

The Elegant Solution

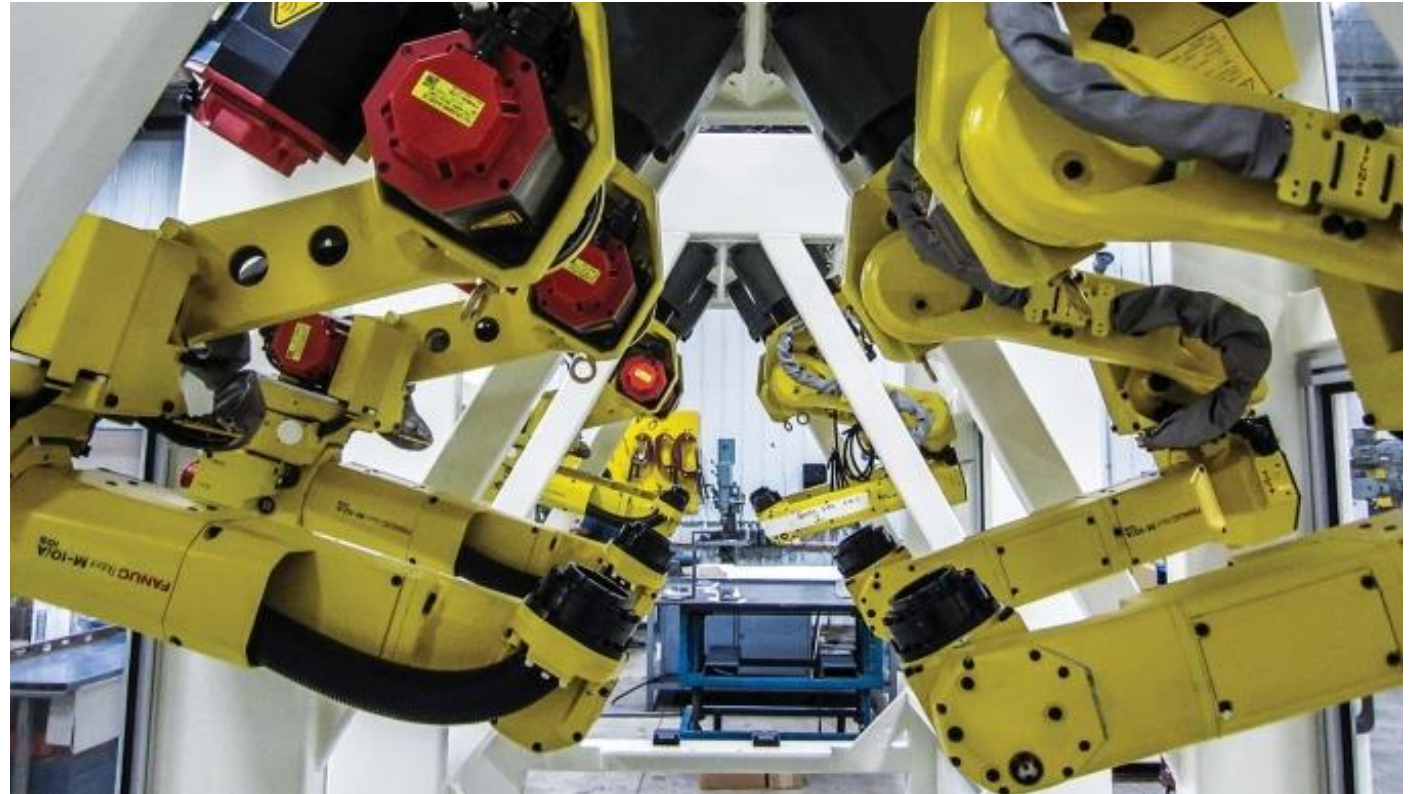
The Simple Idea
that
Changes Everything

Seeking the Silver Bullet

Robot Revolution: Manufacturers embrace automation to hedge against future downturns

Written by John Wiegand
MiBiz – March 6, 2017

“You have to have the productivity, the quality and the delivery times the OEMs need.... to win that business, they [you] have to be able to automate.”



