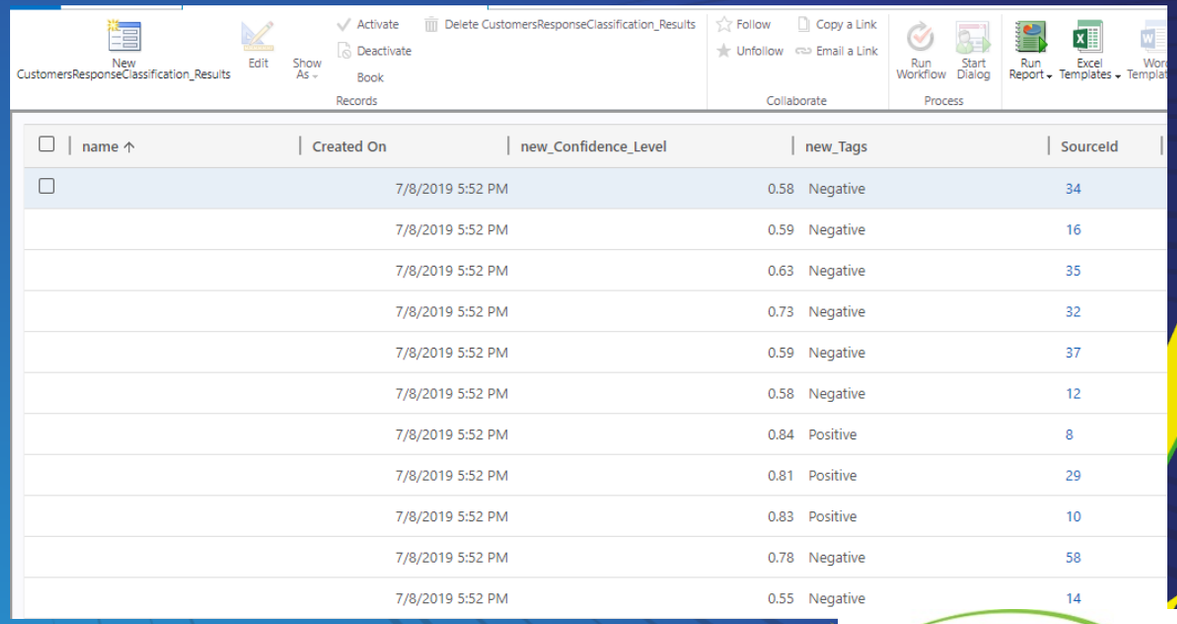
INNOVIA CONSULTING

POWERED BY DUG DYNAMICSCON VIRTUAL

PowerApps AI Model: Text Classification

- Text classification is one of the fundamental natural language processing (NLP) problems. It allows tagging of text entries with tags or labels that can be used for sentiment analysis, spam detection, and routing customer requests, just to name a few examples.





