The DePuy Internship

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Commercial Strategy & Insights

Introduction

About Me

- Interest in Med Tech industry (data side)

Goals:

- Understand the in and outs of how a Med Tech company functions

- Network with individuals in different business sectors

- Work on technical and soft skills

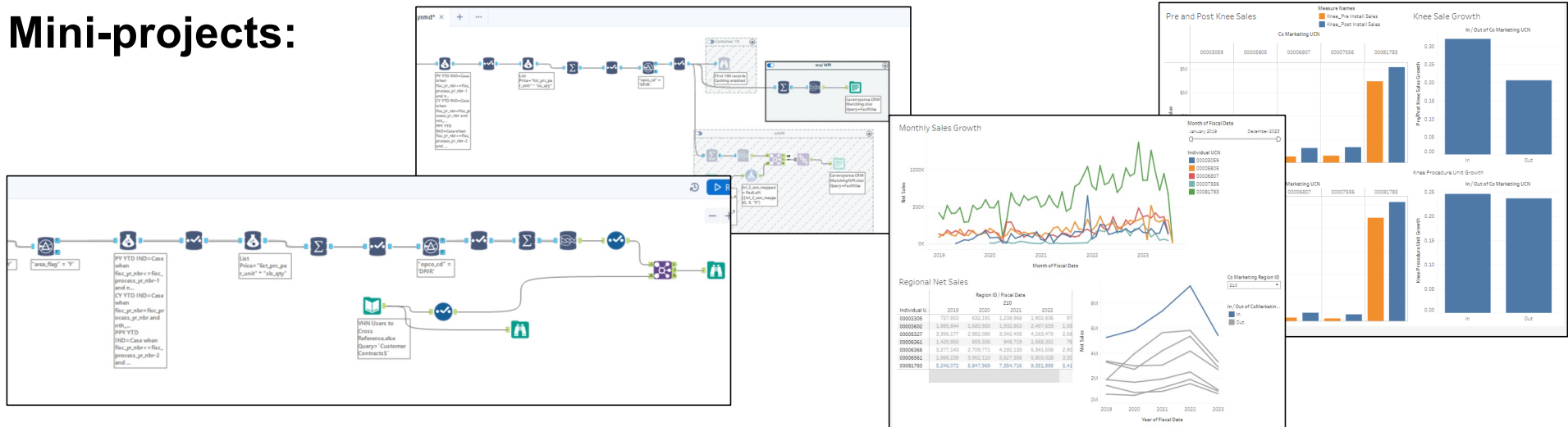- Build a story and gain insight to my next steps

Tools I Used/Learned

Mini-projects:
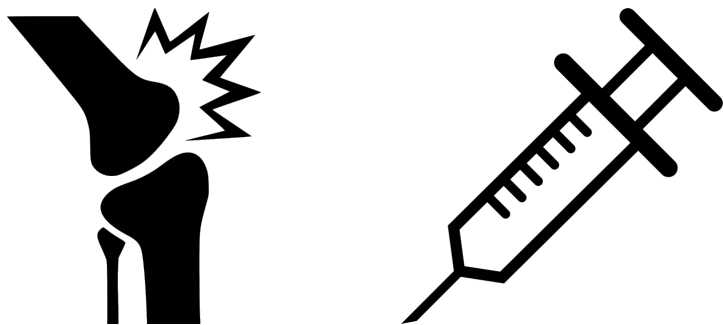
Side Projects

- VHN Users to be cross referenced

- Carevoyance data mapping with 3rd party vendor

- CMDM Exposure

- VELYS talks

- Patient Marketing analysis with VELYS global strategic marketing team

Core Projects

Projects

Pent Up Demand Analysis:

<u>Goal:</u> Analyze TKA procedure volume during COVID and how it relates to viscosupplements

XRAY Portal Proposal:

<u>Goal:</u> Identify pain points with the current XRAY Portal and propose suggestions/ redesign

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Pent Up Demand

Overview:

