

A diverse group of people, including men and women of various ethnicities, are seated in a lecture hall or classroom. They are all looking towards the front of the room, and many are clapping. The image has a warm, yellowish tint. The text "TURNER FLEISCHER" is overlaid in the top right corner in a large, white, sans-serif font.

# TURNER FLEISCHER

Architecture, it's who we are.





**Ellen Bensky**

B. A., Dip. Arch. Tech.(Hon)  
CanBIM P1  
Principal, CEO, CFO  
29 Years with the studio



**Steve Nonis**

B.Arch., OAA, AANB, AAPEI,  
MRAIC, CanBIM P3, LEED AP  
Principal  
16 Years with the studio

# Who We Are



Turner Fleischer  
Toronto, Canada

45

Years of  
Experience

155

Talented  
Professionals



Architecture



Interior Design



Branding



Commercial



Industrial



Institutional



Hospitality



Mixed-Use



Residential



Retail



Planning

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FLEISCHER













# Implementing a Digital Practice: Looking Beyond BIM Management



# Why Look Beyond BIM?

Why Look Beyond BIM?

Innovation is  
**Accelerating  
Exponentially**

Disruption is  
**Inevitable**

Digital  
Transformation  
is **Unavoidable**

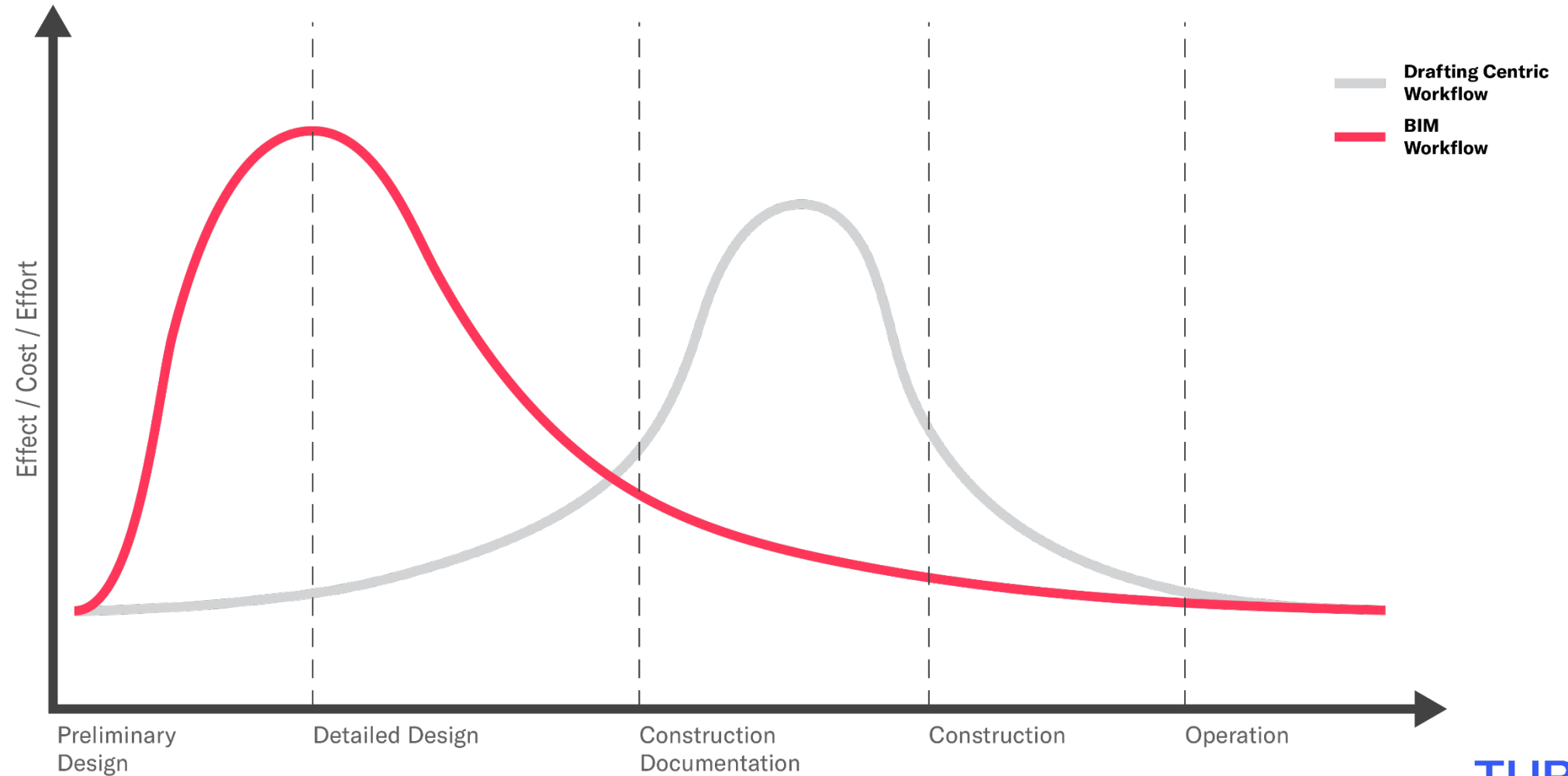


**TURNER  
FLEISCHER**



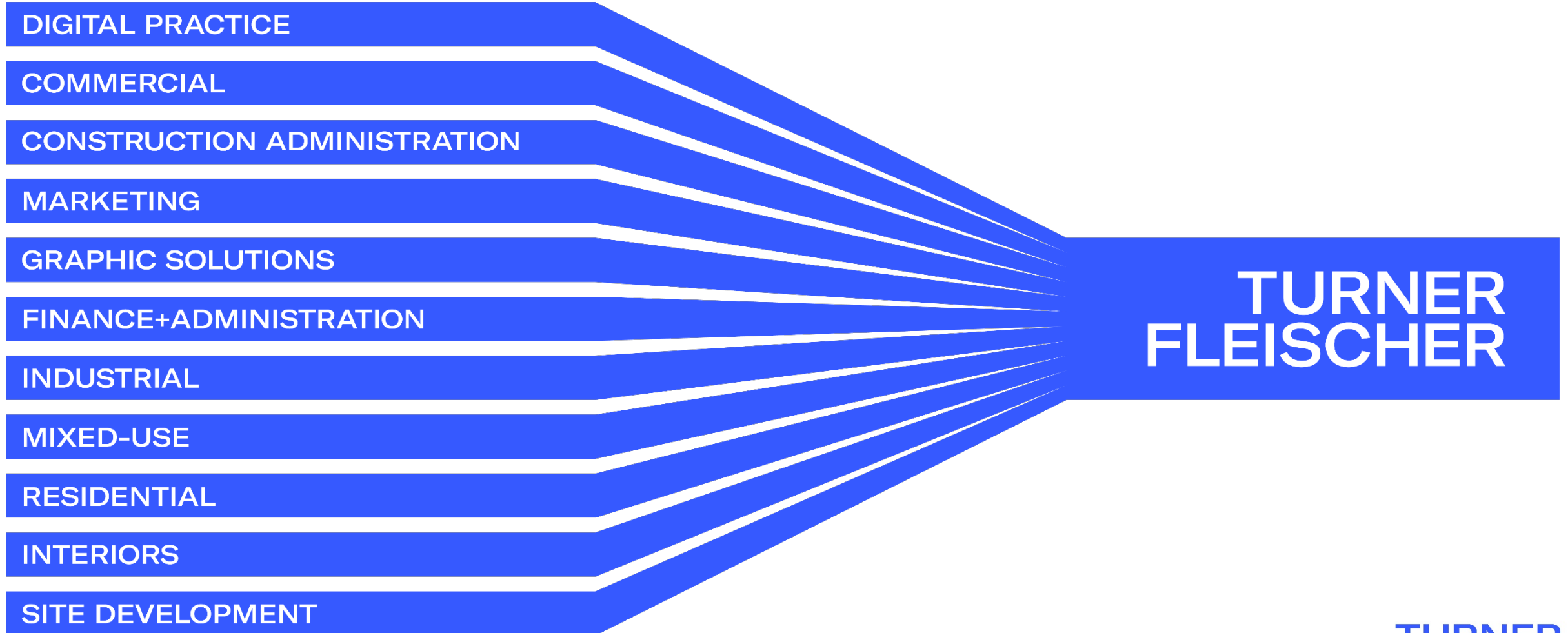
# Why Look Beyond BIM?

## Workflow Shift



# Why Look Beyond BIM?

## Department to Studio Thinking

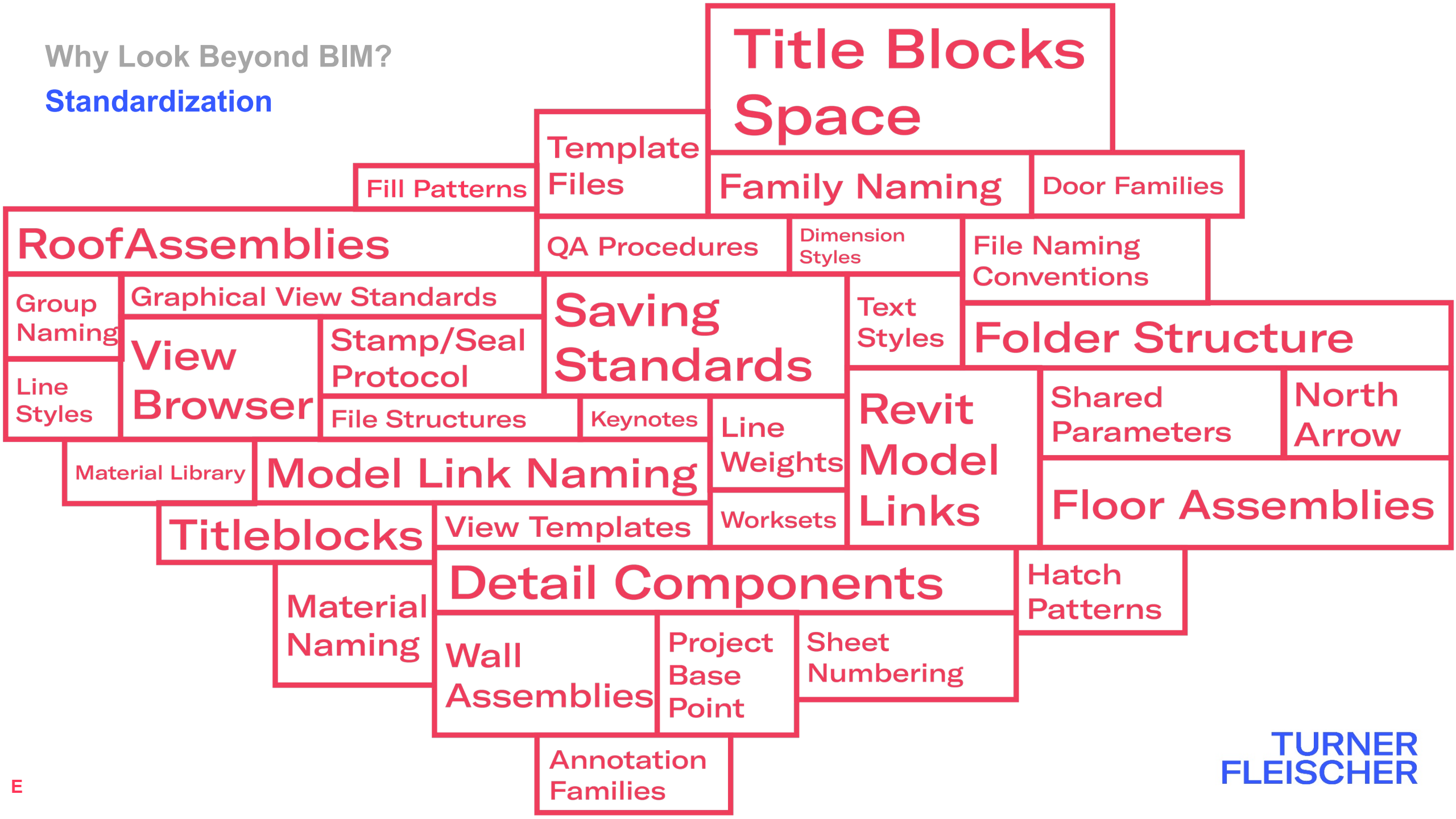


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Why Look Beyond BIM?