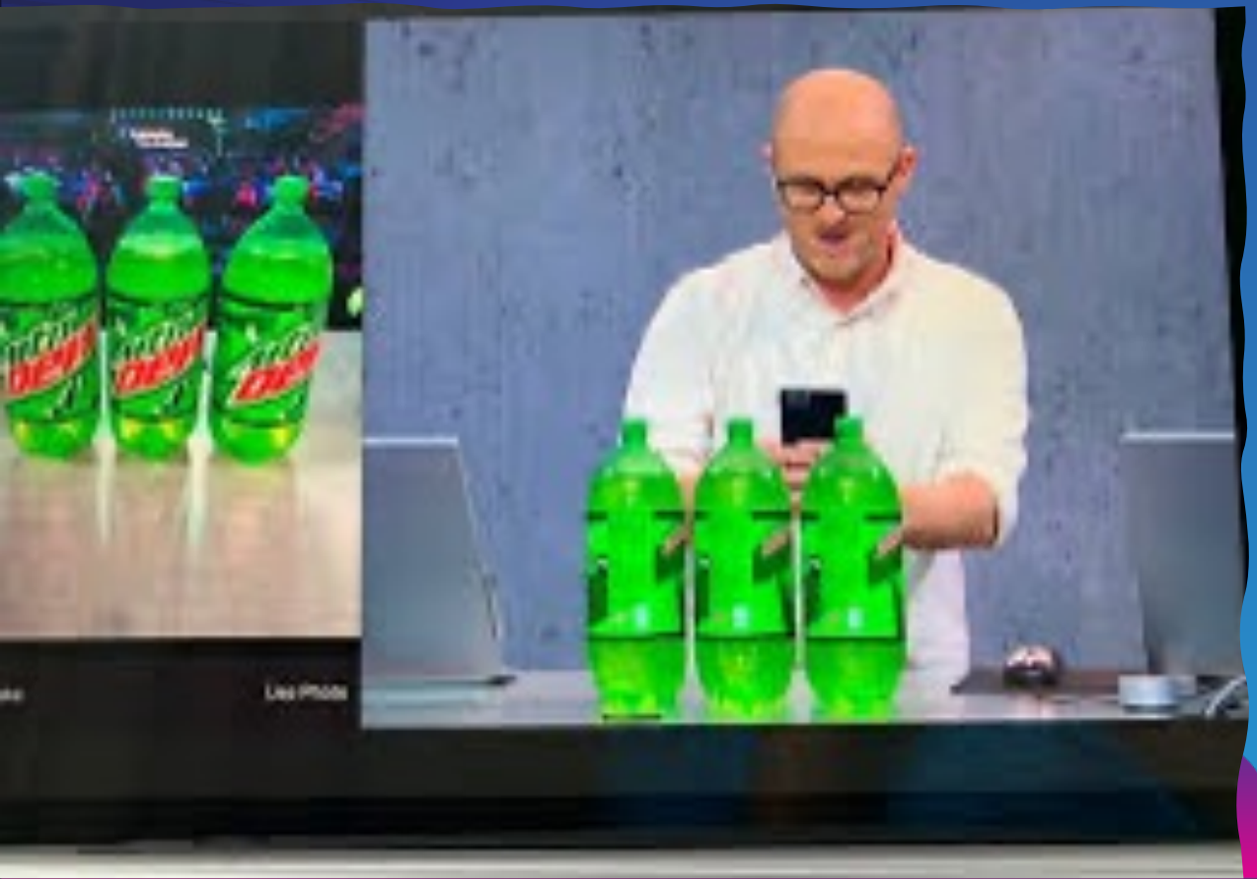
name	Created On	new_Confidence_Level	new_Tags	SourceId
	7/8/2019 5:52 PM	0.58	Negative	34
	7/8/2019 5:52 PM	0.59	Negative	16
	7/8/2019 5:52 PM	0.63	Negative	35
	7/8/2019 5:52 PM	0.73	Negative	32
	7/8/2019 5:52 PM	0.59	Negative	37
	7/8/2019 5:52 PM	0.58	Negative	12
	7/8/2019 5:52 PM	0.84	Positive	8
	7/8/2019 5:52 PM	0.81	Positive	29
	7/8/2019 5:52 PM	0.83	Positive	10
	7/8/2019 5:52 PM	0.78	Negative	58
	7/8/2019 5:52 PM	0.55	Negative	14

Microsoft

INNOVIA CONSULTING

congruentX
PEOPLE | TECHNOLOGY | ALIGNED

PowerApps AI Model: Object Detection



- Clearly one of my favorites, but the ability to look at photograph and detect or recognize objects within the picture, with the ability to take an action once you detect it.

POWERED BY DUG
DYNAMICSCON VIRTUAL

So What could I use object detection for?

Microsoft

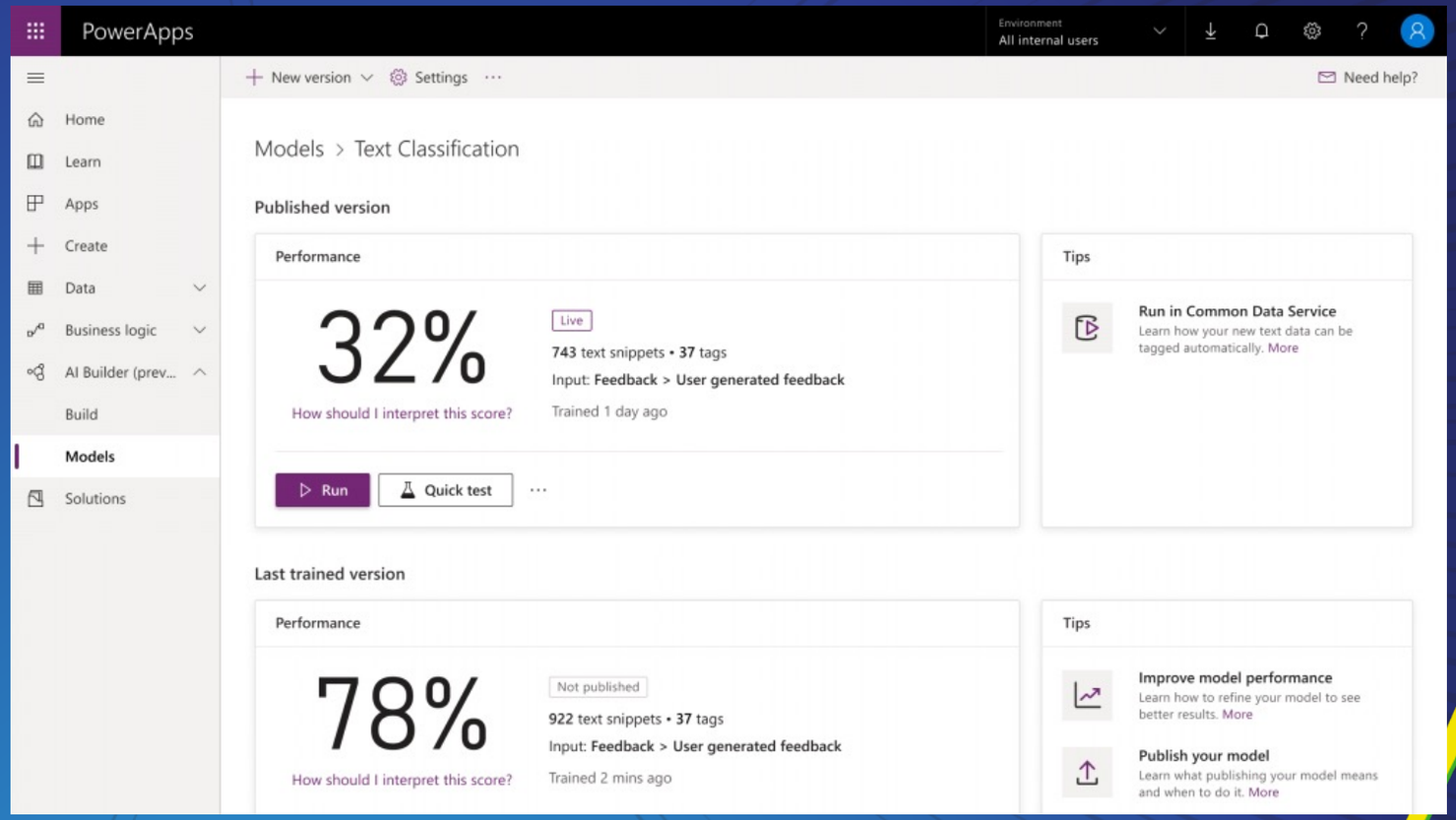
INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