- Viscosupplements are are often precursors to TKAs

- There may be pent up demand for the TKA market due to COVID
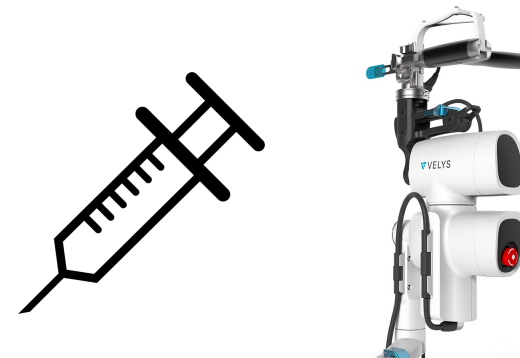
We hypothesize that abnormal growth in the viscosupplement market post COVID could indicate pent up demand in the patient funnel

This analysis will look at procedure volume before and after COVID in the TKA and viscosupplement market, and further identify any regional trends

Pent Up Demand - Data
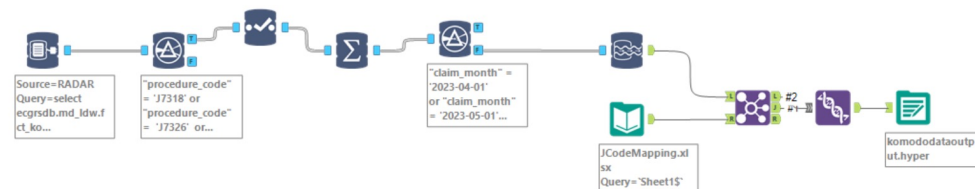
KneeVsInjection	Injectables	Name	Proced..	Sum Visit Count	Injections per proc..	CalcProcedures
Total Knee Replacement	Total Knee Replacement	Total Knee Repla..	27447	599,198	1	599,198
		Total		**599,198**	**1**	**599,198**
	Total			**599,198**	**1**	**599,198**
Viscosupplemen..	MultiInjection	Euflexxa	J7323	384,486	3	128,162
		Orthovisc	J7324	337,585	3	112,528
		Hyalgan / Supart..	J7321	251,087	3	83,696
		GelSyn3	J7328	121,281	3	40,427
		Genvisc850	J7320	158,169	5	31,634
		Hymovis	J7322	29,784	2	14,892
		Triluron	J7332	12,532	3	4,177
		Trivisc	J7329	7,393	3	2,464
		Synojoynt	J7331	104	3	35
		Total		**1,302,421**	*****	**418,015**
	SingleInjection	Synvisc1	J7325	225,199	1	225,199
		Gel-One	J7326	78,066	1	78,066
		Durolane	J7318	58,080	1	58,080
		Monovisc	J7327	57,608	1	57,608
		Total		**418,953**	**1**	**418,953**
	Total			**1,721,374**	*****	**836,968**
Grand Total				**2,320,572**	*****	**1,436,166**

Komodo Data Source

![DePuy Synthes logo] DePuy Synthes
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Pent Up Demand - Correlation and Market Trends