Standardization

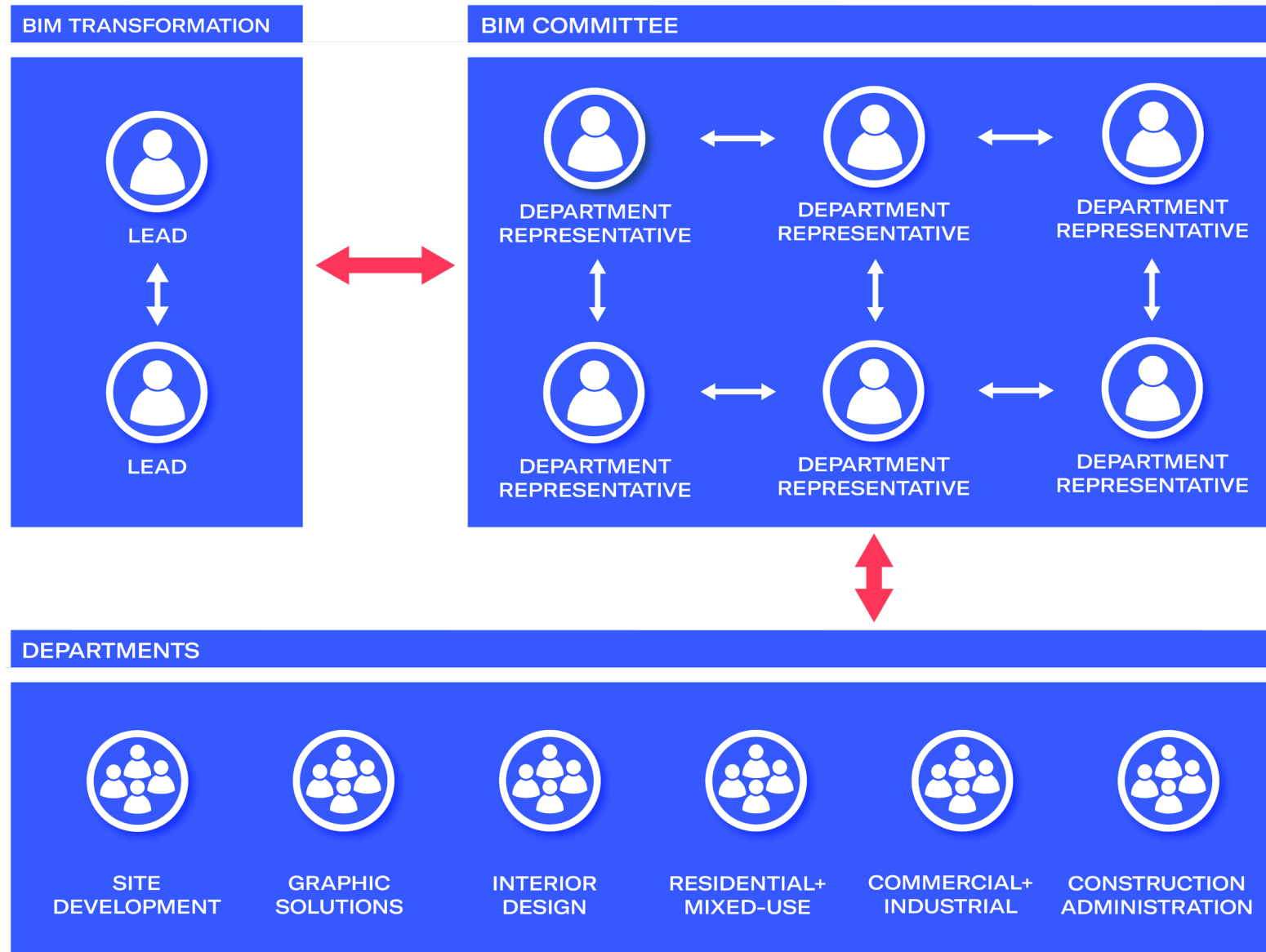


# How We Began



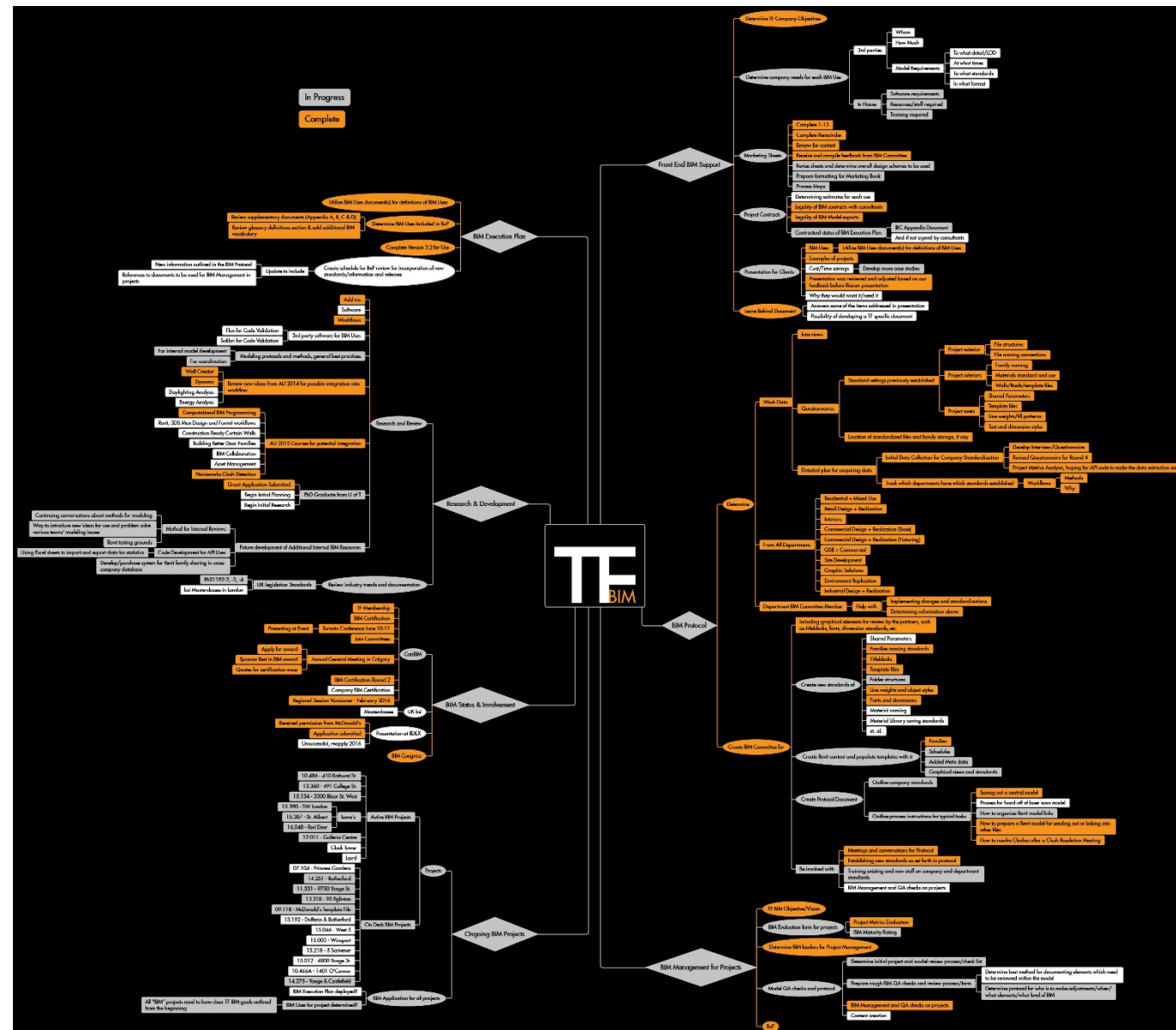
# Realities of Digital Disruption

## Revit – 2006, BIM Transformation – 2014



# Realities of Digital Disruption

## BIM Transformation Mind Map





# Realities of Digital Disruption

## BIM Transformation Accomplishments

- Determined TF Company Objectives for BIM
- Utilized BIM Uses document(s) to create TF definitions
- Completed BIM Execution Plan Version 3.2 for office use
- Researched and reviewed add-ins
- Integrated Dynamo into workflow
- Utilized Navisworks for Clash Detection
- Submitted Grant application for research project
- Completed TF CanBIM Membership
- Completed CanBIM Staff Certification
- Established legality of BIM contracts with consultants
- Established legality of BIM Model exports
- Conducted Workflow Interviews with staff
- Established legality of BIM Model exports
- Conducted Workflow questionnaire for standard settings previously established
- Conducted initial data collection for company standardization
- Tracked existing department standards
- Created standard for Family naming
- Created standard for Titleblocks
- Created standard for Template files
- Created standard for Line weights and object styles
- Created standard for Fonts and dimensions

# Was This Working?



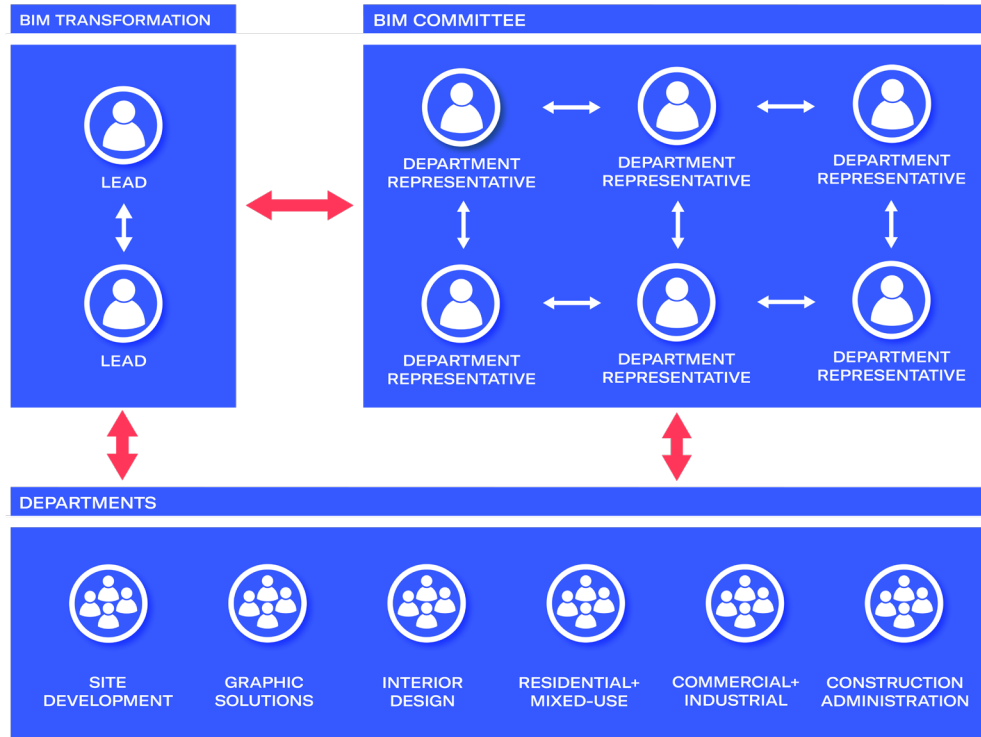
**No, It Wasn't.**

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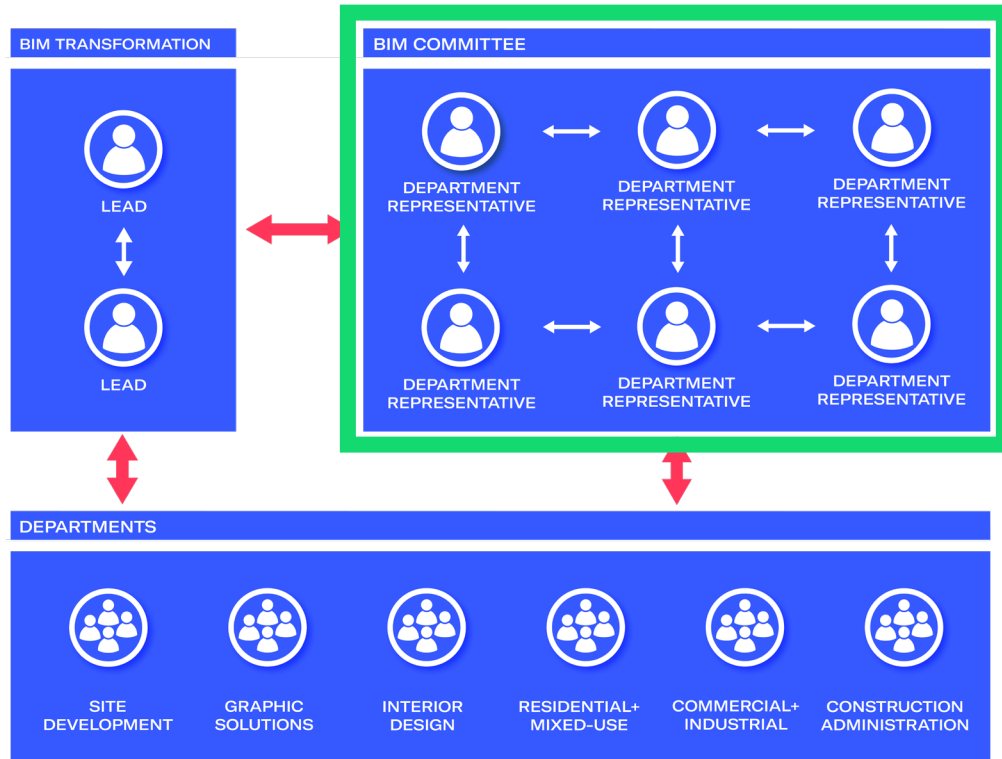
Why?



# Why?



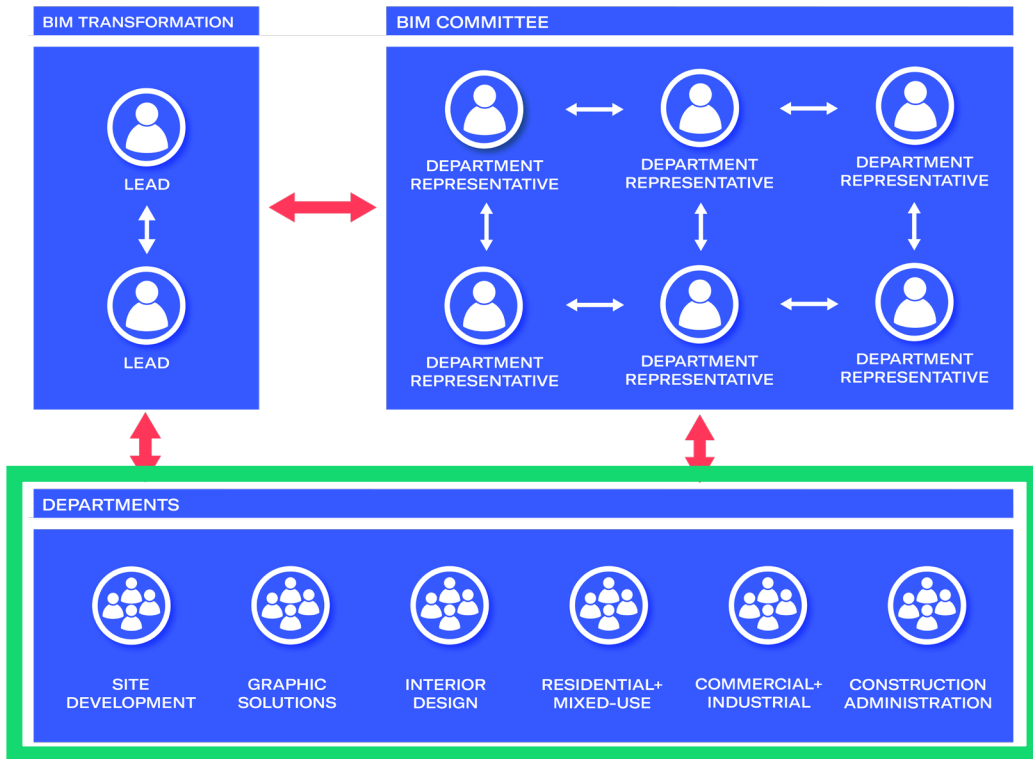
# Why?



- Committee members were challenged to balance project demands and part-time BIM implementation responsibilities

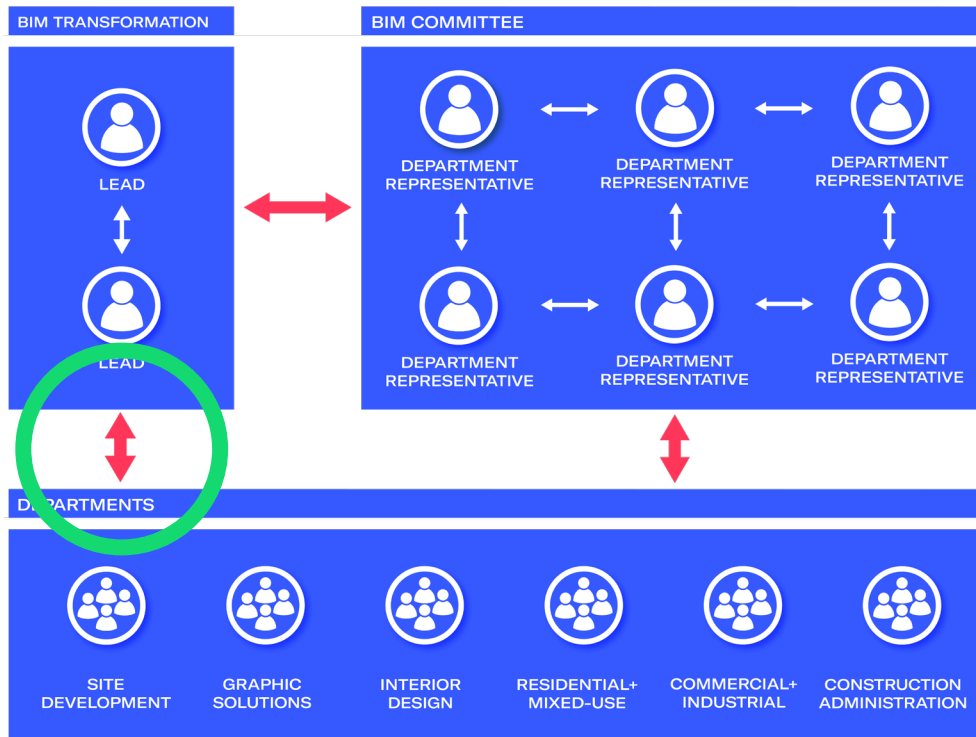


# Why?



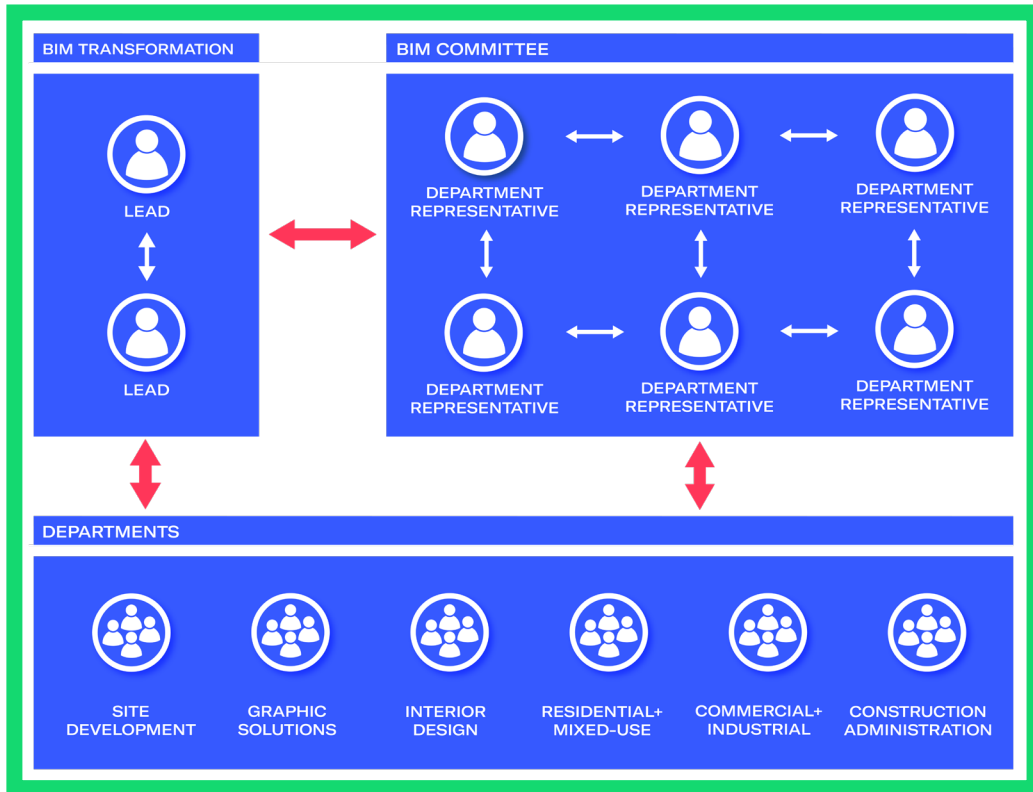
- Committee members were challenged to balance project demands and part-time BIM implementation responsibilities
- Departments were focused on their own needs, not studio-wide objectives

# Why?



- Committee members were challenged to balance project demands and part-time BIM implementation responsibilities
- Departments were focused on their own needs, not studio-wide objectives
- No direct connection between BIM Leads and staff working on projects

# Why?



- Committee members were challenged to balance project demands and part-time BIM implementation responsibilities
- Departments were focused on their own needs, not studio-wide objectives
- No direct connection between BIM Leads and staff working on projects
- Technology was advancing faster than we were implementing it





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# What Did We Do Next?