Build a Model!

- *Training a Model – The more you put in the better the model gets. My story!*
- *Usage of the Model trains the model each day to become more and more accurate!*



Microsoft

INNOVIA CONSULTING

POWERED BY DUG DYNAMICSCON VIRTUAL

Examples by Users just like YOU!

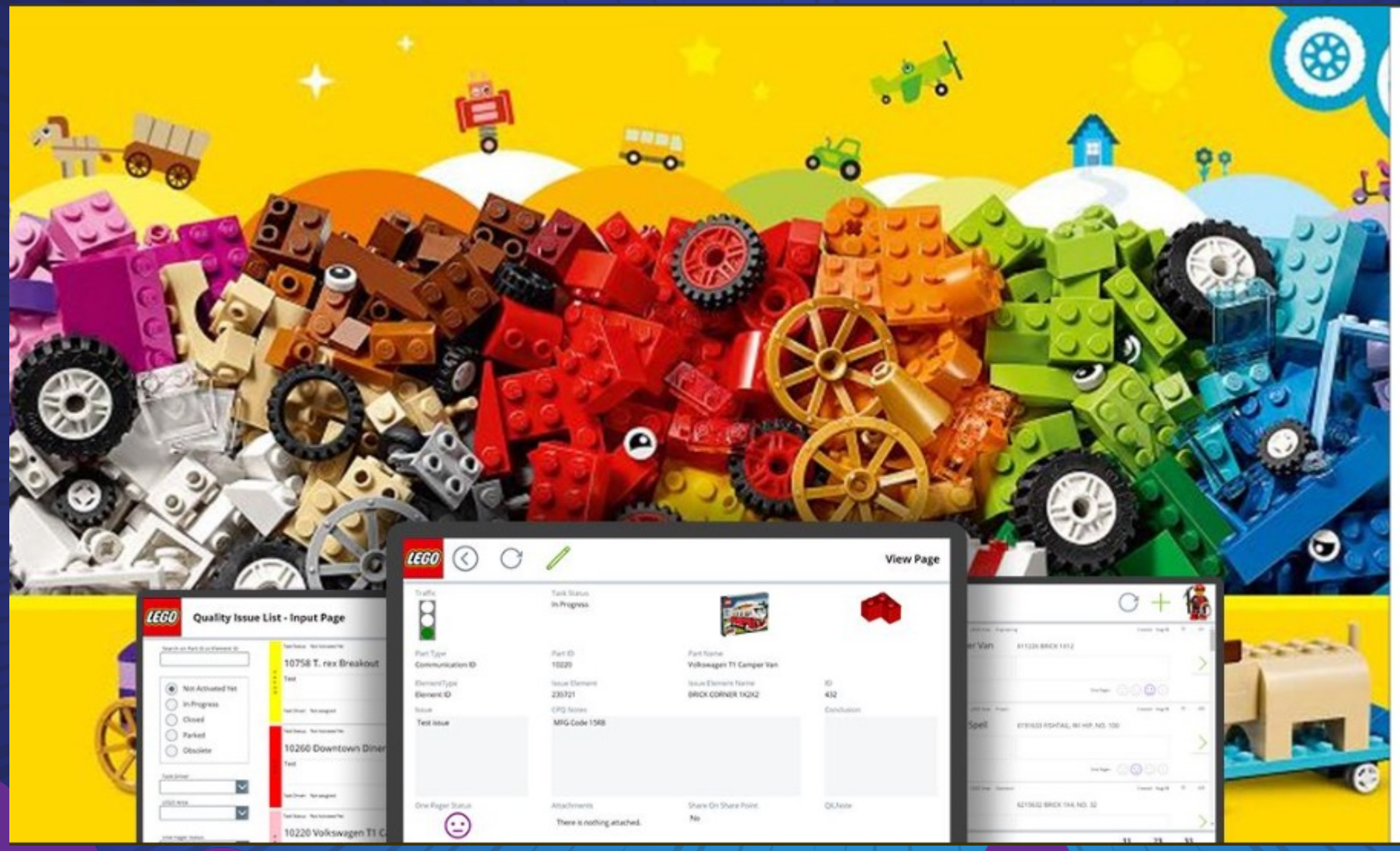
Microsoft

INNOVIA CONSULTING

POWERED BY DUG

DYNAMICSCON VIRTUAL

Quality Assurance Tool for Lego



App Builder

Camilla Friedrichsen
Quality Management Specialist

Company

Company Size
19k+ Employees

Industry
Consumer Goods

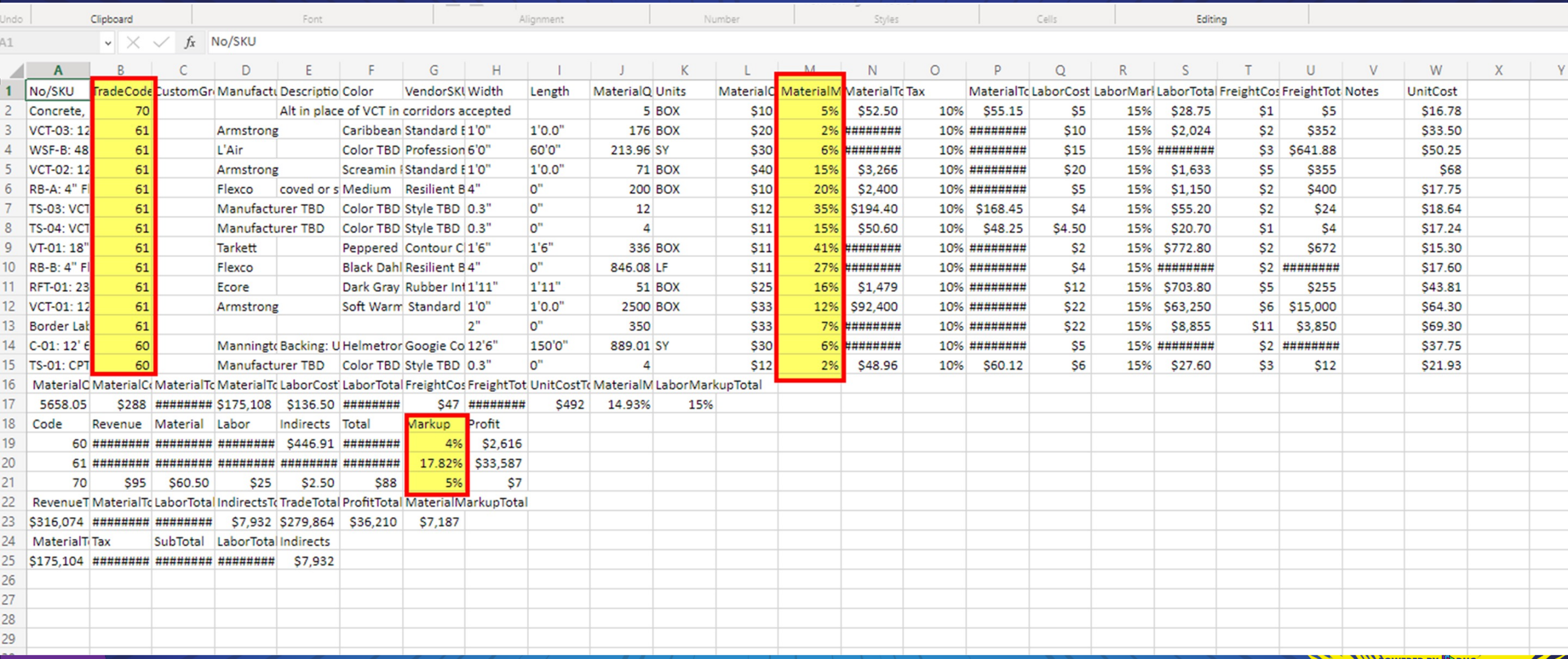
Country
Denmark

Microsoft

INNOVIA CONSULTING

DYNAMICSCON VIRTUAL

Before – Excel Based Estimator tool



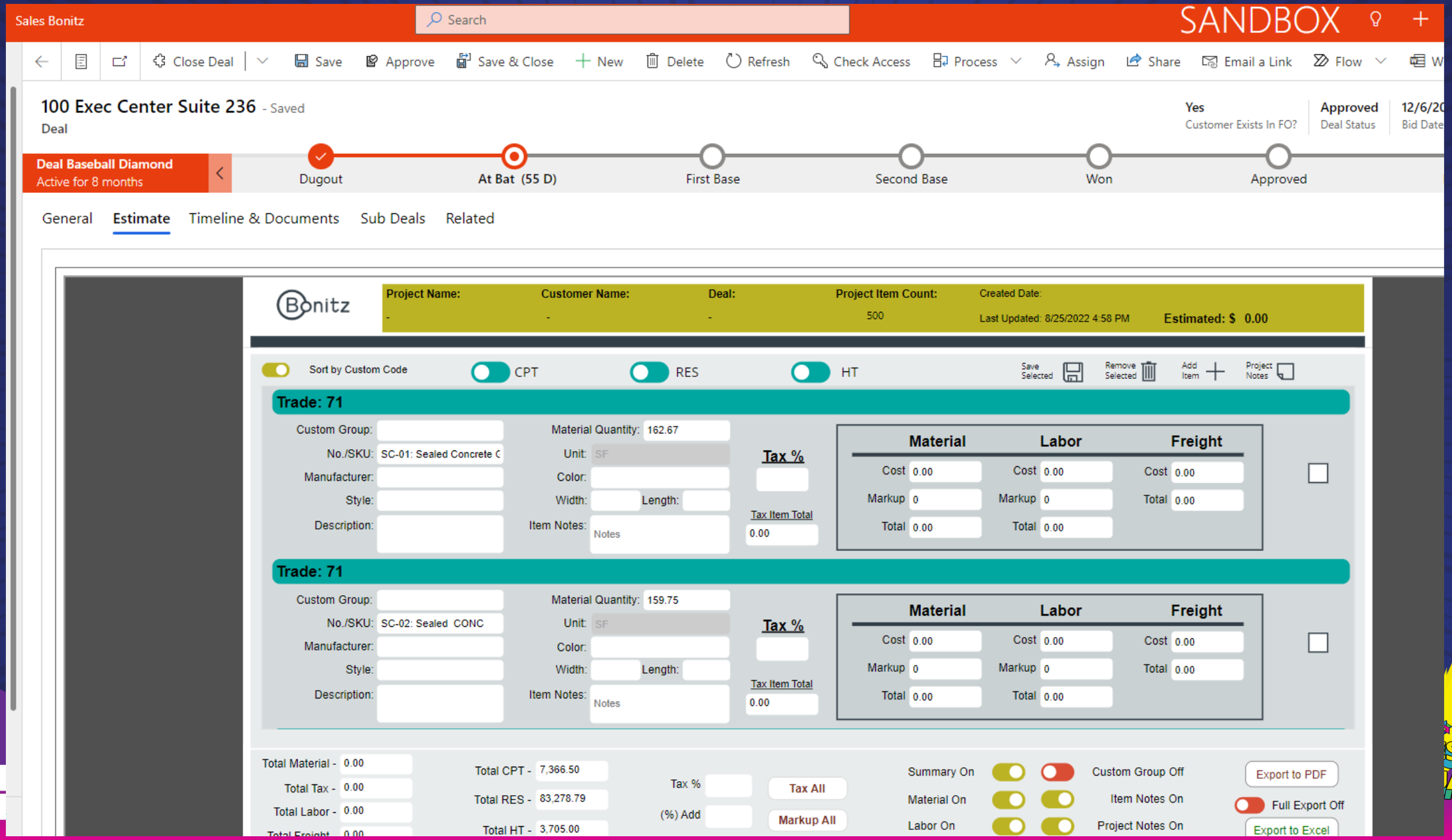
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X
1	No/SKU	TradeCode	CustomGr	Manufactu	Descriptio	Color	VendorSKU	Width	Length	MaterialQ	Units	MaterialC	MaterialM	MaterialTc	Tax	MaterialTc	LaborCost	LaborMarl	LaborTotal	FreightCos	FreightTot	Notes	UnitCost	
2	Concrete,	70			Alt in place of VCT in corridors accepted					5	BOX	$10	5%	$52.50	10%	$55.15	$5	15%	$28.75	$1	$5		$16.78	
3	VCT-03: 12	61		Armstrong		Caribbean	Standard E	1'0"	1'0.0"	176	BOX	$20	2%	########	10%	########	$10	15%	$2,024	$2	$352		$33.50	