Seeking the Silver Bullet

Robot Revolution: Manufacturers embrace automation to hedge against future downturns



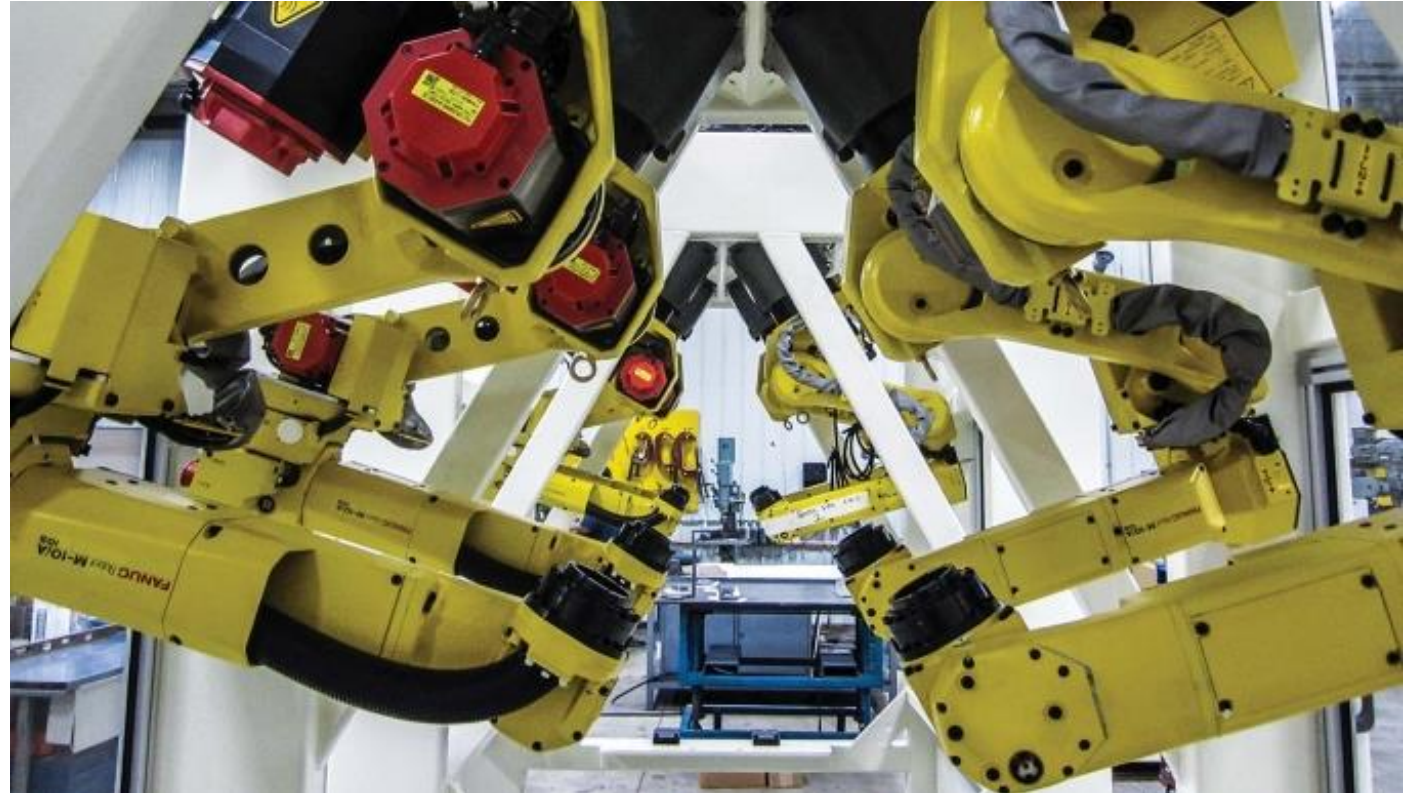
Seeking the Silver Bullet

ERP IoT ISO CAD/CAM
COMPLEXITY
Industry 4.0 6σ Big Data

*“I have yet to see any problem, however complicated, which,
when looked at in the right way did not become still more complicated.”*

Seeking the Silver Bullet

Robot Revolution: Manufacturers embrace automation to hedge against future downturns



Seeking the Silver Bullet

Technology → Vision
Strength → Resilience
Process → System
Power → Leverage
Parts → Whole
Complex → Simple
Capital → Creative
Addition → Subtraction