# DIGITAL PRACTICE



Saji



Kristian



Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross



# DIGITAL PRACTICE



Saji



Kristian



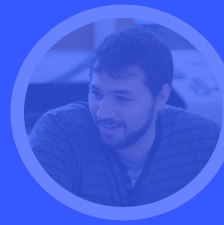
Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

## Manager

- 3 years at TF
- 3 years in DPD

Hired for DPD

# DIGITAL PRACTICE



Saji



Kristian



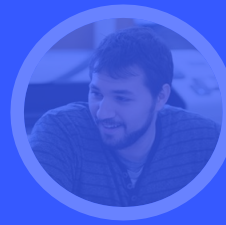
Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

## Lead Specialist

- 3 years at TF
- 2 years in DPD

## Previous Department:

- Residential + Mixed- Use

# DIGITAL PRACTICE



Saji



Kristian



Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

## Lead Specialist

- 6 years at TF
- 3 years in DPD

## Previous Department:

- Interior Design
- BIM Transformation



# DIGITAL PRACTICE



Saji



Kristian



Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

## Content Creation

- 5 years at TF
- 1.5 years in DPD

## Previous Department:

- Visualization
- Graphic Solutions
- Environment Replication

# DIGITAL PRACTICE



Saji



Kristian



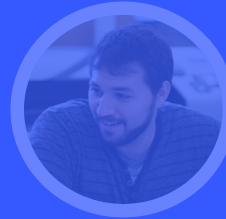
Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

Content Creation  
Starting December 9

# DIGITAL PRACTICE



Saji



Kristian



Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

## Knowledge Manager

- 5 years at TF
- 1 year in DPD

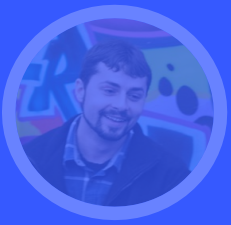
## Previous Department:

- Commercial + Industrial

# DIGITAL PRACTICE



Saji



Kristian



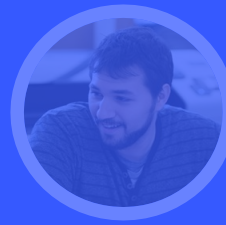
Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

Laser Scanning Specialist

- 1 year at TF
- 1 year in DPD

Hired for DPD



# DIGITAL PRACTICE



Saji



Kristian



Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

**Programmer**

- 6 month at TF
- 6 month in DPD

**8 month co-op**

# DIGITAL PRACTICE



Saji



Kristian



Elizabeth



Rocky



Mauricio



Marco



Srujana



Mohsen



Ross

## 3D Printing Spc

- 1 years at TF
- 2 months in DPD

## Previous Department:

- Residential +  
Mixed-use

# DIGITAL PRACTICE



Saji

Manager



Kristian

Lead Specialist



Elizabeth

Lead Specialist



Rocky

Content Creation



Mauricio

Content Creation



Marco

Knowledge Manager



Srujana

Laser Scanning



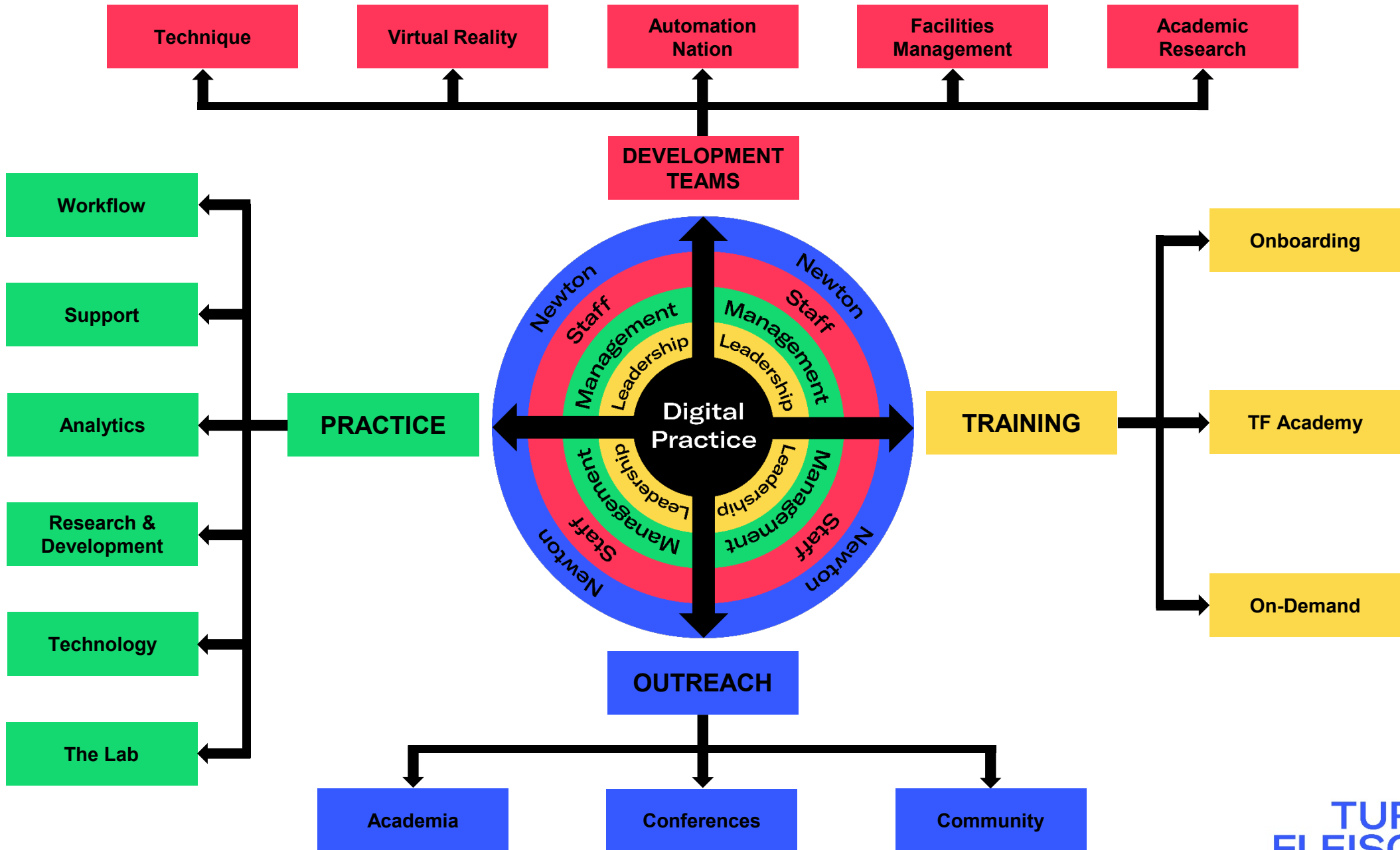
Mohsen

Programmer

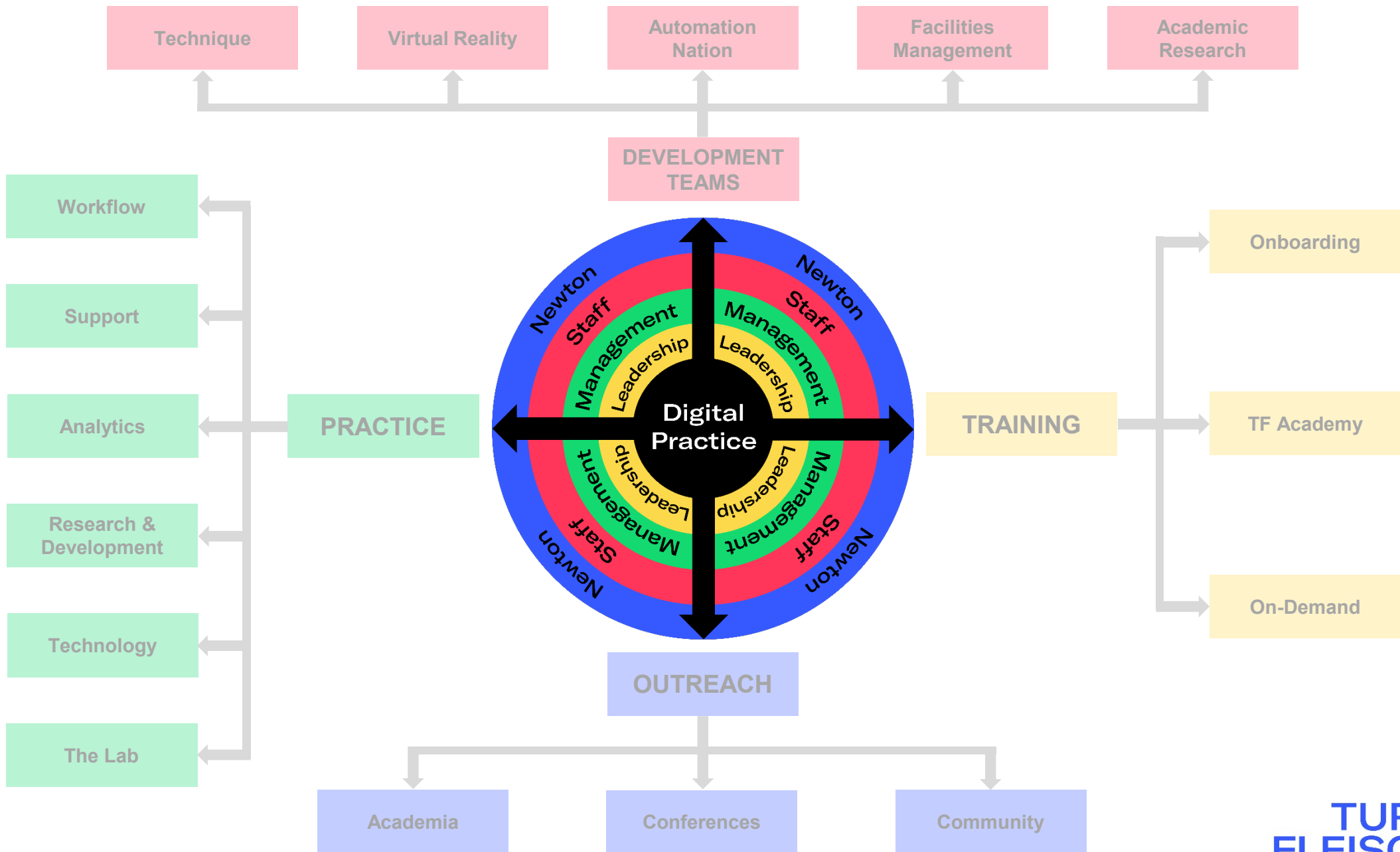


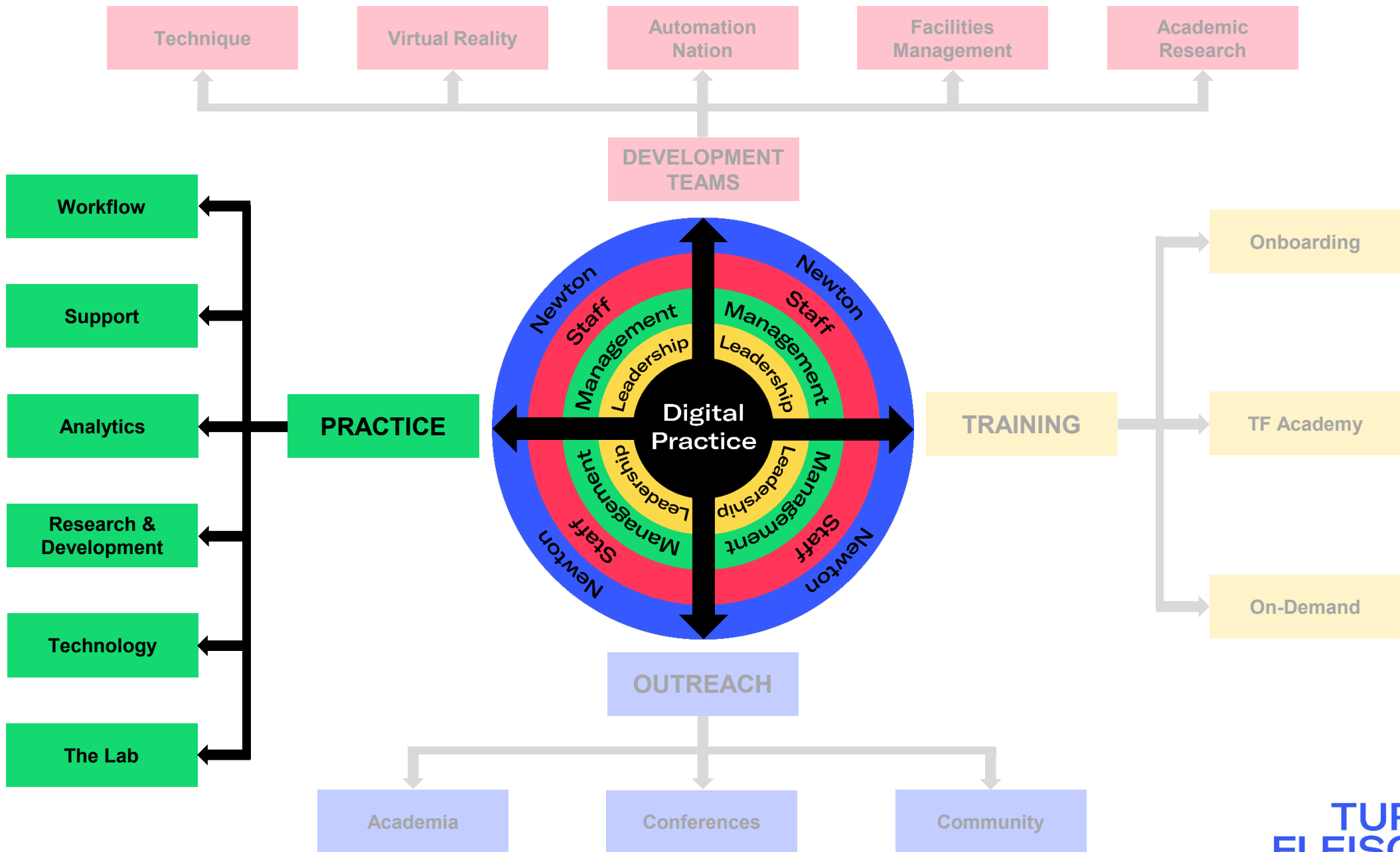
Ross

3D Printing Spc



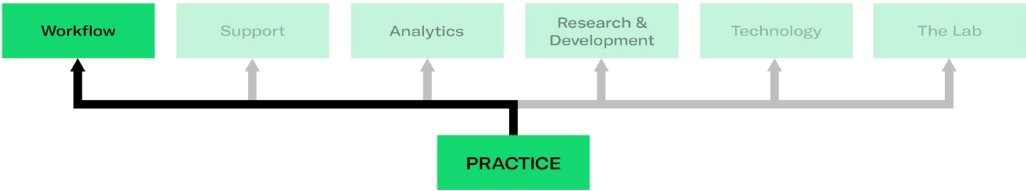






# Practice

## Workflow – BIM Implementation



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Turner Fleischer BIM Execution Plan  
IPD/BIM EXECUTION PLAN V3.6

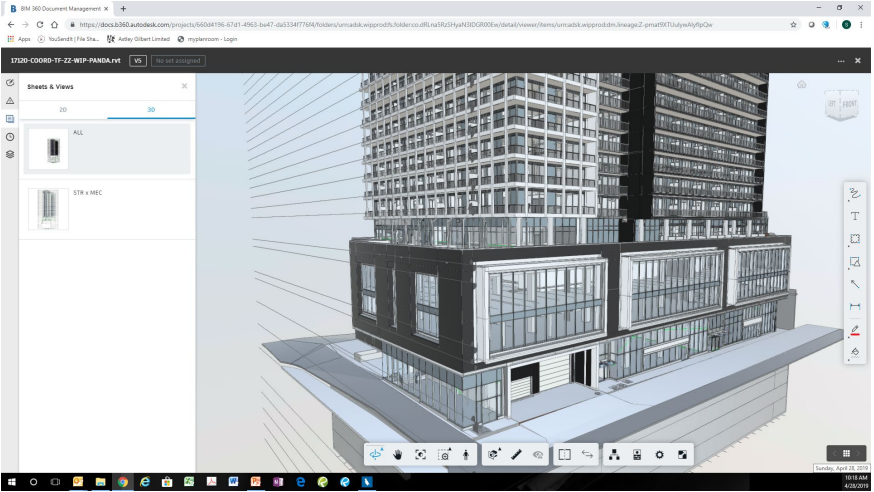
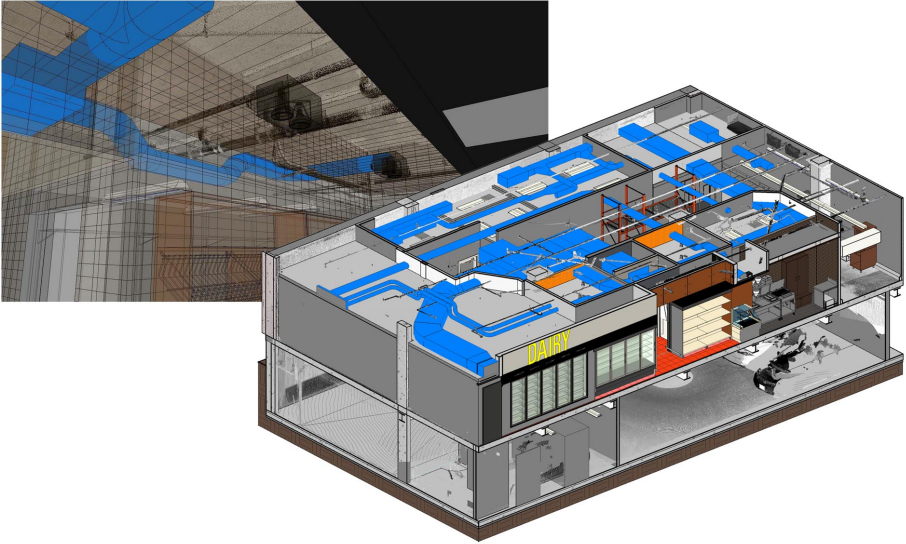
Project Name  
2019-05-01

RO - Preliminary

REVISION RECORD

REVISION	DATE	BY WHOM	COMMENTS

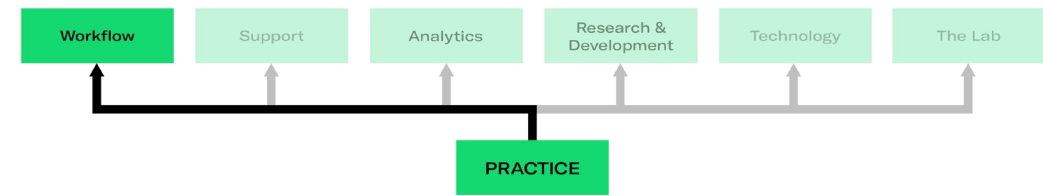
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TURNER  
FLEISCHER

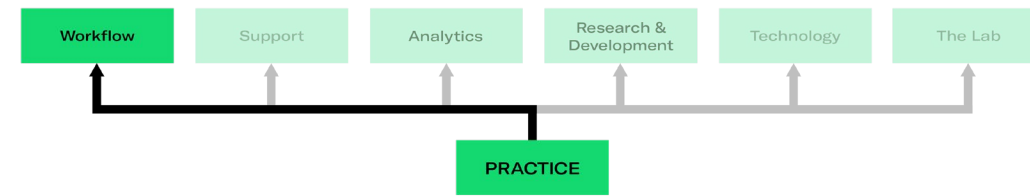
# Practice

## Workflow – Model QA/QC



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[BROWSE](#)[PAGE](#)[Home](#) [People](#) [Practice](#) [Culture](#) [Learning](#) [Core Team](#)

### Project Directory

#### Calendars

Meeting Spaces  
Conference Lines  
Site Visits  
Laser Scanning

#### Project Essentials

Administration  
Newforma  
BIM in Practice  
**Standards**  
Procedures  
Planning Approvals  
QA + Risk Management  
Building Permit  
Specifications  
Tender Process  
Construction  
Administration

#### Digital Practice

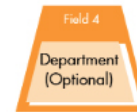
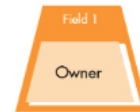
Our Vision  
Research + Development  
Technology  
Training  
Scripts  
Support

#### Reference Material

## LINE STYLE NAMING

### FORMATTING RULES:

- All fields are required except where indicated.
- Fields must be separated by a hyphen character "-". Hyphens should not be used anywhere else in the line style name with exception of a performance range.
- Forward slashes "/" and dots "." are permitted to indicate fractions.