TKAs vs Injections Across States
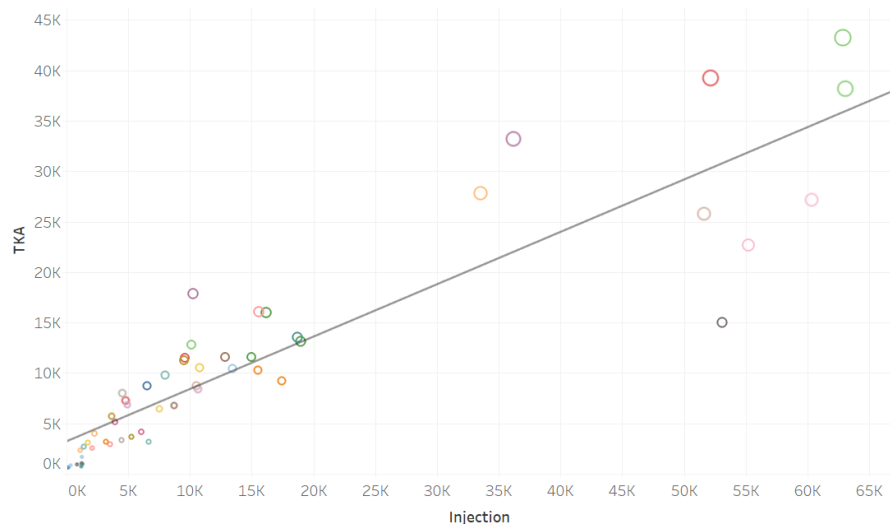
Line of Best Fit: Data from 2021
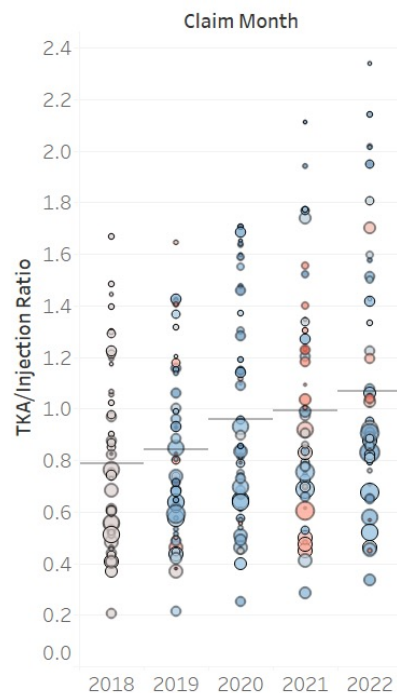R^2 = .819
P-value < .0001

Market Trends
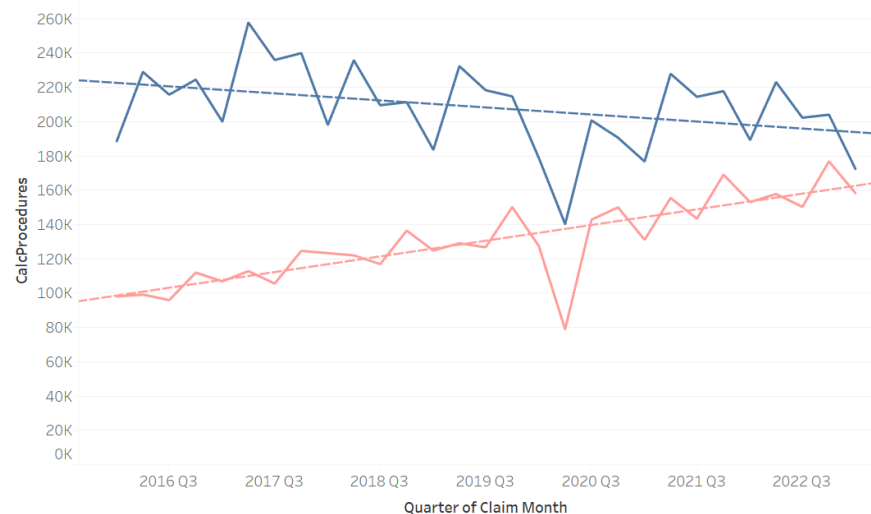
Viscosupplement: TKA:
R^2 = .126   R^2 = .666
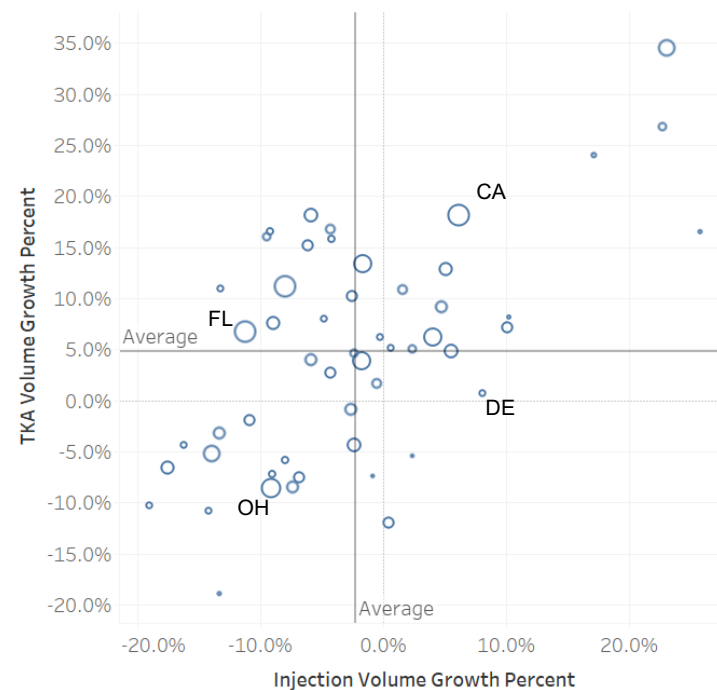P-value = 0.059   P-value < .0001