The Elegant Solution Framework

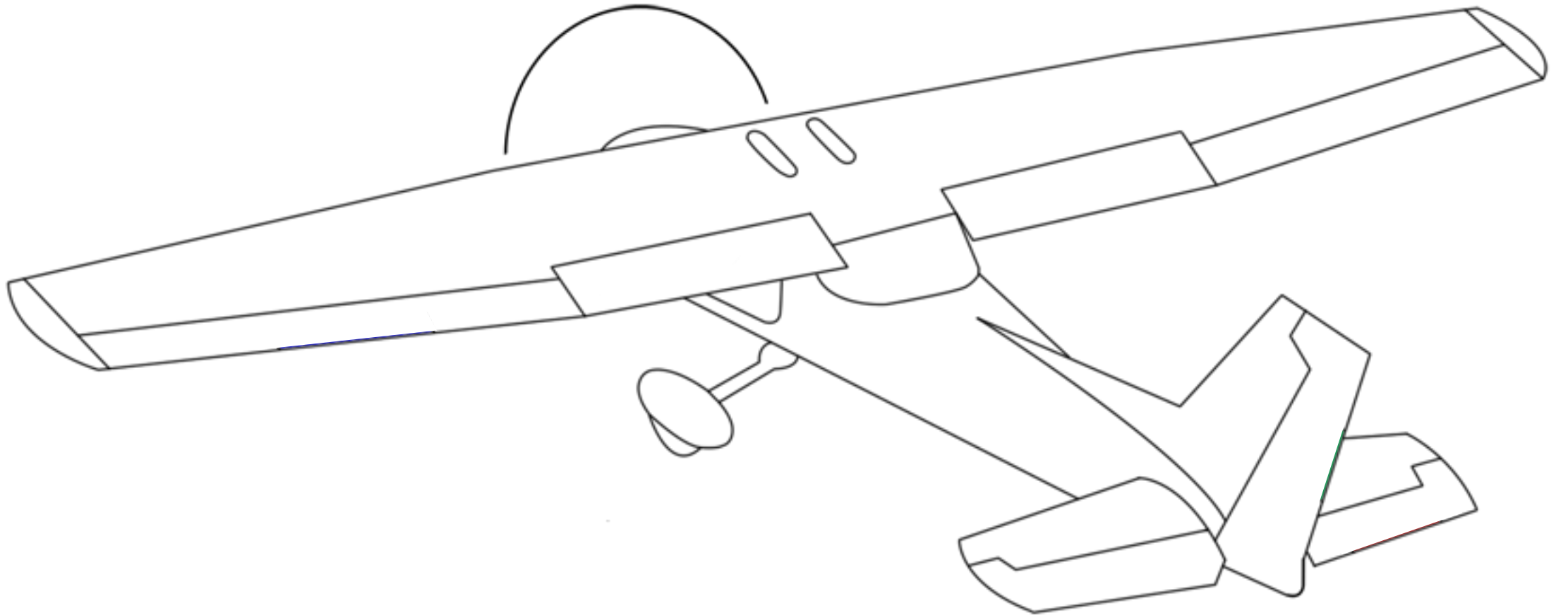
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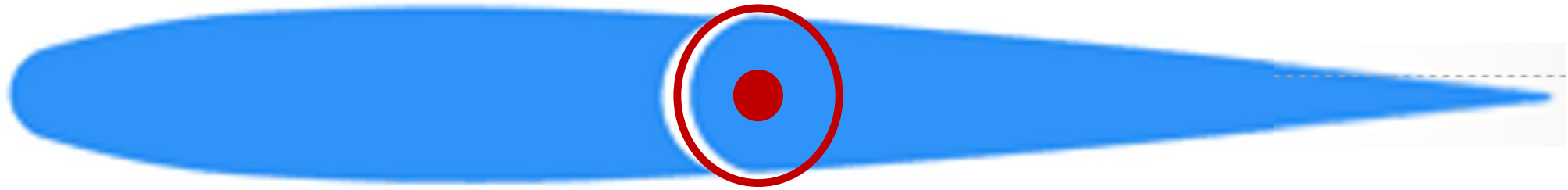
While the factors on the left are important, the elegant solution focuses on the ideals to the right.