4	WSF-B: 48	61		L'Air		Color TBD	Profession	6'0"	60'0"	213.96	SY	$30	6%	########	10%	########	$15	15%	########	$3	$641.88		$50.25	
5	VCT-02: 12	61		Armstrong		Screamin	Standard E	1'0"	1'0.0"	71	BOX	$40	15%	$3,266	10%	########	$20	15%	$1,633	$5	$355		$68	
6	RB-A: 4" F	61		Flexco	coved or s	Medium	Resilient B	4"	0"	200	BOX	$10	20%	$2,400	10%	########	$5	15%	$1,150	$2	$400		$17.75	
7	TS-03: VCT	61		Manufacturer	TBD	Color TBD	Style TBD	0.3"	0"	12		$12	35%	$194.40	10%	$168.45	$4	15%	$55.20	$2	$24		$18.64	
8	TS-04: VCT	61		Manufacturer	TBD	Color TBD	Style TBD	0.3"	0"	4		$11	15%	$50.60	10%	$48.25	$4.50	15%	$20.70	$1	$4		$17.24	
9	VT-01: 18"	61		Tarkett		Peppered	Contour C	1'6"	1'6"	336	BOX	$11	41%	########	10%	########	$2	15%	$772.80	$2	$672		$15.30	
10	RB-B: 4" Fl	61		Flexco		Black Dahl	Resilient B	4"	0"	846.08	LF	$11	27%	########	10%	########	$4	15%	########	$2	########		$17.60	
11	RFT-01: 23	61		Ecore		Dark Gray	Rubber Int	1'11"	1'11"	51	BOX	$25	16%	$1,479	10%	########	$12	15%	$703.80	$5	$255		$43.81	
12	VCT-01: 12	61		Armstrong		Soft Warm	Standard	1'0"	1'0.0"	2500	BOX	$33	12%	$92,400	10%	########	$22	15%	$63,250	$6	$15,000		$64.30	
13	Border Lab	61						2"	0"	350		$33	7%	########	10%	########	$22	15%	$8,855	$11	$3,850		$69.30	