Pent Up Demand - Regional Analysis

- Average TKA/Injection Ratio across states increasing

- Target States respective to the way TKA and Injection volume are growing

TKA/Injection Ratio in States

TKA and Injection Volume Growth

Growth rate from 2021 to 2022

Pent Up Demand - Insights and Next Steps

- While there wasn't any clear indication of pent-up demand in the TKA patient funnel, we identified regional trends in these markets

- Younger patients opting to get knee replacements earlier or without taking viscosupplements prior

- Next Time:
  - Identify age demographics
  - Filter data

- Taught me how to use alteryx and tableau together, deeper insights through visualizations

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XRAY Portal

Overview:

- Develop a new layout for the XRAY portal that allows its users to leverage our dashboards more effectively

Methodology:

- Inventory of current Dashboards
- Stakeholder Interviews
- Mock Wireframe

|	Name	Businesses	Update Date	Total Views	Unique Views	Past 3 Months	Views Last Month	
16	Executive Summary	JR	6/27/2023	715	61	41	17	Tabu
17	Sales Reference Table	JR	6/6/2023	395	36	35	15	Tabu
18	AMC Performance	JR	5/22/2023	106	25	19	2	Perfo
19	Performance Ranking	JR	6/27/2023	162	44	23	2	High
20	Momentum Review	JR	6/27/2023	145	32	11	3	Rolli
21	NPI Set Tracking Dashboard	JR	5/22/2023	123	20	18	7	Trac
22	Hip & Knee Opportunity Da	JR	2/2/2023	193	34	18	4	Usin
23	Market Share Analysis	JR	2/27/2023	201	25	17	5	How
24	Knees vs Hips Segmentation	JR	5/22/2023	104	30	18	8	Look
25	Digital Products Dashboard	JR	6/26/2023	1263	94	68	35	asse
26	ACTIS Champion	JR	5/22/2023	125	20	10	5	
27	Area P&L	JR	5/22/2023	166	32	16	7	Tabu
28	NPI Scorecard	JR	7/5/2023	342	25	22	14	Unde
29	VRAS Exec Sales Summary	JR	6/7/2023	42	19	19	19	Help
30	VHN Exec Sales Summary	JR	6/16/2023	660	54	49	24	Help
31	VAPR Action Ladder Tool	Mitek	11/21/2022	329	38	12	7	Sales
32	Capital Renewal Tracker	Mitek	11/8/2022	144	29	9	3	Mite
33	Regional Business Planning	Mitek	5/17/2023	65	16	16	10	Busi
34	Territory Business Planing	Mitek	2/9/2023	260	34	18	4	Business Planning of territorial accounts
35	Sales Performance Suite	Mitek	4/25/2023	861	46	37	25	Performance of mitek sales
36	Market Share Analysis	Mitek	4/5/2023	51	12	11	3	determines mitek market share. Compares areas to n
37	Sales Performance Suite	Spine	5/23/2023	264	24	16	12	Overall view of how spines sales are distributed acr
38	Lateral Performance	Spine	6/28/2023	38	7	7	7	sales and pull through of lateral