Field 1	Owner
Field 2	Use Ex. <ul style="list-style-type: none"><li>• Above, Air Barrier, Fire Rating, Grid Line, Hidden, Markup</li></ul>
Field 3	Description (Optional) A description that further specifies use, scale, line weight, colour, etc. If this field is blank while field 4 is used, it is recommended to fill this field with either "Standard" or a colour such as "Black" in order to avoid field 4 shifting to 3. This will maintain clarity in the naming.

## STANDARDS

[+ new Wiki page](#)

Name  
Enscape TF Branding  
Revit Parameters Standard (Content Creation)  
Standard Titleblock Use  
Titleblock Use (Loblaws)

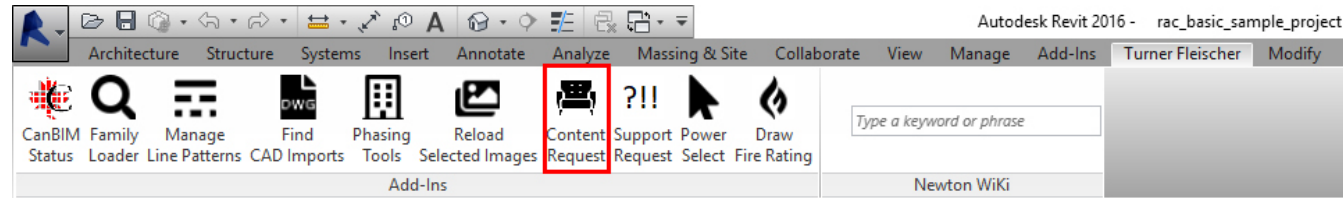
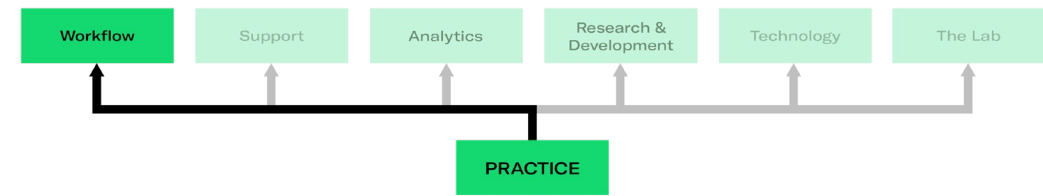
## NAMING STANDARDS

[+ new Wiki page](#)

Name  
Family Naming  
Group Naming  
**Line Style Naming**  
Material Naming  
Model + Link Naming  
Revit Project Parameter Naming  
Sheet Export Naming  
Sheet Numbering  
Text Style Naming  
Workset Naming

# Practice

## Workflow – Content Creation



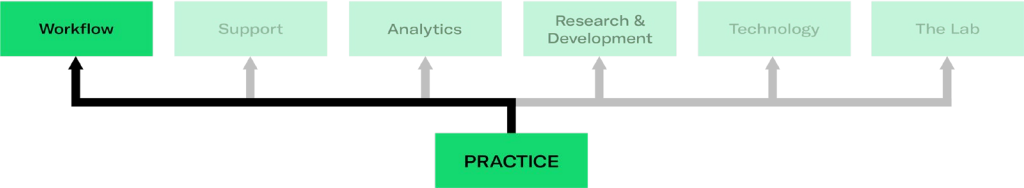
The 'Request Form' dialog box is displayed, showing the following fields and options:

- Submitted By:** Rocky Leong (dropdown)
- Department:** Interior Design (dropdown)
- Type:** Content (dropdown)
- Required By:** 2019-04-25 04:11 PM (calendar icon)
- Project No. (if applicable):** None (dropdown) / No applicable project selected (text field)
- Subject:** (text field)
- Software:** Revit 2016 (dropdown)
- Description:** (large text area)
- ☒ Send an email message to notify DPD team
- ☒ Create folder to add supporting files
- ☐ Add link: <Central file not found>
- Submit** button

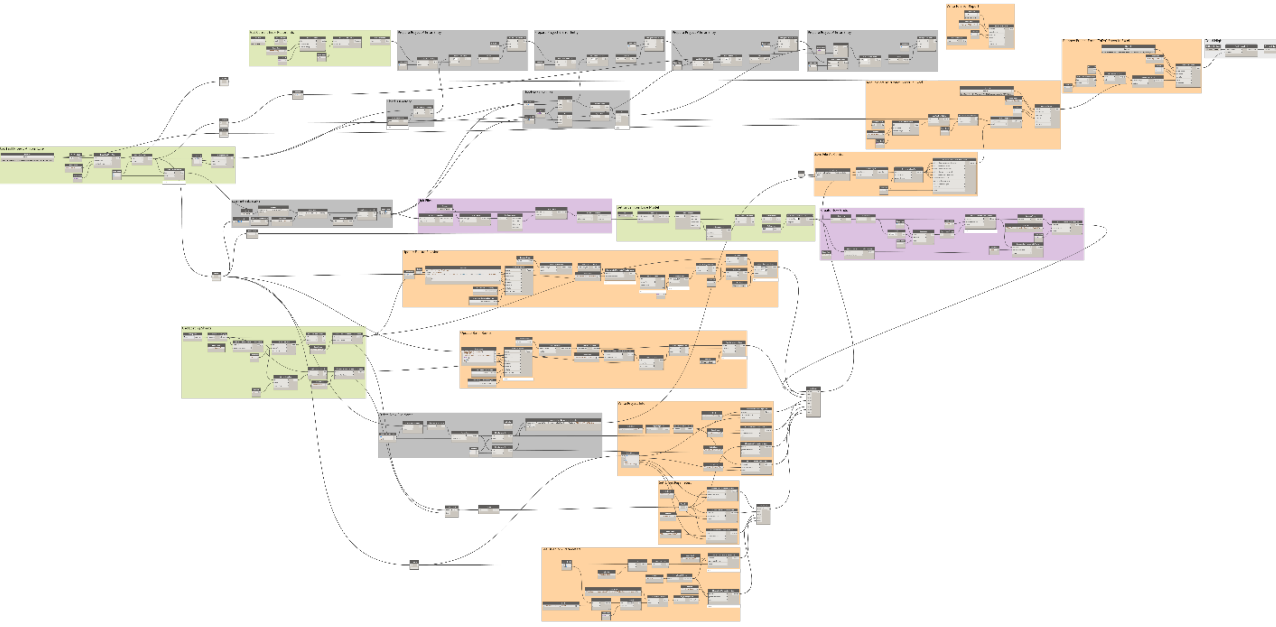
The dialog box has a standard Windows window title bar with minimize, maximize, and close buttons. The bottom right corner shows a status bar with the number '475'.

# Practice

## Workflow – Automation



Mobile Shop automation list_WIP (MS) - Excel										
Matthew Shelp										
F:\proj\99251\99251F7-Mobile Shop (2019)\07. Working Files\Revit										
S	Tech	Owner	Address	Feature Folder location	Feature file name	Architectural folder location	Architectural file name	LOBLAWS FEATURE FILE NAME	Mobile Shop material library	Store specific Material Library
F1	ADE	2DHP5	OldHedgebrook	DNT 200 Franklin Blvd., Cambridge	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	02467_57N_F1_L_R00_FXTUR E.rvt	02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F2	CAT	Loblaw	Great Food	5000 Glen Erin Drive, Mississauga	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00003-ARCH-TF-22-VIP-PCF (No file yet)	00003-ARCH-TF-22-VIP-PCF (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F3	ACM	Loblaw	Great Food	301 High Tech Rd., Richmond Hill	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F4	NFP	Loblaw	Great Food	200 Bullock Dr., Markham	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
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F9	CAT	PCSS	Superstore	875 Highland Ave. V., Kitchener	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F10	CAT	PCSS	Superstore	789 Borden Avenue, Peterborough	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F11	NFP	AAVASS	Superstore	69 Trindly Dr., Moncton	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F12	AAV	AAVASS	Superstore	650 Portland St., Dartmouth	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F13	TJB	AAVASS	Superstore	818 Rotheray Ave., Saint John	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F14	JMB	PCSS	Superstore	1972 Parkdale Ave., Brockville	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
F15	PMS	PCSS	Superstore	125 Queensway East, Simcoe	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	00032-ARCH-TF-22-VIP (No file yet)	00032-ARCH-TF-22-VIP (No file yet)	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt	F:\proj\99251\0020F5-PC Express - LRE (2019)07. Working Files\Revit\Fixtur E\02467_57N_F1_L_R00_FXTUR E.rvt
Master List										
Fix To Do										
Base To Do										
Working To Do										
Working Done										



S



The screenshot shows a 'Support Request Form' window. It contains several input fields and checkboxes. The 'Submitted By' field is set to 'John Doe', 'Department' to 'Commercial +', 'Type' to '2D Work', and 'Required By' to '2018-01-01 01:41 PM'. The 'Project No. (if applicable)' field is set to 'None'. The 'Subject' field is empty, and the 'Software' field is set to 'Revit 2016'. The 'Description' field is a large text area. At the bottom, there are three checkboxes: 'Send an email message to notify DPD team' (checked), 'Create folder to add supporting files' (unchecked), and 'Add link: ...N\07. Working Files\Revit\...' (checked). A 'Submit' button is located at the bottom right.

Support Request Form

Submitted By: John Doe Department: Commercial + Type: 2D Work Required By: 2018-01-01 01:41 PM

Project No. (if applicable): None No applicable project selected

Subject: Software: Revit 2016

Description:

☒ Send an email message to notify DPD team 500

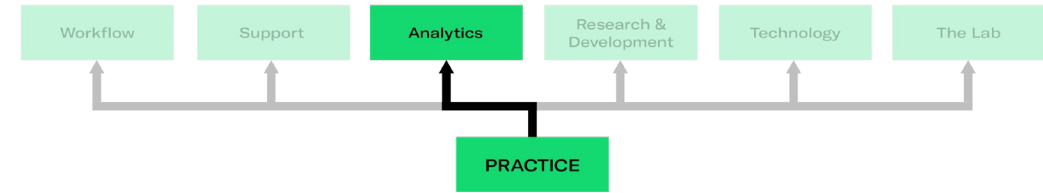
☐ Create folder to add supporting files

☒ Add link: ...N\07. Working Files\Revit\...

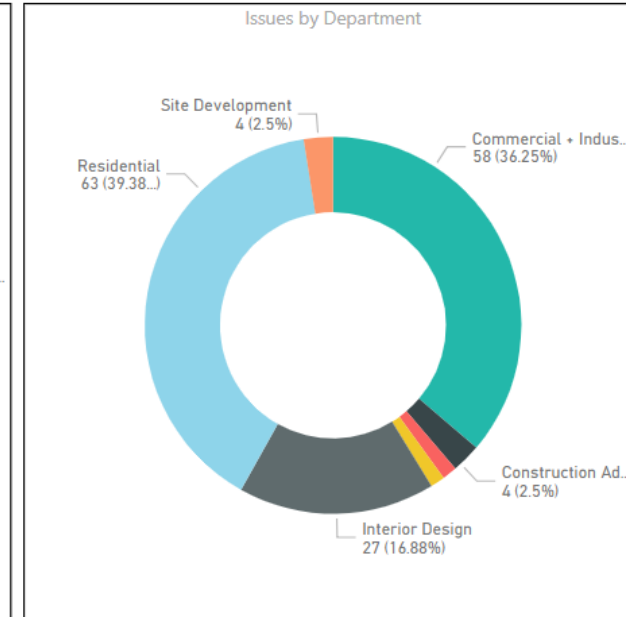
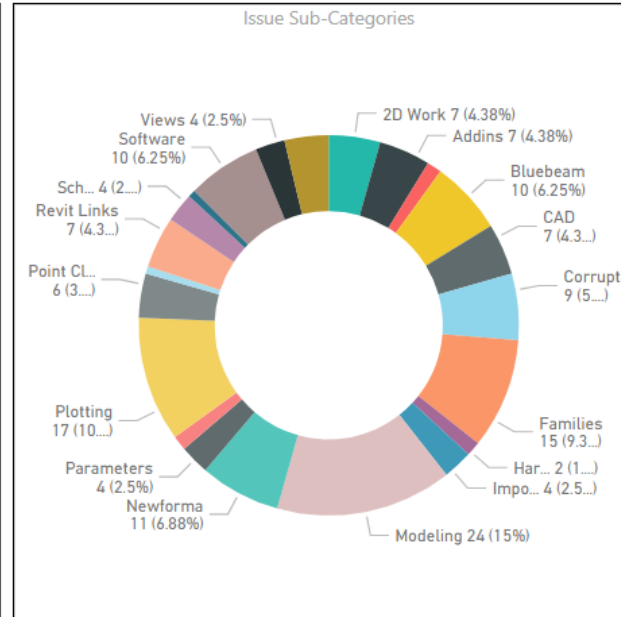
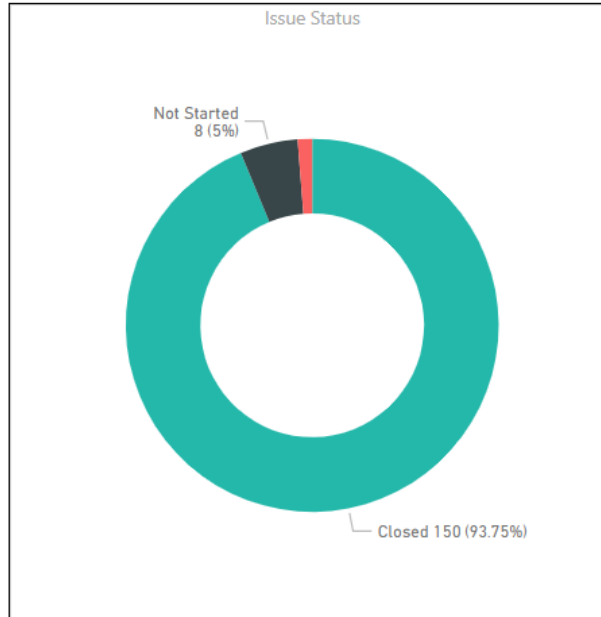
Submit

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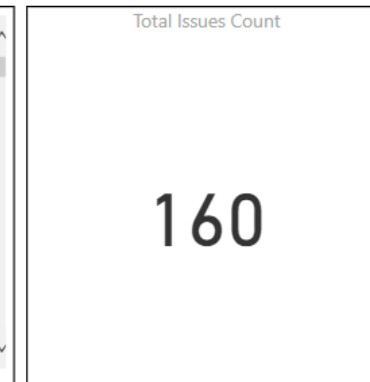
# Practice Analytics



## Troubleshooting Requests Past 3 Months



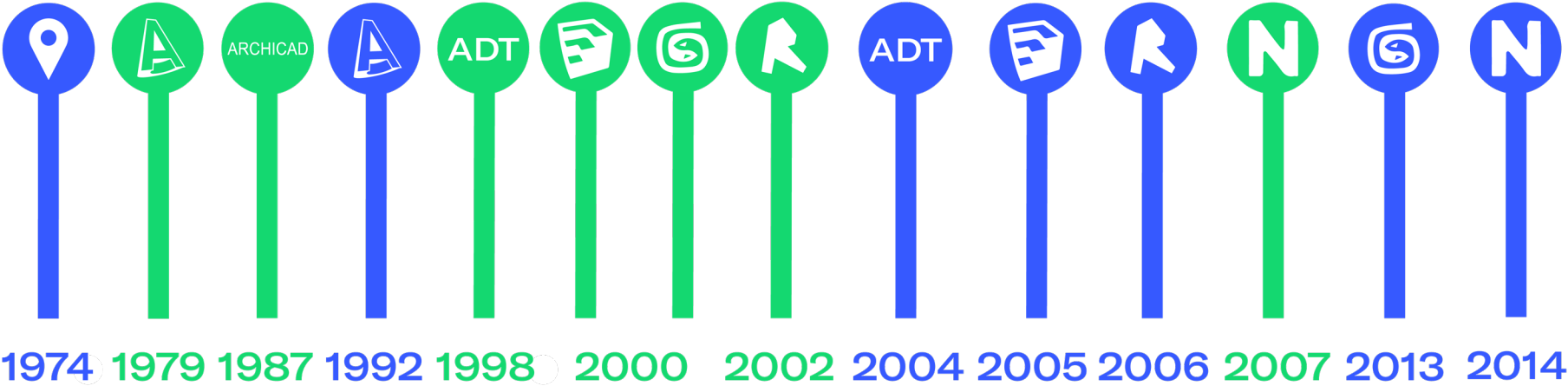
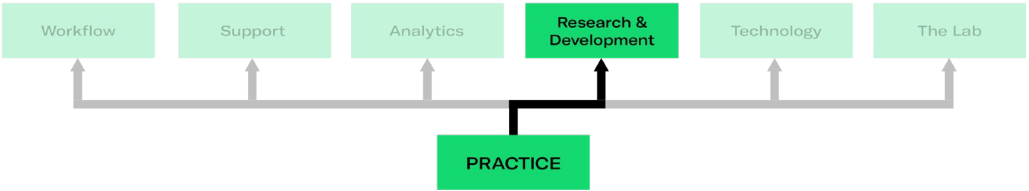
Department	CreationTime	Subject	Status	Created By	AssignedTo
Commercial + Industrial (C)	1/28/2019 1:45:00 PM	Edit family for proeject specific dimensions	Closed	Rocky Leong	
Residential	3/18/2019 9:00:00 AM	How to install Schedule XL addin	Closed	Aimen Sarwar	Abdallah
Residential	2/27/2019 8:25:00 AM	File Size	Not Started	Daisy Yim	Daisy
Residential	2/27/2019 8:26:00 AM	File Size	Not Started	Daisy Yim	Daisy
Residential	2/26/2019 9:59:00 AM	Marketing Drawing Title Block Family Broken	Closed	Daisy Yim	Daisy
Interior Design	2/28/2019 10:00:00 AM	2d/3d Grid Extents lesson at desk	Closed	Laura Simpson	Kristian
Commercial + Industrial (C)	2/22/2019 1:30:00 PM	Adobe printing issues - not printing more than one view/sheet	Closed	Ashley McPhaden	Kristian
Residential	2/12/2019 9:45:00 AM	CADScrubbing issues and Large 3D view limits	Closed	Catherine Martin	Kristian
Residential	2/6/2019 3:15:00 PM	Corruption issues in View template from worksharing	Closed	Aurelie Amable	Kristian
Construction Administration	2/13/2019 3:15:00 PM	Filter lesson for slab edges and groups	Closed	Athene Hummel	Kristian
Residential	1/15/2019 2:30:00 PM	Filters and selection methods	Closed	Aurelie Amable	Kristian
Construction Administration	1/10/2019 11:15:00 AM	Lesson on filters with Michelle and Sussan	Closed	Athene Hummel	Kristian