14	C-01: 12' E	60		Manningtc	Backing: U	Helmetror	Googie Co	12'6"	150'0"	889.01	SY	$30	6%	########	10%	########	$5	15%	########	$2	########		$37.75	
15	TS-01: CPT	60		Manufacturer	TBD	Color TBD	Style TBD	0.3"	0"	4		$12	2%	$48.96	10%	$60.12	$6	15%	$27.60	$3	$12		$21.93	
16	MaterialC	MaterialC	MaterialTc	MaterialTc	LaborCost	LaborTotal	FreightCos	FreightTot	UnitCostTc	MaterialM	LaborMarkupTotal													
17	5658.05	$288	########	$175,108	$136.50	########	$47	########	$492	14.93%	15%													
18	Code	Revenue	Material	Labor	Indirects	Total	Markup	Profit																
19	60	########	########	########	$446.91	########	4%	$2,616																
20	61	########	########	########	########	########	17.82%	$33,587																
21	70	$95	$60.50	$25	$2.50	$88	5%	$7																
22	RevenueT	MaterialTc	LaborTotal	IndirectsTc	TradeTotal	ProfitTotal	MaterialMarkupTotal																	
23	$316,074	########	########	$7,932	$279,864	$36,210	$7,187																	
24	MaterialT	Tax	SubTotal	LaborTotal	Indirects																			
25	$175,104	########	########	########	$7,932																			
26																								
27																								
28																								
29																								