Sheet1
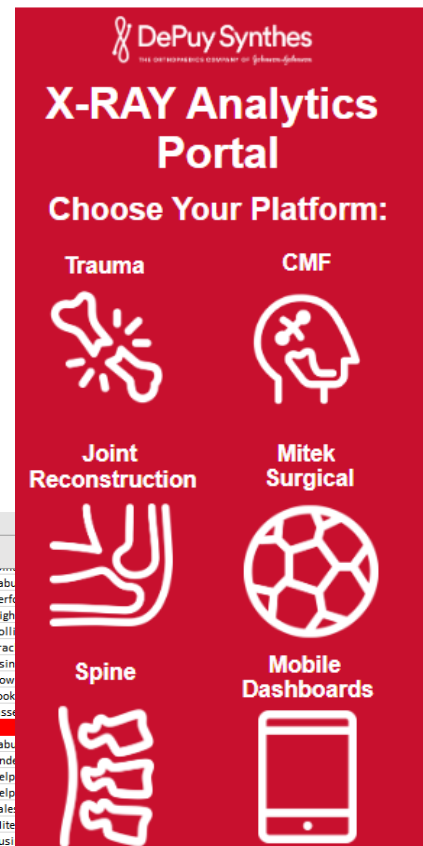
XRAY - Pain Points

- Categories inconsistent between businesses

- Hard to navigate to relevant dashboards + utilize them

- No guides readily available on the site

- Dashboards can sometimes fit in multiple sectors

- Inconsistent dashboard formatting (branding)

XRAY - Wireframe Proposal
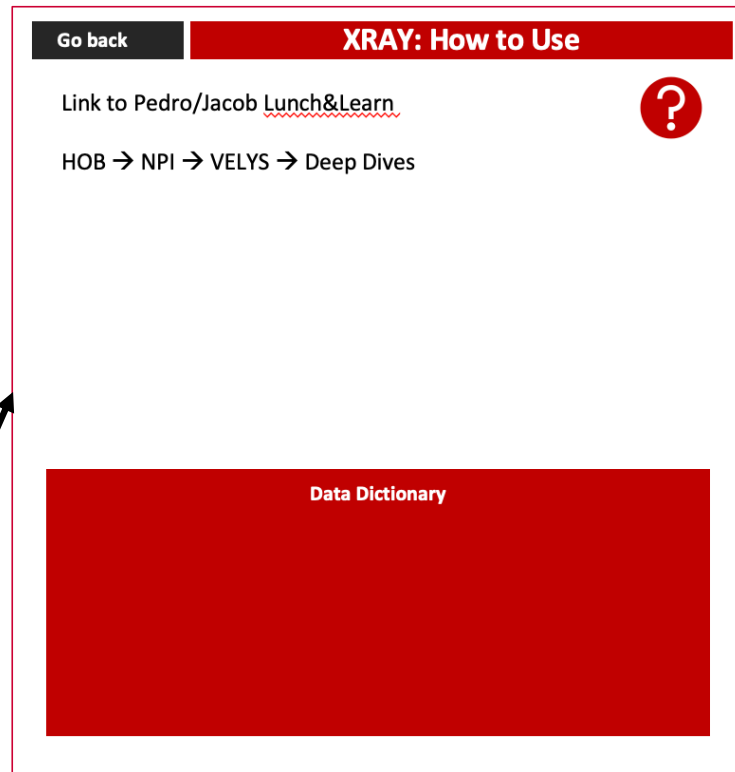
- Create a "How to Use" Page