Elegant

Pivot Point



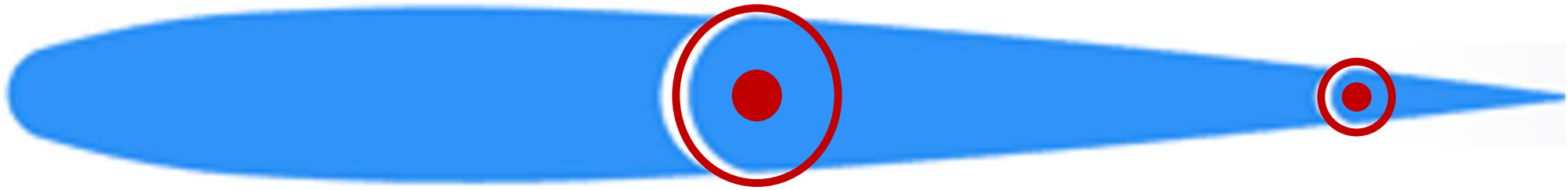
Pivot Point



boldmethod.com

↑
Elevator

Pivot Point



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↑
Elevator

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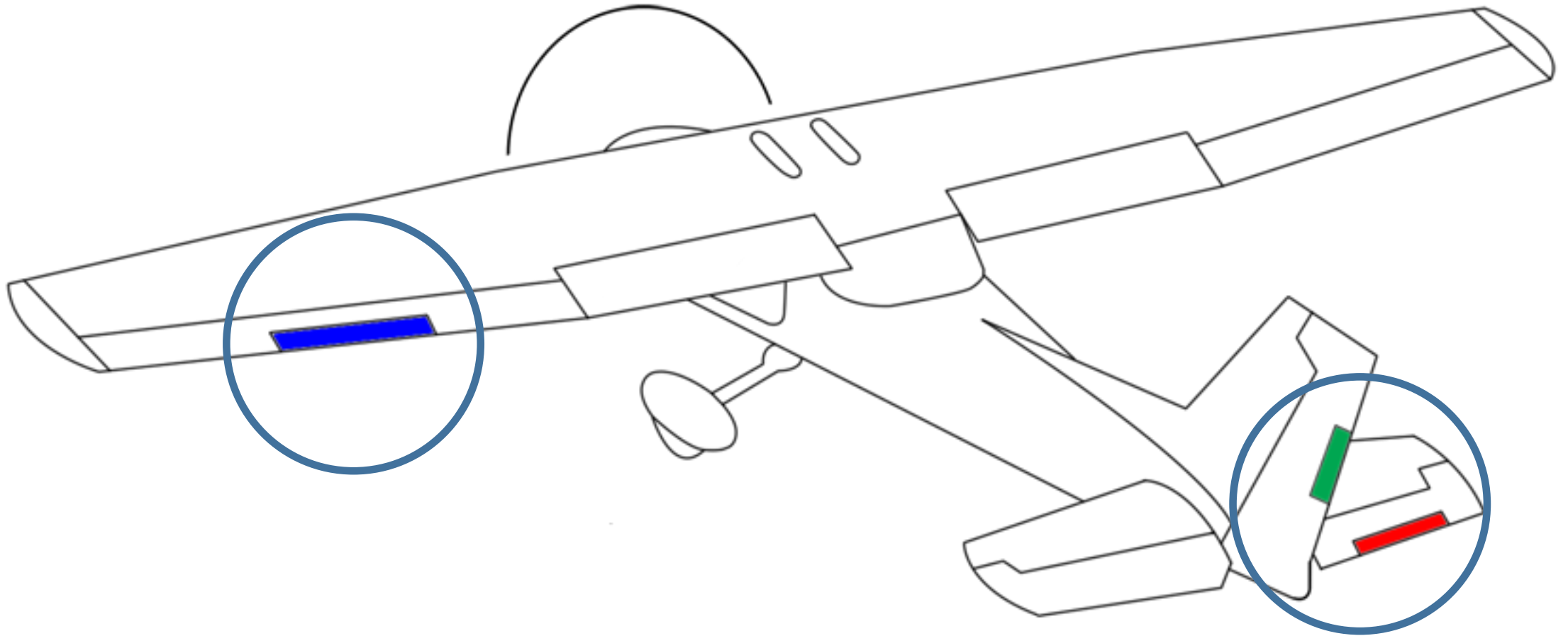
Piv^otPoint

Elevator

Trim Tab

progressive|ae

Pivot Point



Addition by Subtraction



“Every once in a while a revolutionary product comes along that changes everything.”