Microsoft

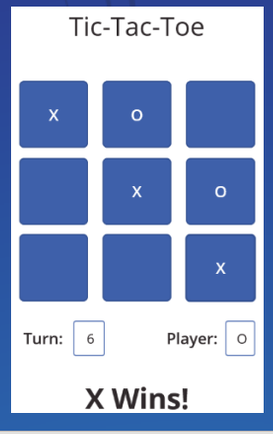
INNOVIA CONSULTING

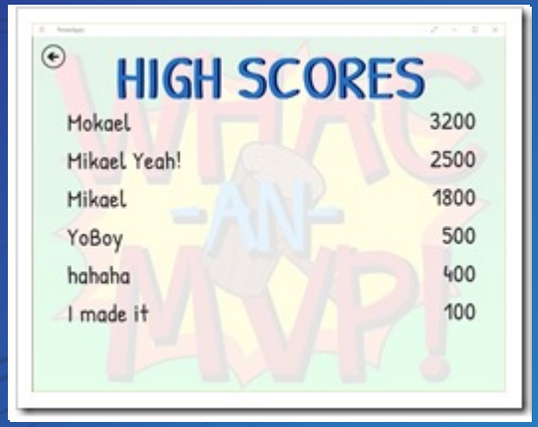
POWERED BY DUG DYNAMICSCON VIRTUAL

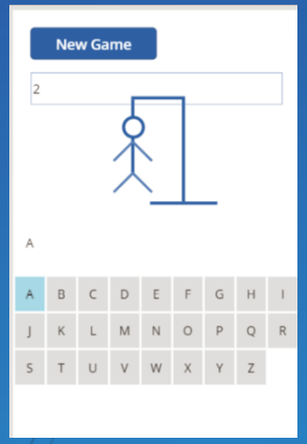
After Estimator Tool – Real time Data, Product Updates & Export!