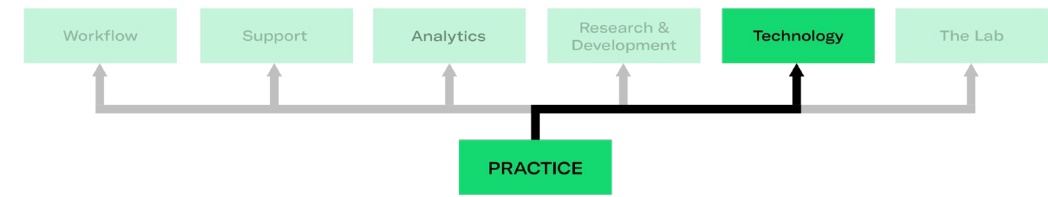
Practice

Research & Development



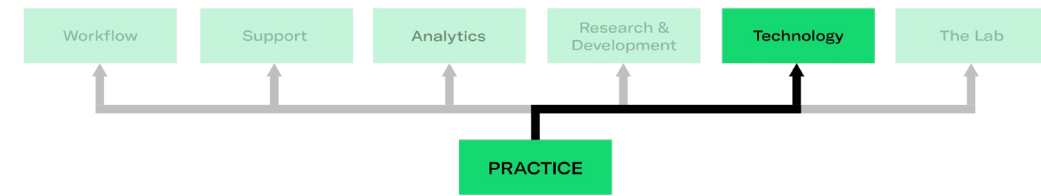
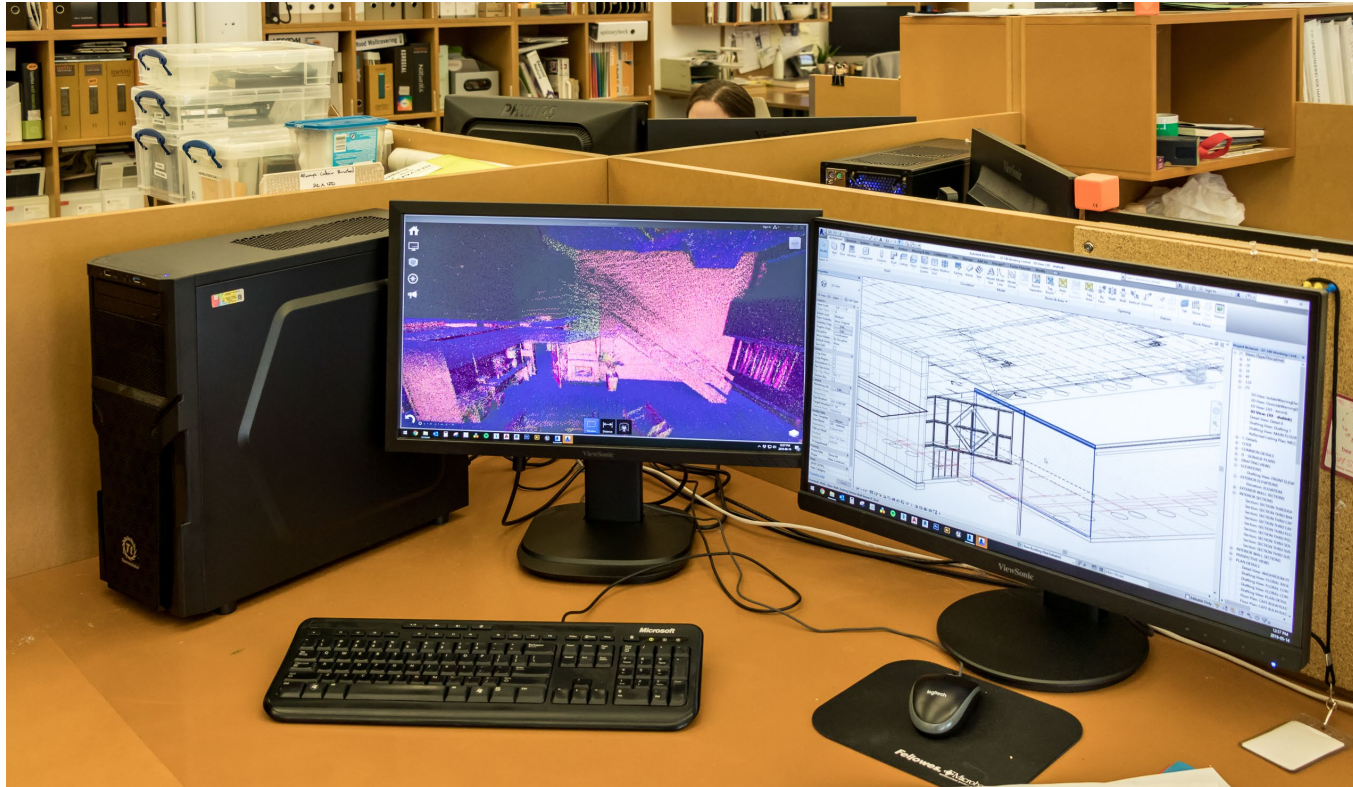
- Industry Shifts
- TF Adoption

# Practice Technology



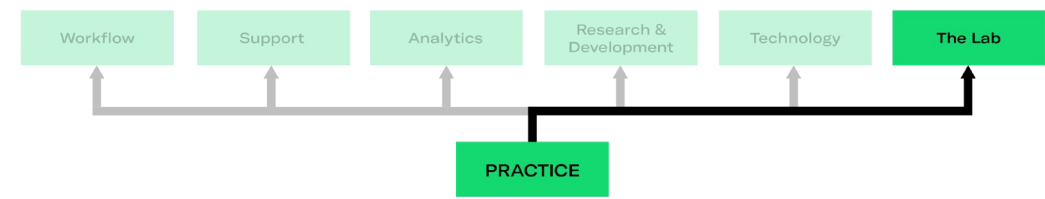
# Practice

## Technology – IT Infrastructure



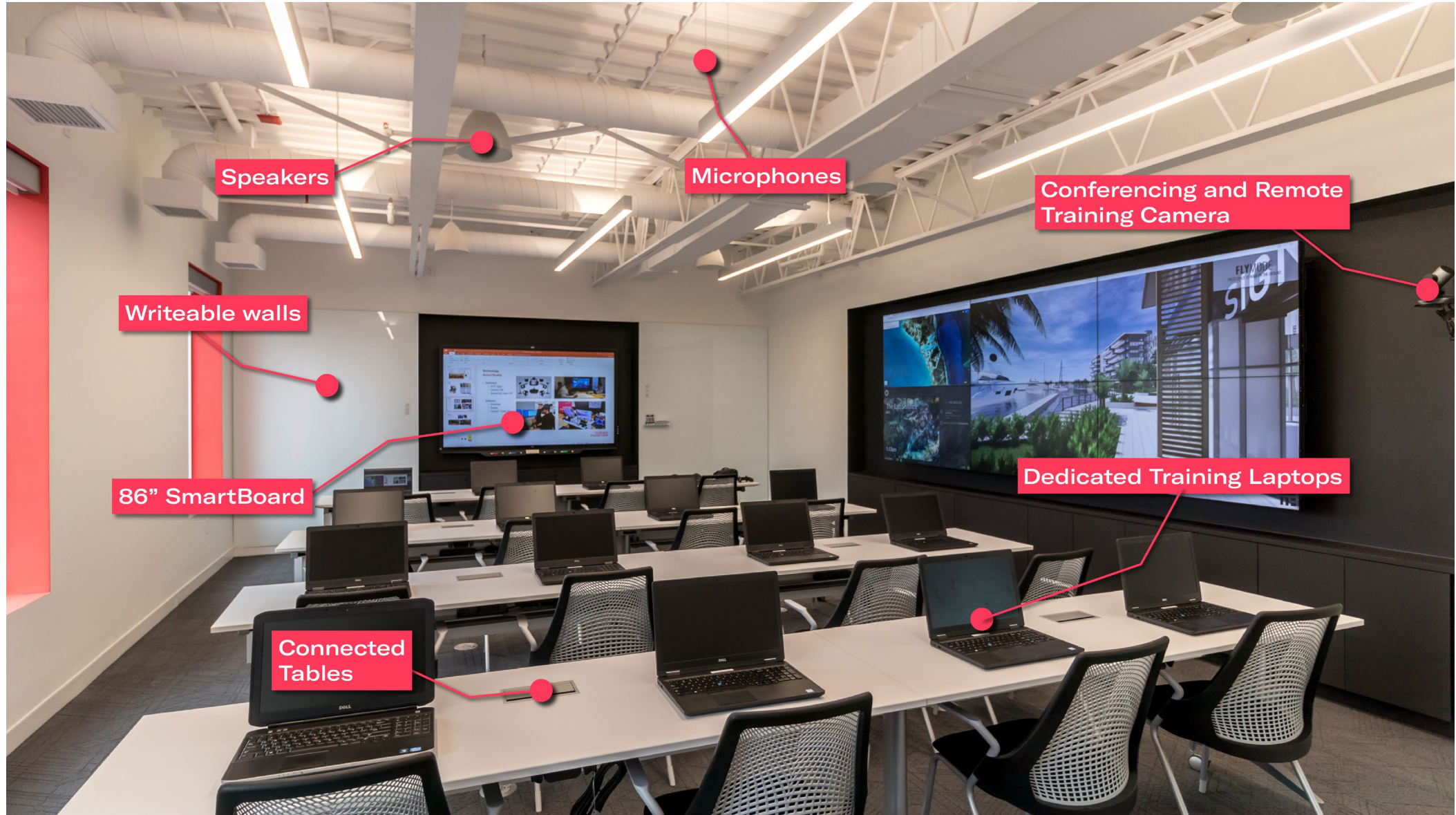
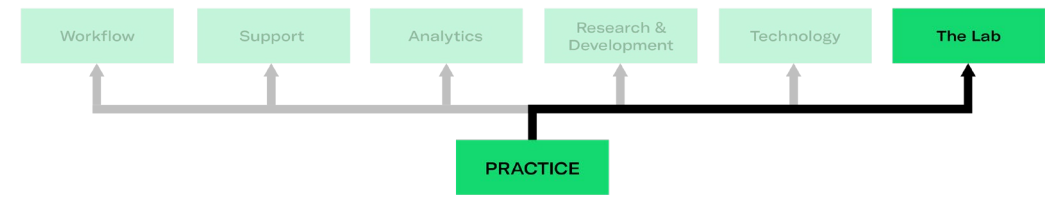


# Practice The Lab



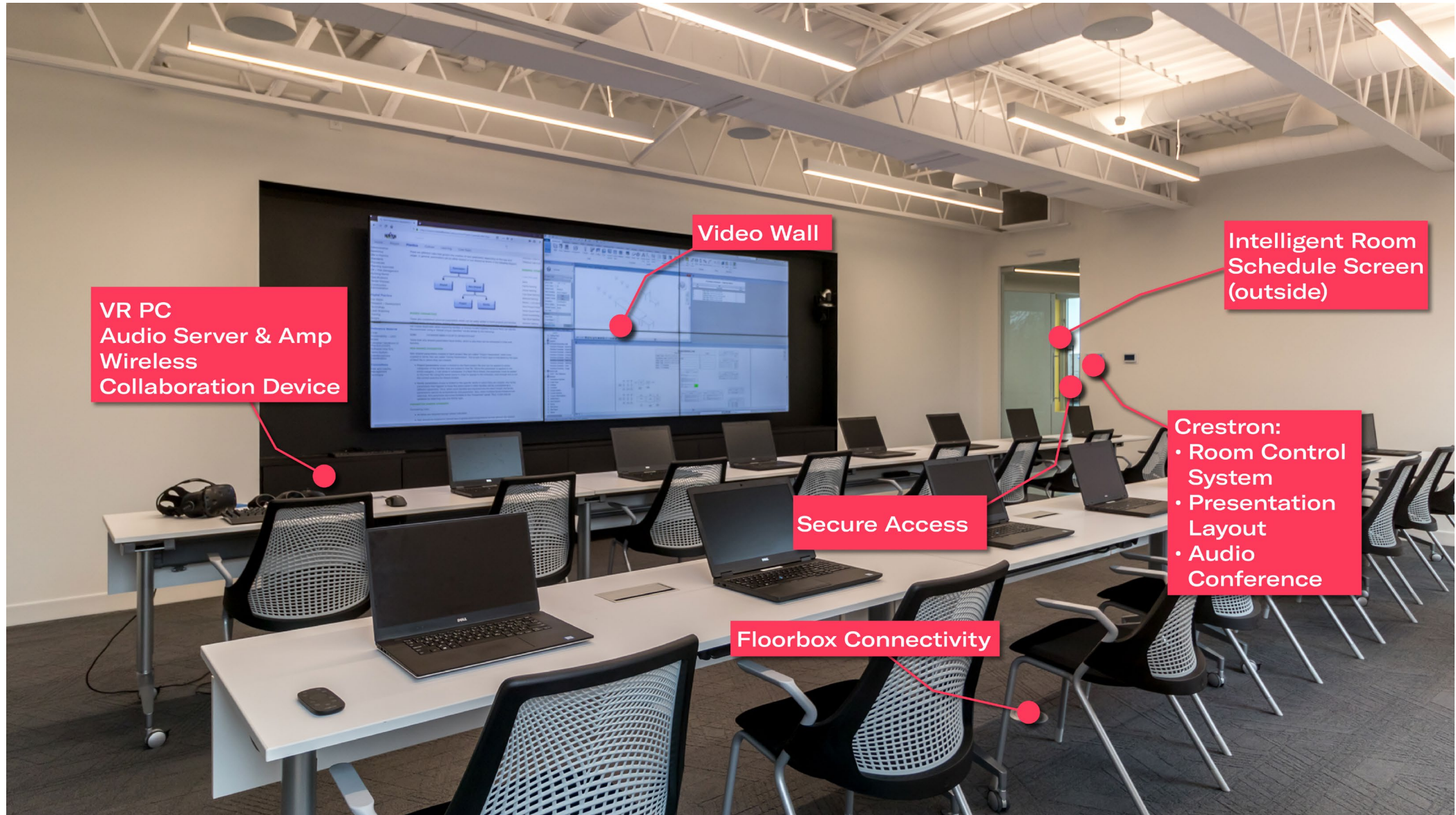
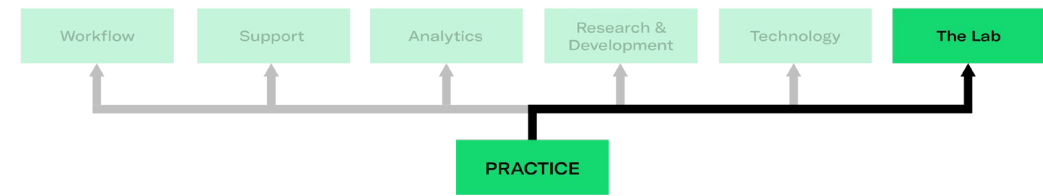


# Practice The Lab



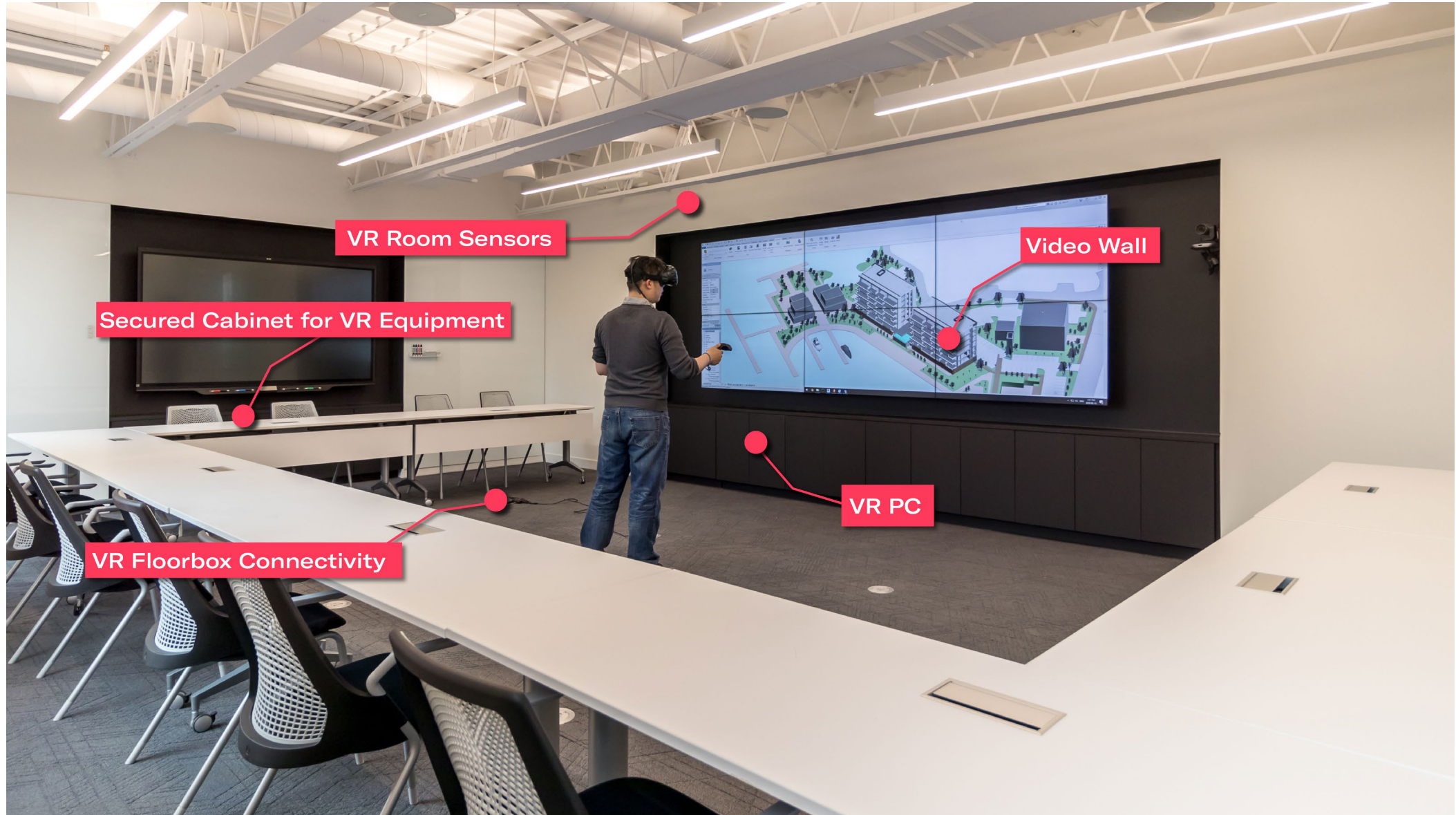
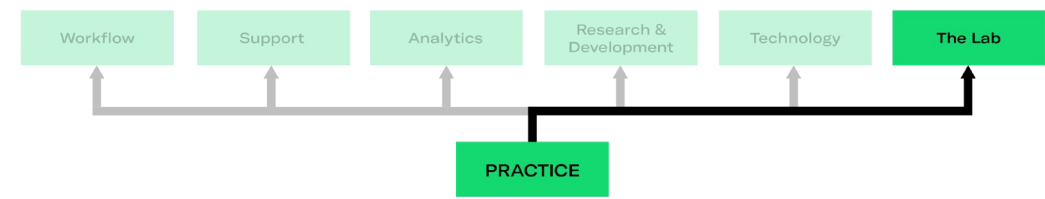