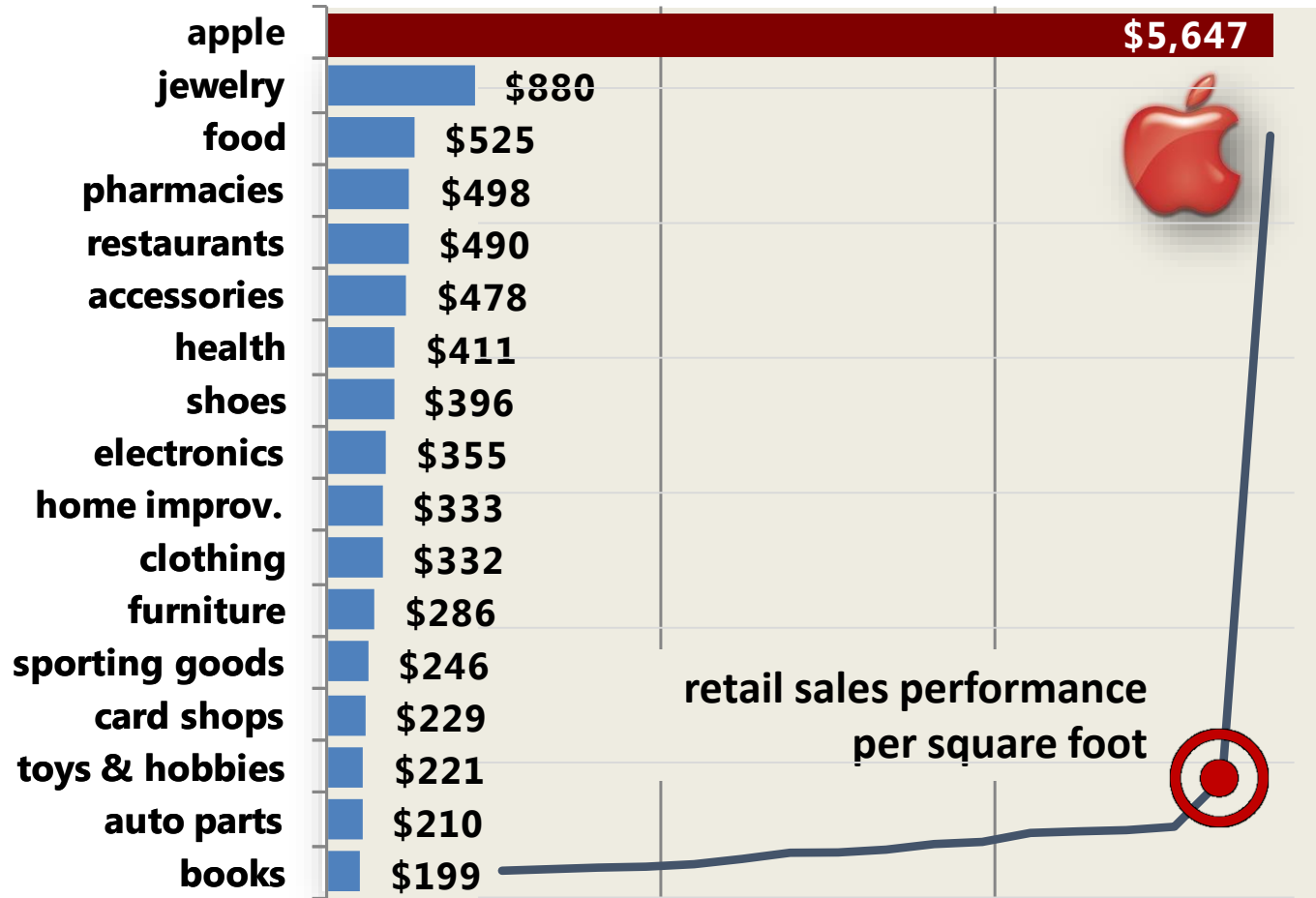
Addition by Subtraction

Address Book	Flashlight	Planner	Thermometer
Alarm Clock	GPS	Radio	Tickets
Audio Player	Guitar Tuner	Remote Control	Typewriter
Books	Level	Scanner	Video Game
Business Cards	Light Meter	Speedometer	Player
Calculator	Magazines	Step Counter	Video Player