More Fun PowerApps from Events!





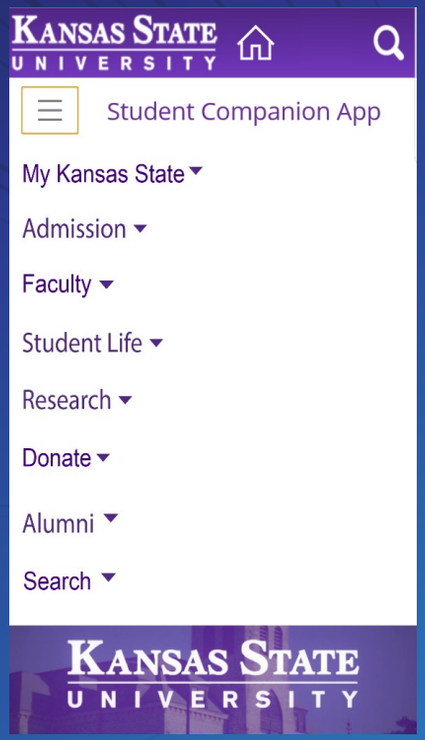


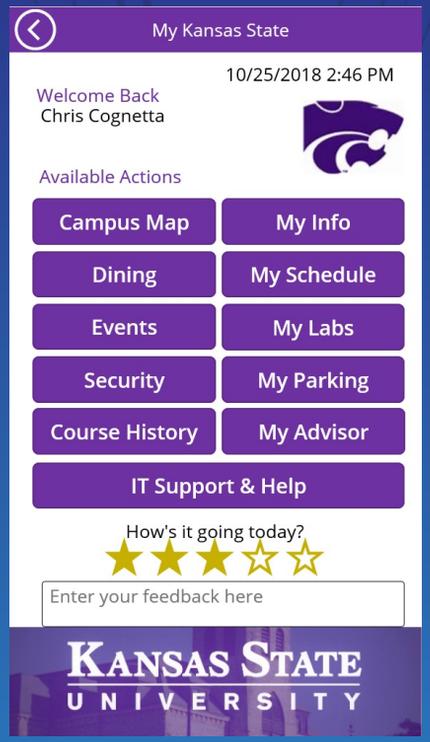
Microsoft

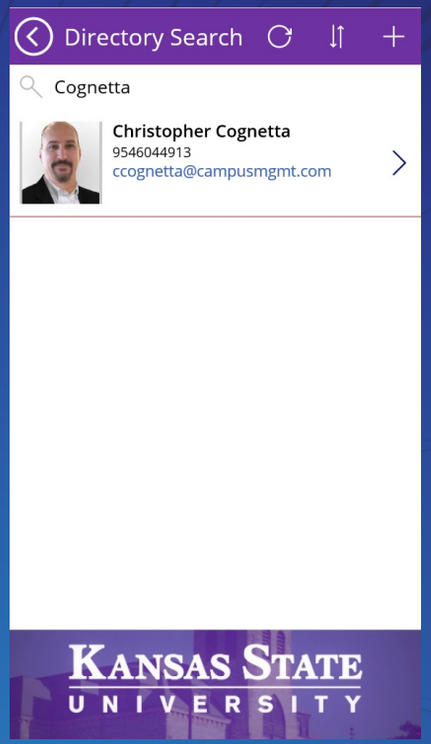
INNOVIA CONSULTING

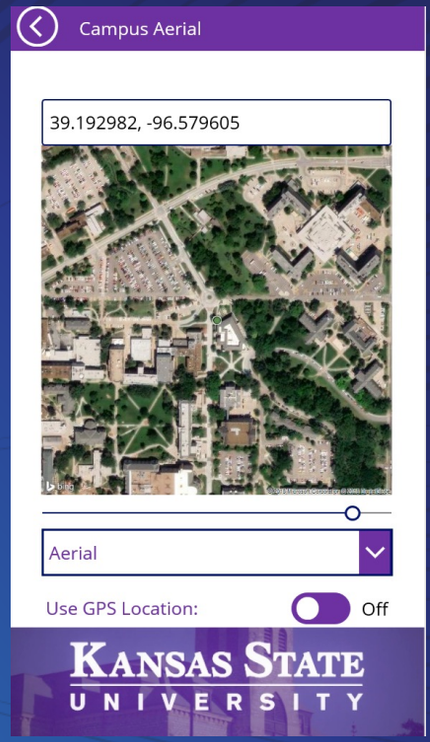
POWERED BY DUG
DYNAMICSCON VIRTUAL

Campus Engage – Student Companion App Powered by Microsoft PowerApps

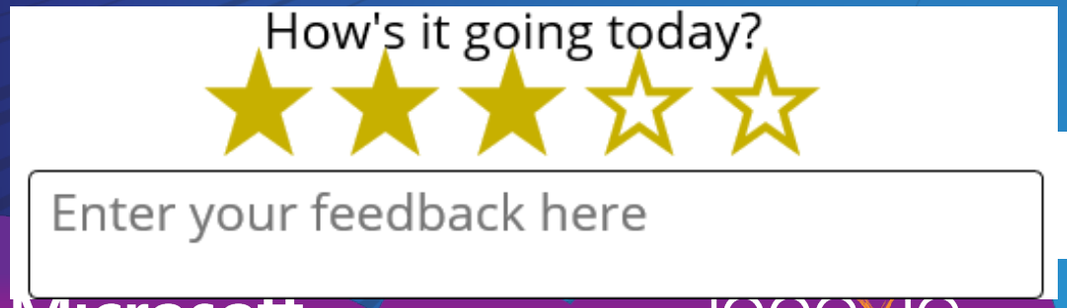








Ability to Analyze Student Sentiment with



Proactively monitor and send negative responses to Campus Security

Security

Real-time review of sentiment on courses to faculty

Feedback

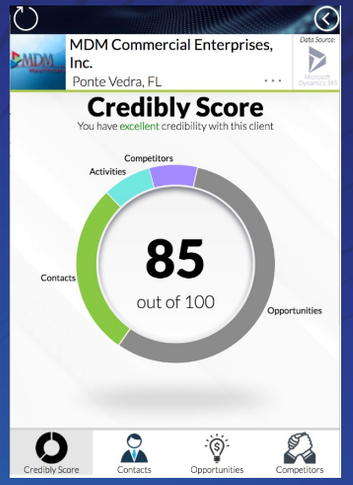
Microsoft

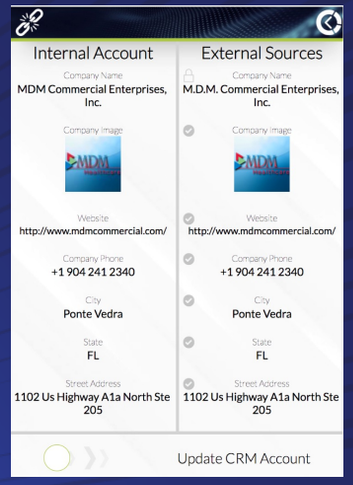
Innovia Consulting

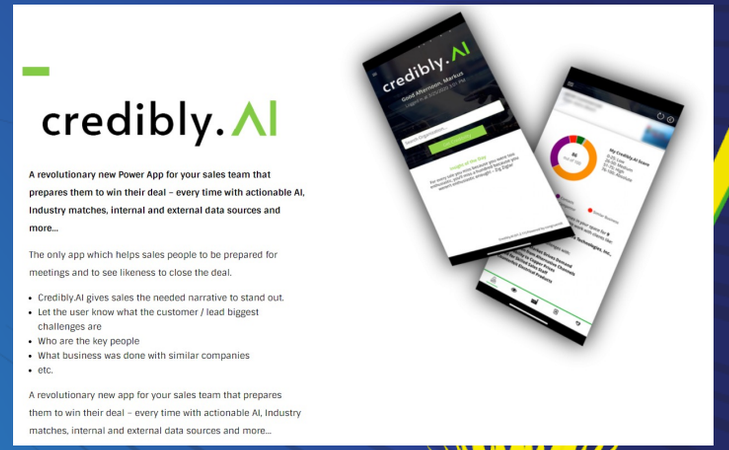
POWERED BY DUG DynamicsCon Virtual

CampusNexus Engage

From the team at congruentX







Microsoft

INNOVIA CONSULTING

POWERED BY DUG
DYNAMICSCON VIRTUAL

Tweet me your IDEA!

- Tweet and tag me at @ccognetta or post on linkedin
- We just might use your concept in our next presentation

Closing and Open Q&A

- Learned what a PowerApps is about and how it can easily be used to help solve business challenges
- Start today for FREE at **https://powerapps.microsoft.com/en-us/**
- https://powerusers.microsoft.com/t5/Galleries/ct-p/PA_Comm_Galleries
- Understand they can go from zero to wild very fast!
- Check and follow PowerApps on twitter for more news!
- Robust architecture only getting better and better each month