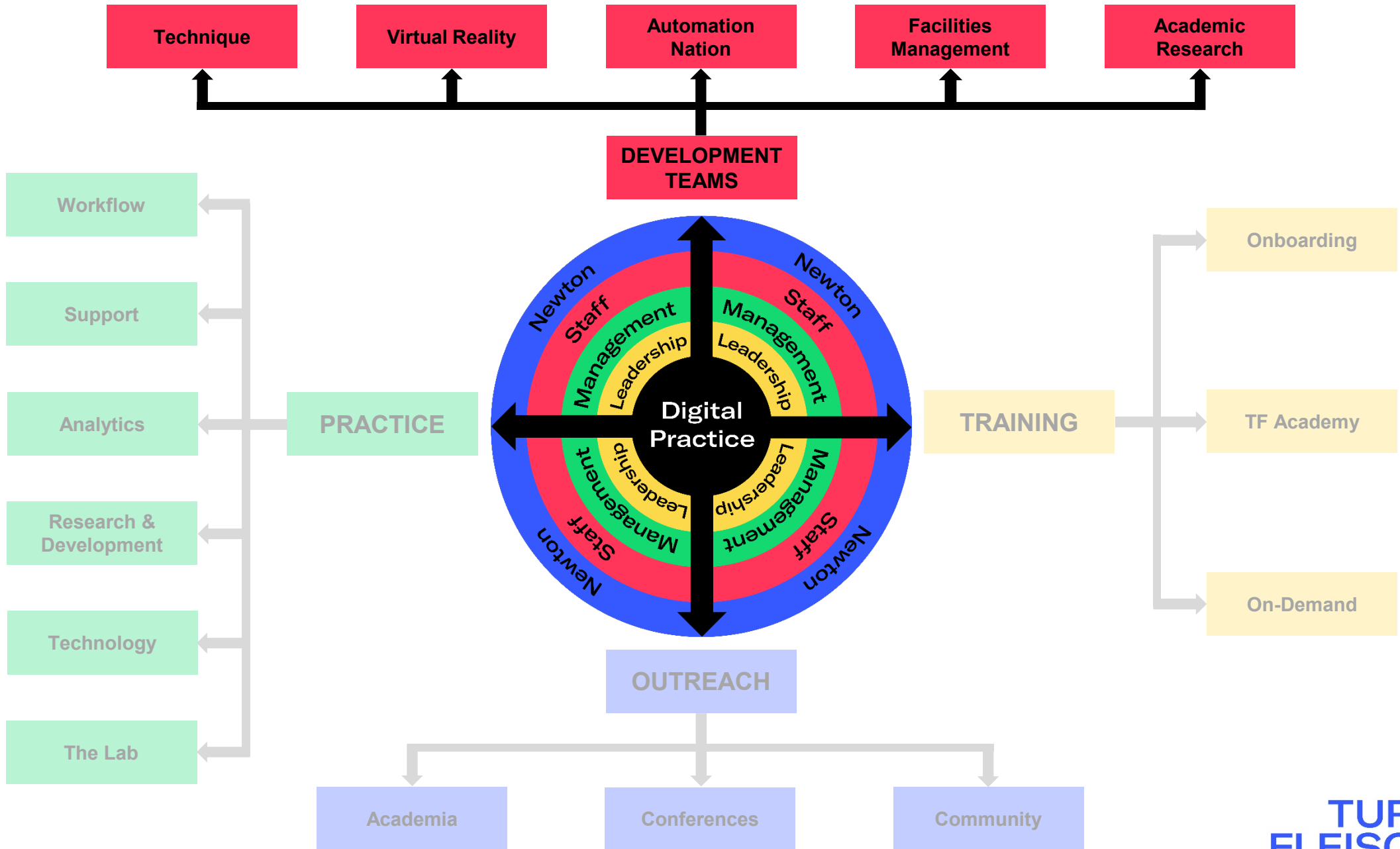
# Practice The Lab





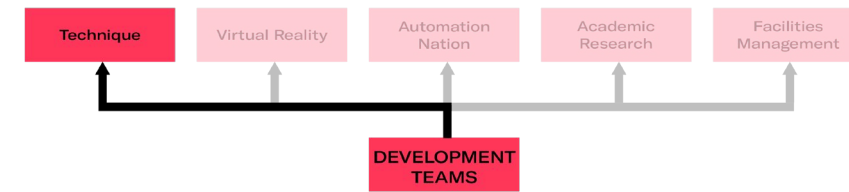
# Practice The Lab





# Development Teams

## Technique



**Nick Bowker**

Manager  
Commercial + Industrial  
**9 years** at TF



**Raza Mehdi**

Associate  
Residential + Mixed Use  
**10 years** at TF



**Ellen Bensky**

Principal – CEO/CFO  
Finance Administration  
**29 years** at TF



**Florian Caffier**

Designer/Technologist  
Marketing + Communications  
**2 year** at TF



**Matthew Shelp**

Intermediate Designer/Technologist  
Commercial + Industrial  
**4 years** at TF



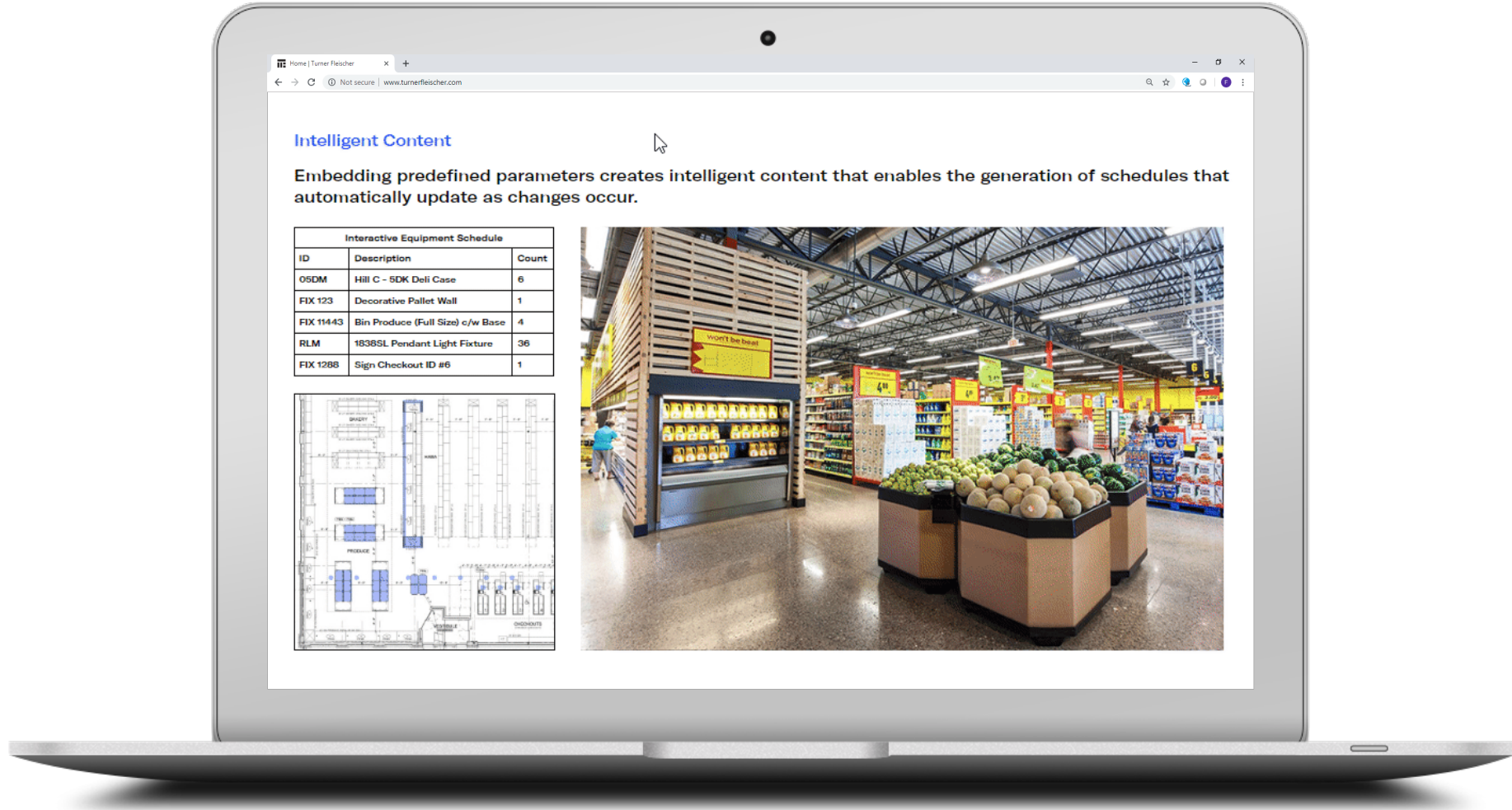
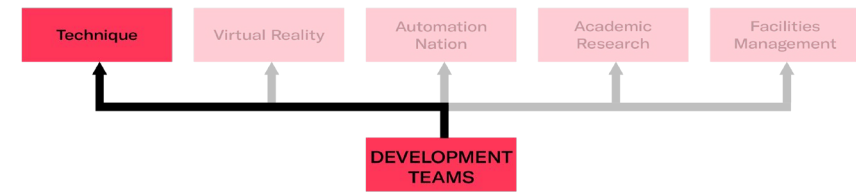
**Calvin Fung**

Project Manager  
Residential + Mixed Use  
**9 years** at TF



# Development Teams

## Technique

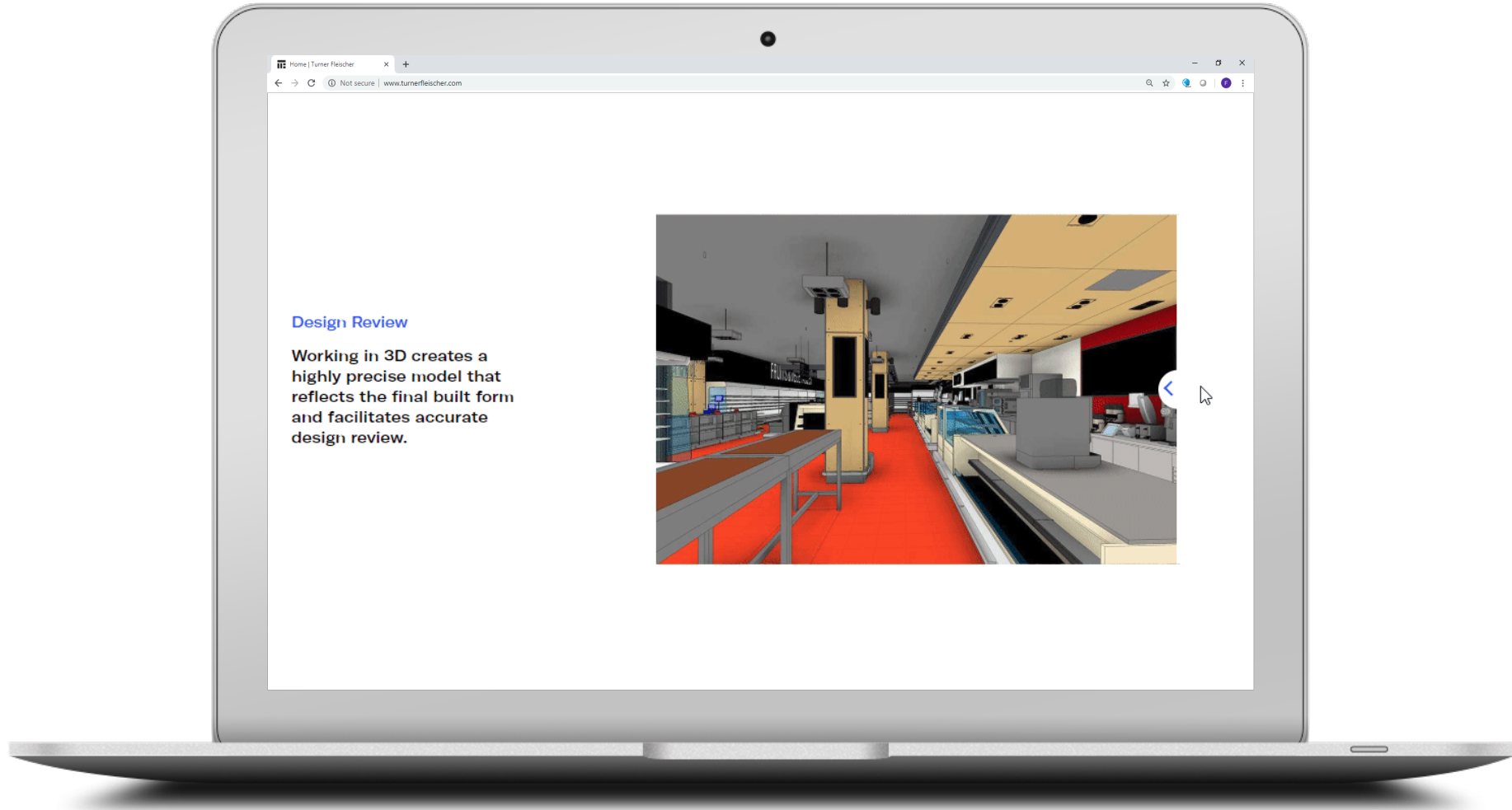
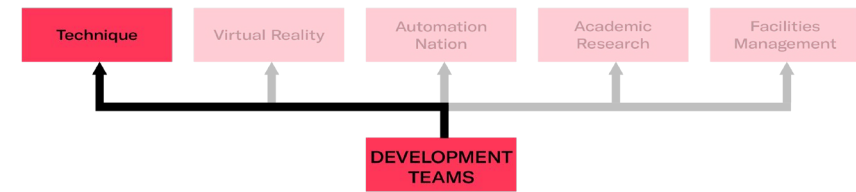