- References/Links to powerpoints relevant to XRAY

- Data Dictionary:
  - Pull Through
  - WGS
  - Churn Rate
  - Foot Traffic
  - Financial Acumen
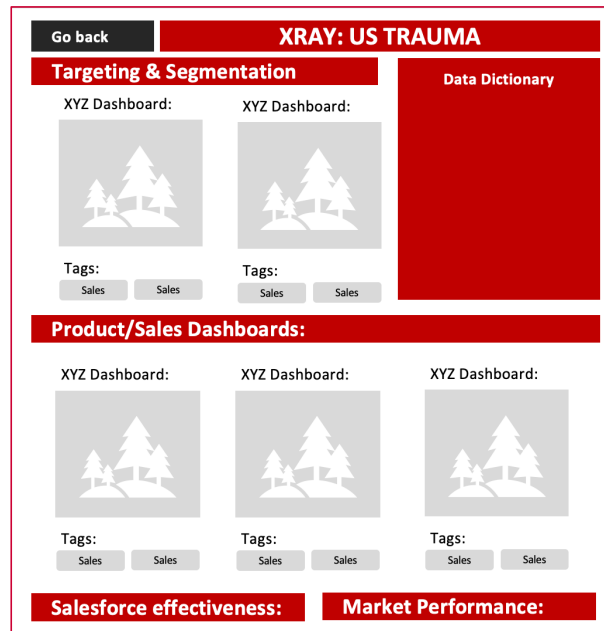
XRAY - Categorical and Tag Based Design

Potential Categories:

Categories	Example Dashboards
Product/Sales Performance	Customer sales, executive summaries
Salesforce effectiveness	Quota Tracking, Performance reviews
Market Performance	HCP Volume
Targeting & Segmentation	WGS, NPI Utilization, opportunity dashboards

Tag-Based:

- Assign each dashboard a tag based on its category or data metrics it measures

- Allows dashboards be more descriptive of what they represent

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XRAY - Wireframe Proposal

Panel 1

Go back | **XRAY: US TRAUMA**

Filter Dashboards:

Choose tag filter:
Sales

Data Dictionary

Dashboards:

XYZ Dashboard:

Tags:
Sales | Sales

XYZ Dashboard:

Tags:
Sales | Sales

XYZ Dashboard:

Tags:
Sales | Sales

Panel 2

Go back | **XRAY: US TRAUMA**

Targeting & Segmentation

XYZ Dashboard:

Tags:
Sales | Sales

XYZ Dashboard:

Tags:
Sales | Sales

Data Dictionary

Product/Sales Dashboards:

XYZ Dashboard:

Tags:
Sales | Sales

XYZ Dashboard:

Tags:
Sales | Sales

XYZ Dashboard:

Tags:
Sales | Sales

Salesforce effectiveness: | **Market Performance:**

- Add data dictionary relevant to dashboards on this page

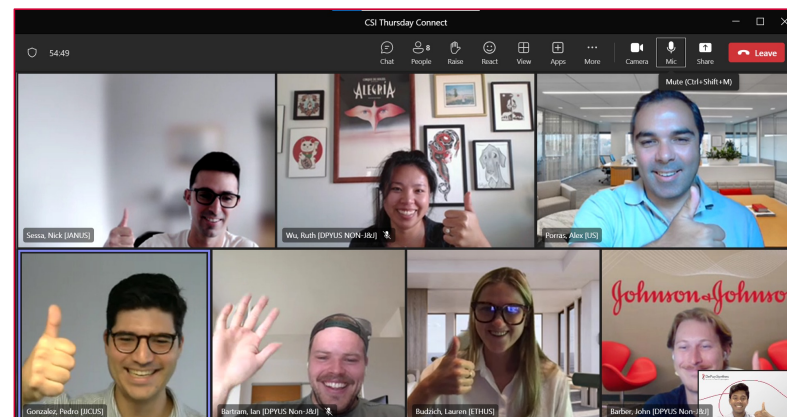DePuy Synthes
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XRAY - Final Thoughts

- Get the user the information they need, but make it just as easy to dive deeper into the insights

- Certain pain points are easier to address over others
  - A data dictionary has a higher benefit to work relationship over adding tags

- Taught me to connect dots between different sources of data
  - Holding stakeholder interviews
  - Creating potential designs

Concluding Remarks

What's Next?

- Learn to leverage data in order to make insights more accessible to everyone at all levels – build this story through experiences

- Practice both technical and soft skills
  - Plan to get a certification from Alteryx site

- Stay in the Med Tech Industry and a data driven position
  - Only a Junior, so going to take the next summer to explore

- Relax 👍👍

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Thank you!

Questions?

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