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# Development Teams

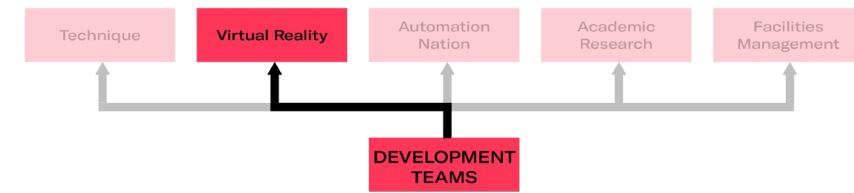
## Technique



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# Development Teams

## Virtual Reality



**Nebojsa Milutinovic**

Intermediate Designer/Technologist  
Residential + Mixed Use  
**3 years** at TF



**Laura Simpson**

Intermediate Designer/Technologist  
Interiors  
**2 years** at TF



**Nick Bowker**

Manager  
Commercial + Industrial  
**9 years** at TF



**Shahin Kiyomarsi**

Designer/Technologist  
Commercial + Industrial  
**2 years** at TF

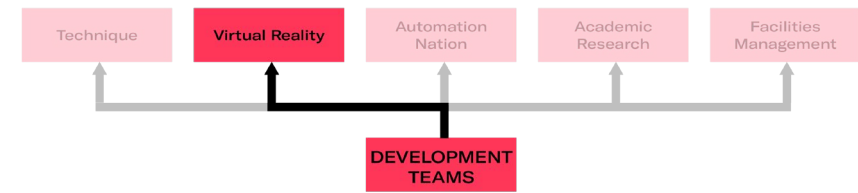


**Daniel Vivat**

Job Captain  
Residential + Mixed Use  
**1.5 year** at TF

# Development Teams

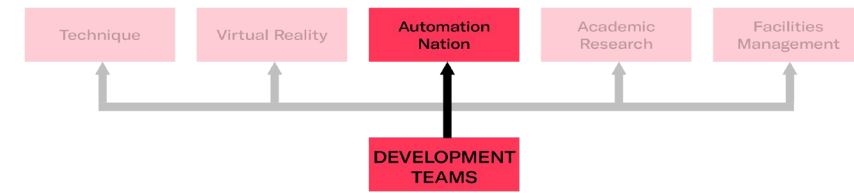
## Virtual Reality



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# Development Teams

## Automation Nation



### Tyler Baxter

Intermediate Designer/Technologist  
Commercial + Industrial  
**2 years** at TF



### Calvin Fung

Project Manager  
Residential + Mixed Use  
**9 years** at TF



### Matthew Shelp

Intermediate Designer/Technologist  
Commercial + Industrial  
**4 years** at TF



### John Corston

Designer/Technologist  
Commercial + Industrial  
**1.5 year** at TF



### Henry Tran

Intermediate Designer/Technologist  
Commercial + Industrial  
**4 years** at TF

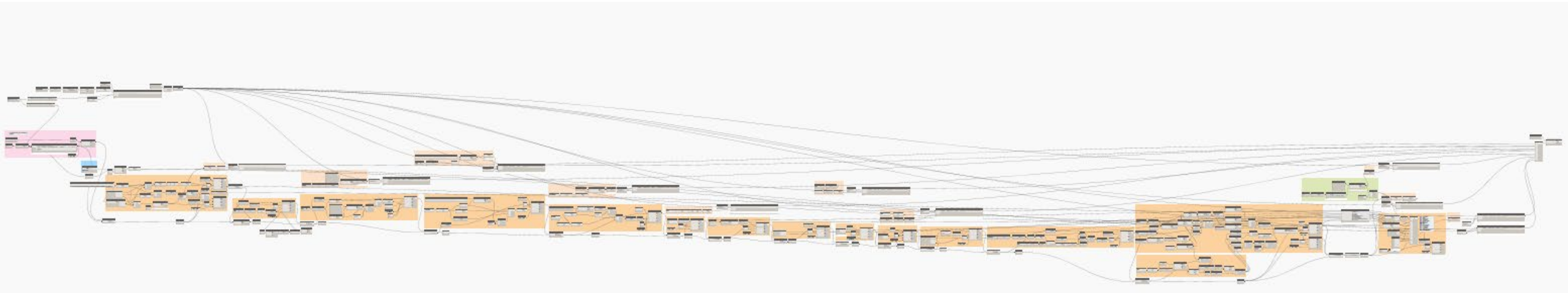
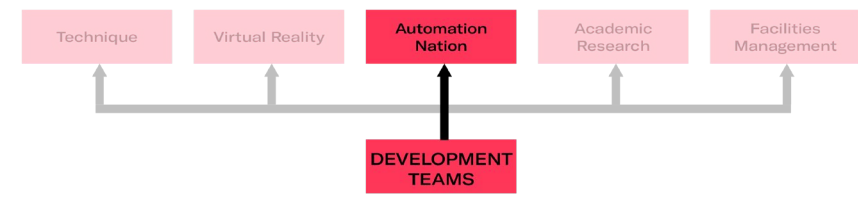


### Mohsen Assaqqaf

Programmer  
Digital Practice  
**6 months** at TF

# Development Teams

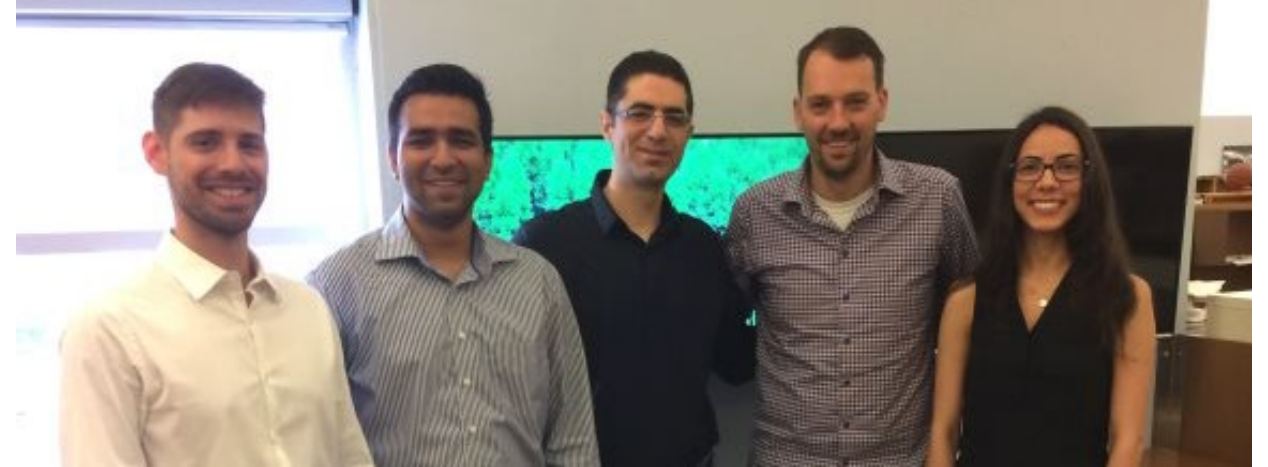
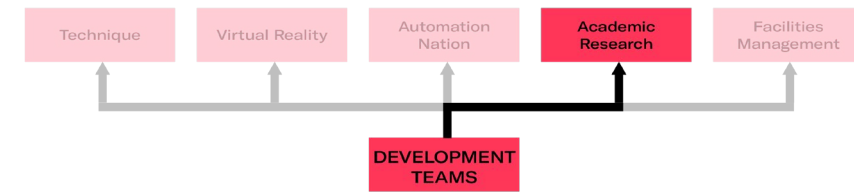
## Automation Nation





# Development Teams

## Academic Research



## Natural Sciences and Engineering Research Council

**NSERC Grant 1:** QTO: Model Analysis and Software Research

**Students:** Jacob Anhang, Fernanda Vale, Alexander Liu

**NSERC Grant 2:** QTO utilizing Dynamo

**Students:** Gabriel Nery, Amrinder Waraich

**NSERC Grant 3:** Validate & Optimize Digital Architectural Content Library

**Students:** Dulce Gallardo, Rabiya Kayhan

**NSERC GRANT 4:** Facilities Management

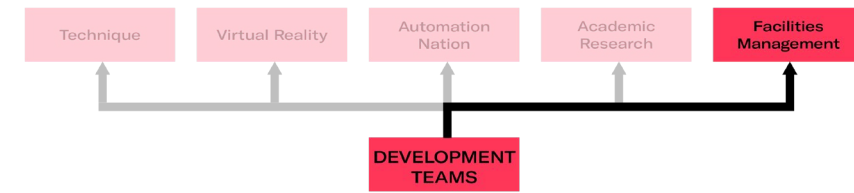
**Students:** Jessica Frasca, Abdallah Darwish



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FLEISCHER**

# Development Teams

## Facilities Management



**Kristian Pal**  
Lead Specialist  
Digital Practice  
**3 years** at TF



**Srujana Janardan**  
Laser Scanning Specialist  
Digital Practice  
**1 year** at TF



**Marco Marcoccia**  
Knowledge Manager  
Digital Practice  
**5 years** at TF

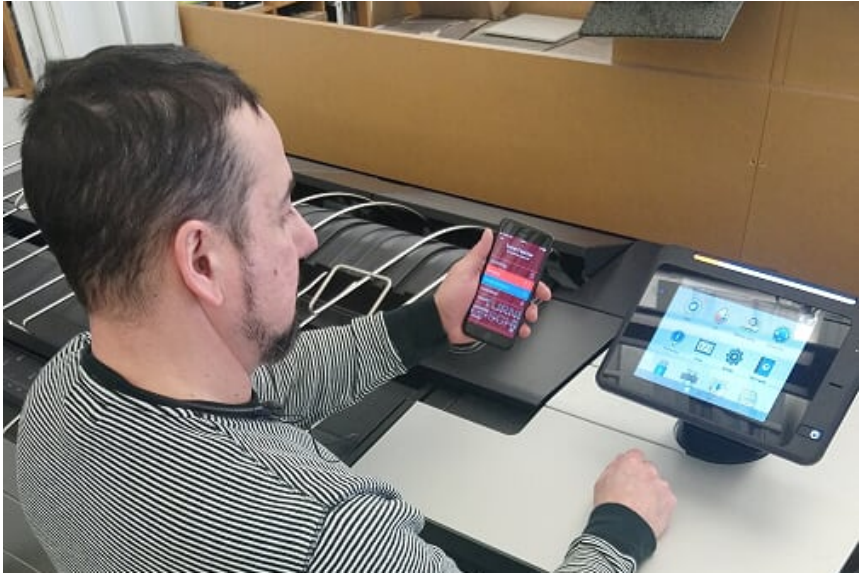
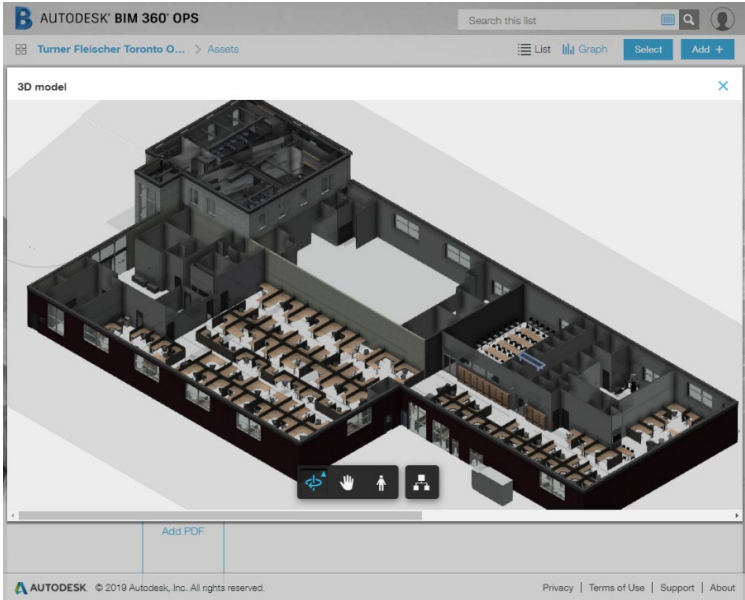
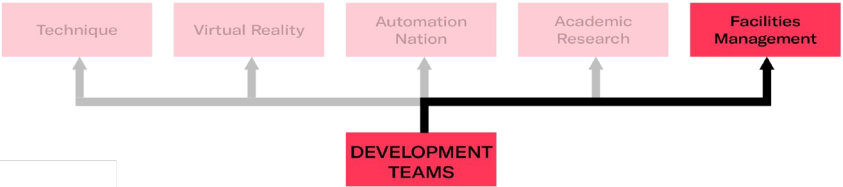
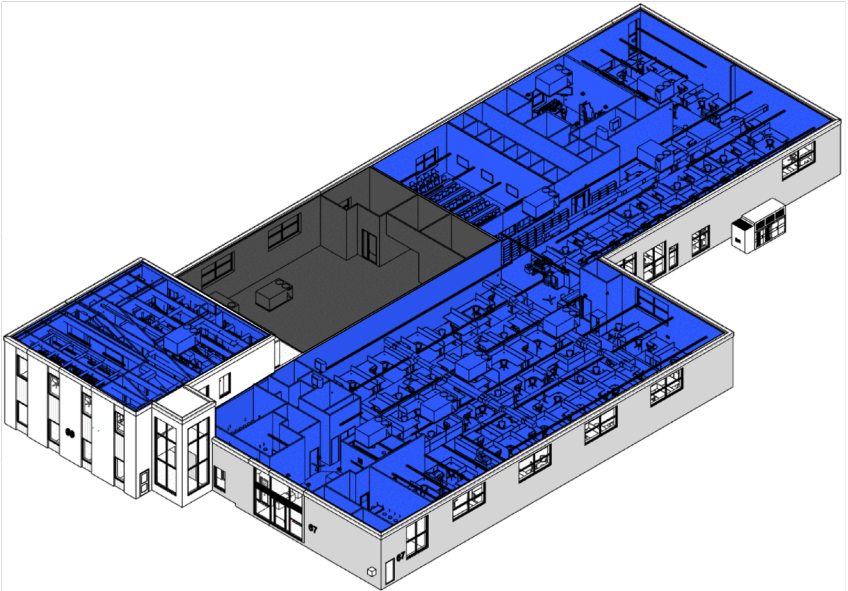
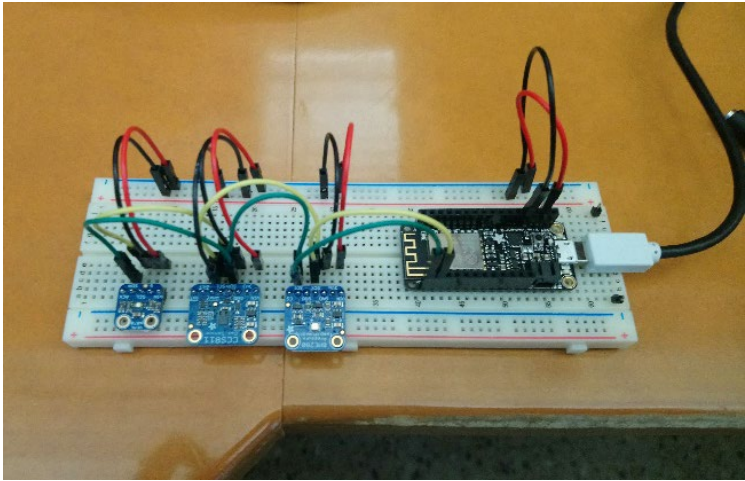


**Abdallah Darwish**  
Designer/Technologist  
Commercial + Industrial  
**3 months NSERC** Research Student  
**4 months** at TF

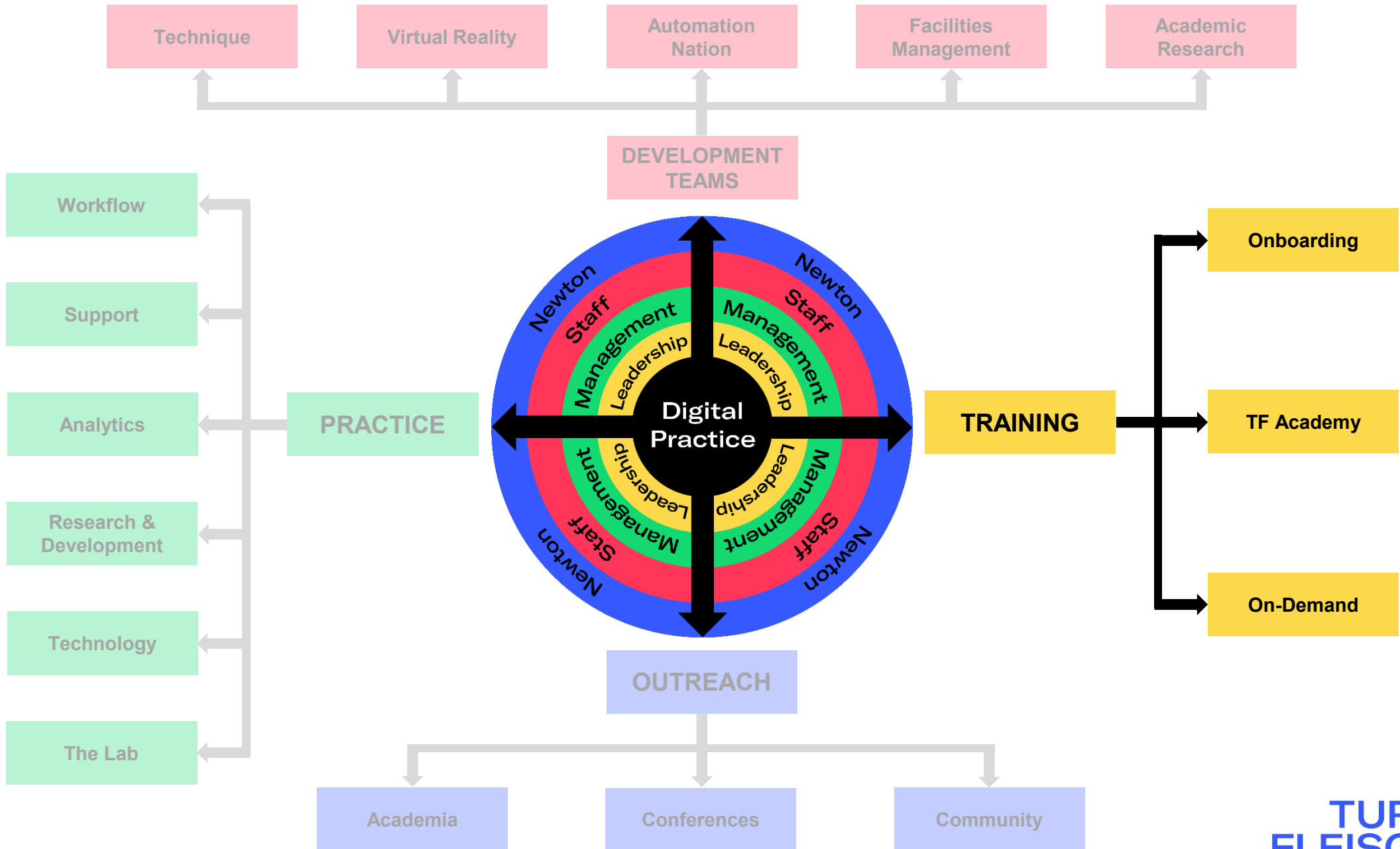


# Development Teams

## Facilities Management



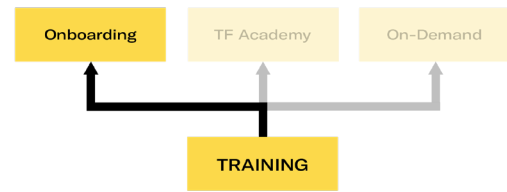
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# Training

## Onboarding

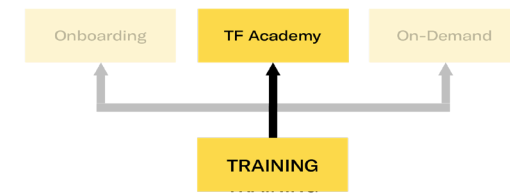


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# Training

## TF Academy

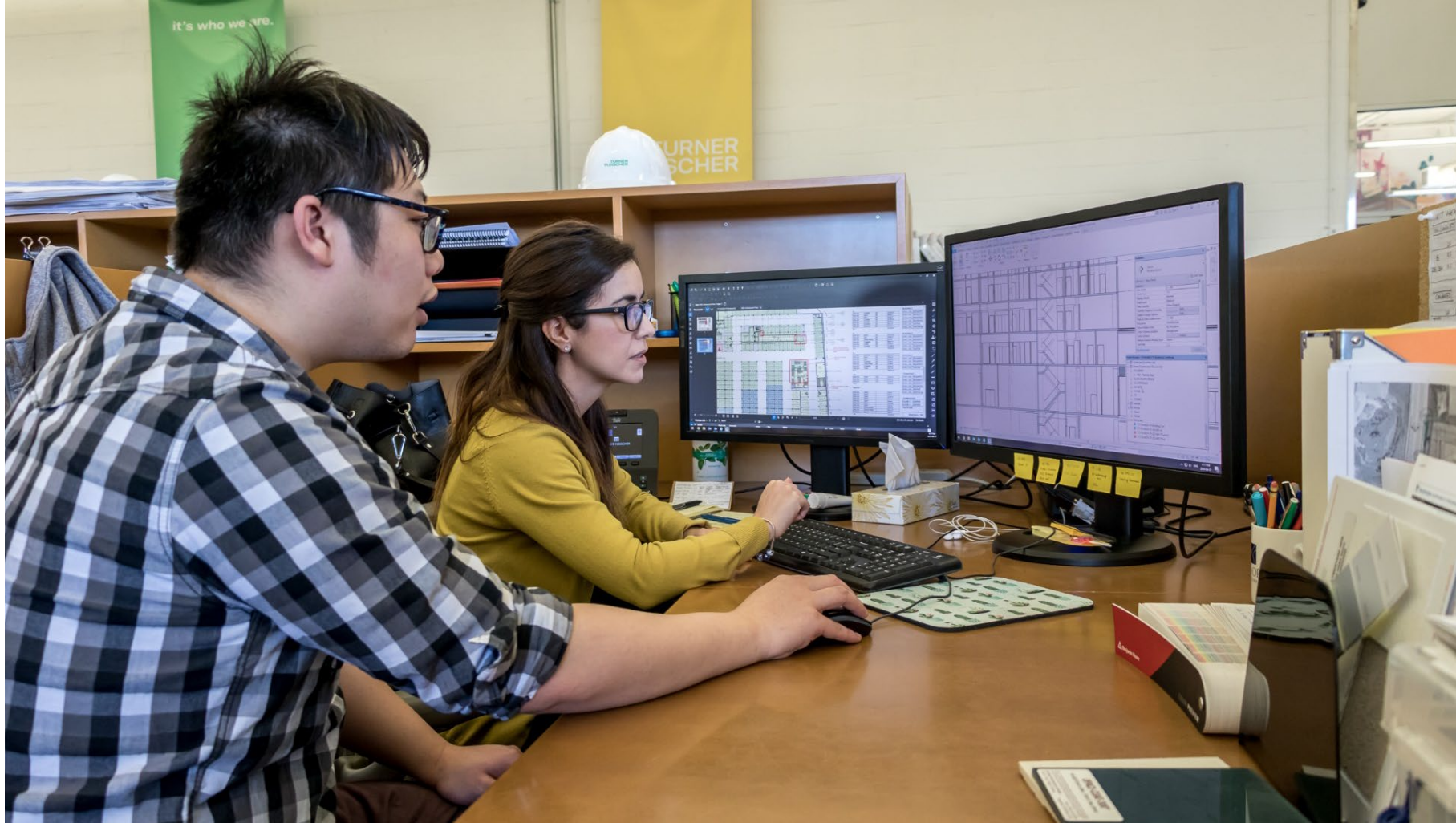
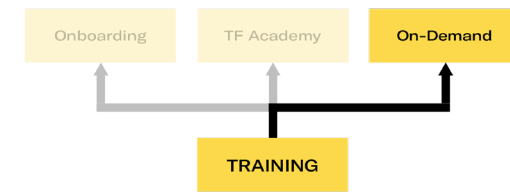


**TURNER  
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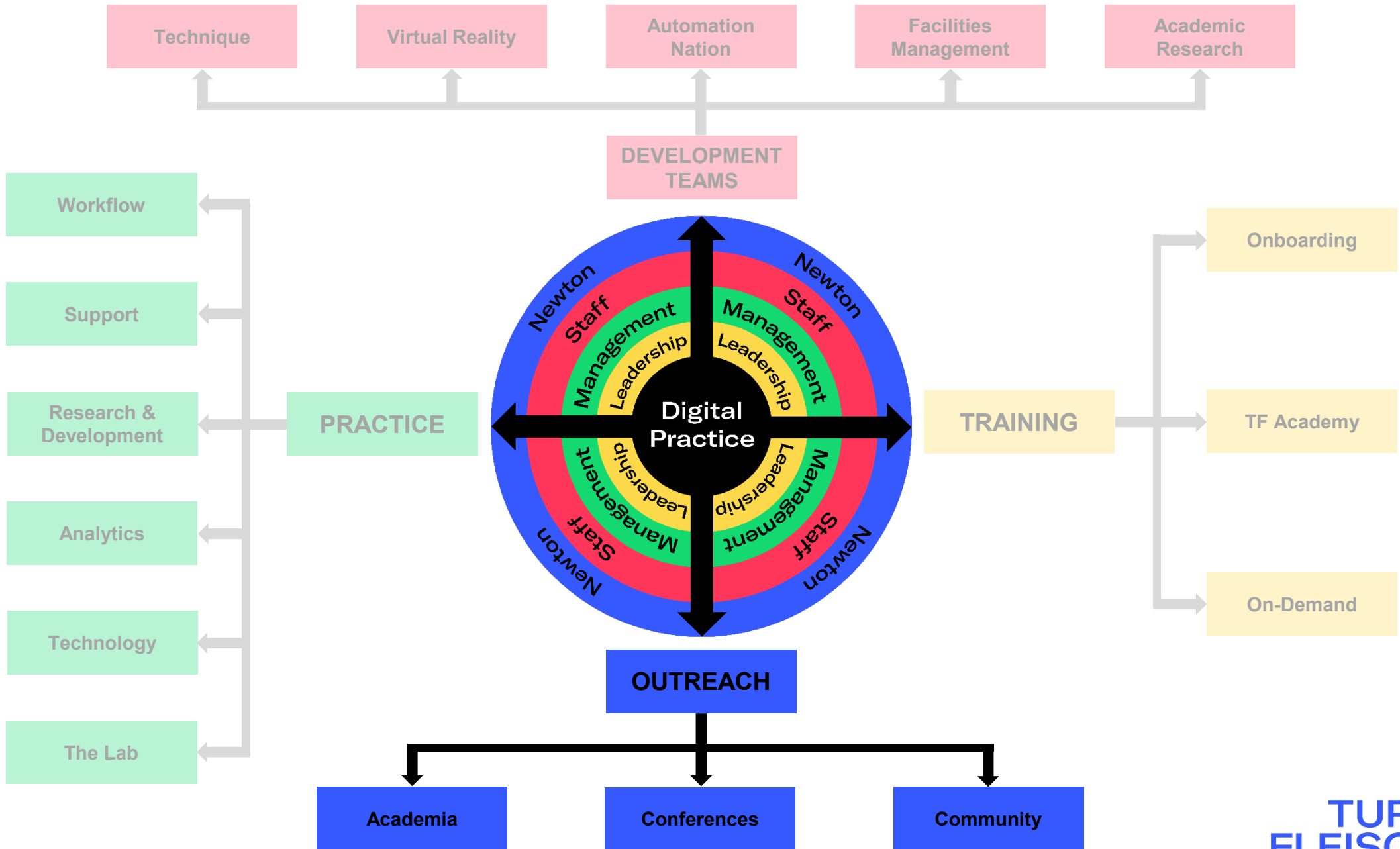


# Training

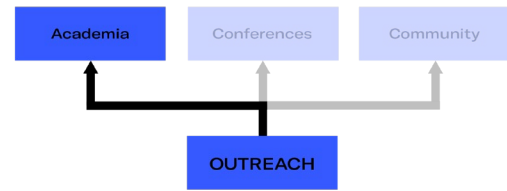
## On-Demand



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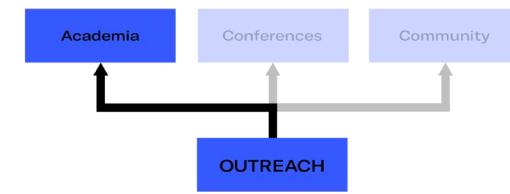
# Outreach Academia



TURNER  
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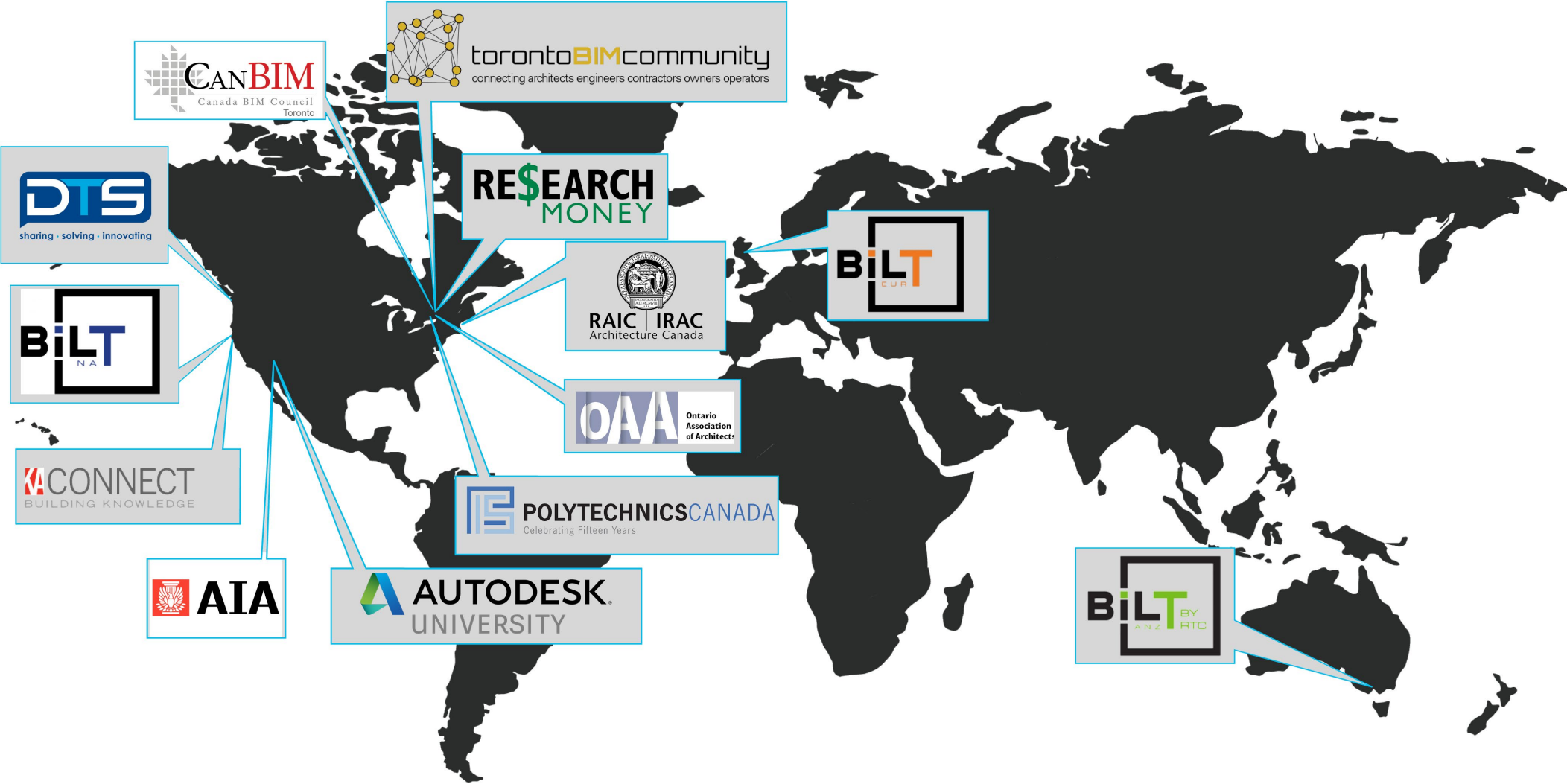
# Outreach Academia



TURNER  
FLEISCHER

Outreach

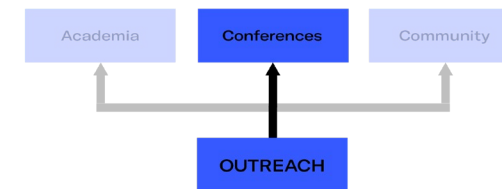
Conferences





# Outreach

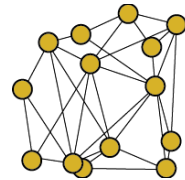
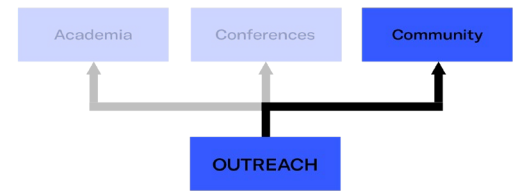
## Conferences



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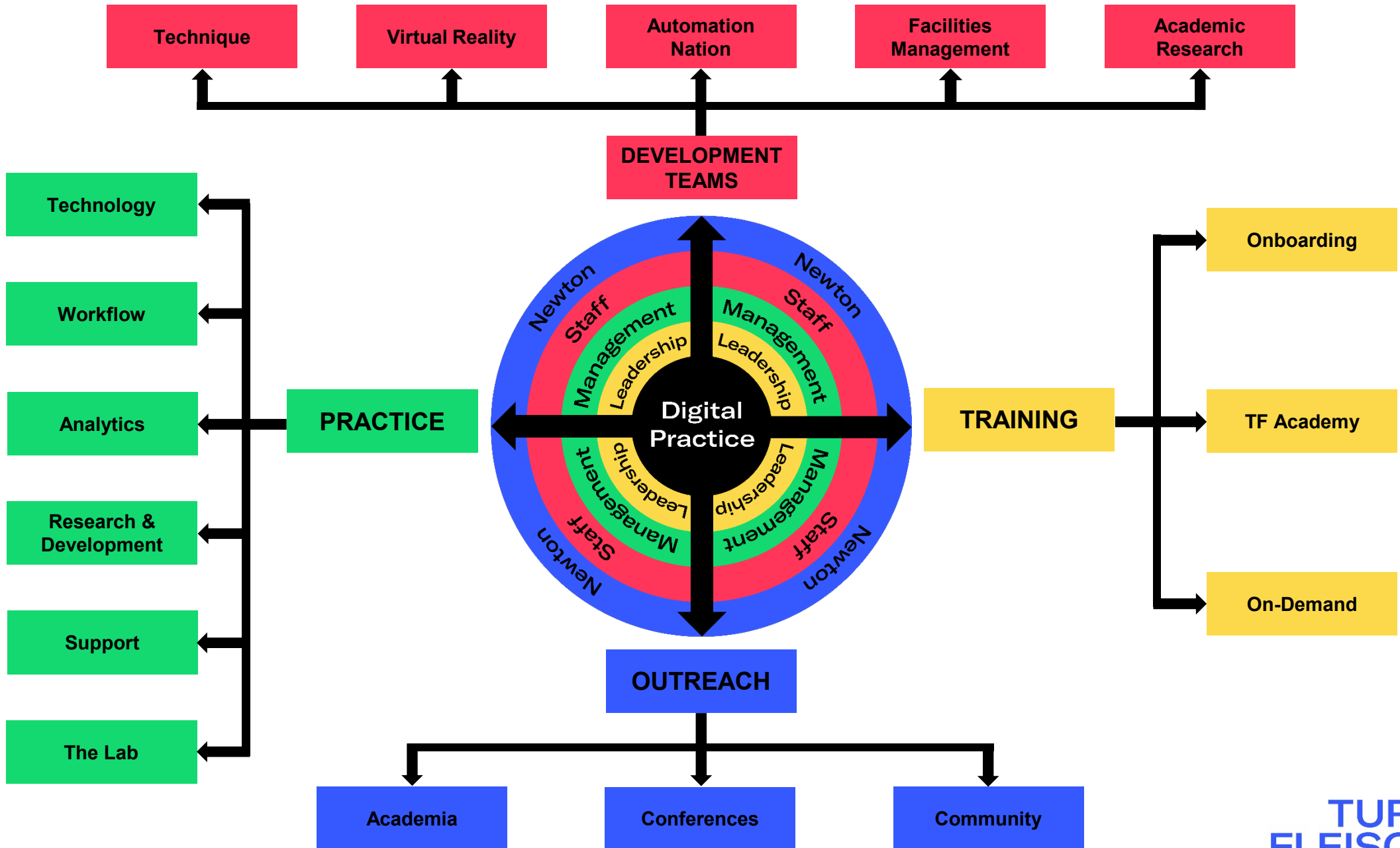
# Outreach Community



**torontoBIMcommunity**  
connecting architects engineers contractors owners operators

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FLEISCHER**





# **So... Why Implement a Digital Practice and Look Beyond BIM Management?**

**It was all about BIM, but in reality it's all about establishing a new operational standard.**

**When something isn't working,  
Stop, Disrupt and Start again.**



**Harness the power of a mind-map  
to visualize the depth, breadth  
and impact on your practice.**

**Before hiring, look inward  
and empower your subject  
matter experts.**

**Create a team that encourages curiosity, nurtures creativity and fosters collaboration.**

**Make it the foundation of  
your studio.**

TURNER  
FLEISCHER



A blue-tinted photograph of an audience clapping. The image is monochromatic, with various shades of blue. In the foreground, a person's hands are visible, clapping. Behind them, other audience members are also clapping, their faces partially visible. The overall mood is one of appreciation and celebration.

# TURNER FLEISCHER

## Thank You