Camera	Maps	Stopwatch	Video Recorder
Compass	Metronome	Stud Finder	Voice Recorder
Computer	Newspaper	Tachometer	Walkie Talkie
Credit Cards	Notepad	Telephone	Watch
Diary	Phone Book	Television	WiFi Router
Encyclopedia	Photo Album	Thermometer	

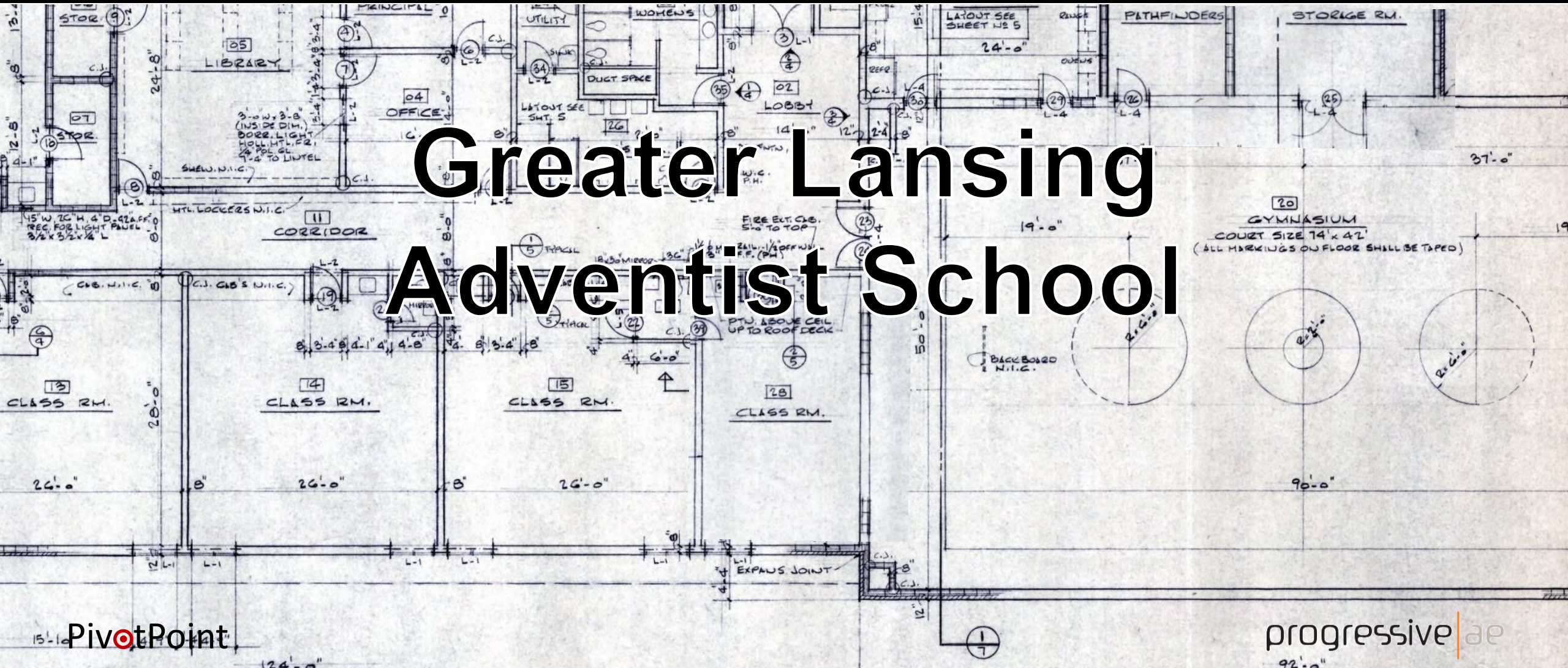
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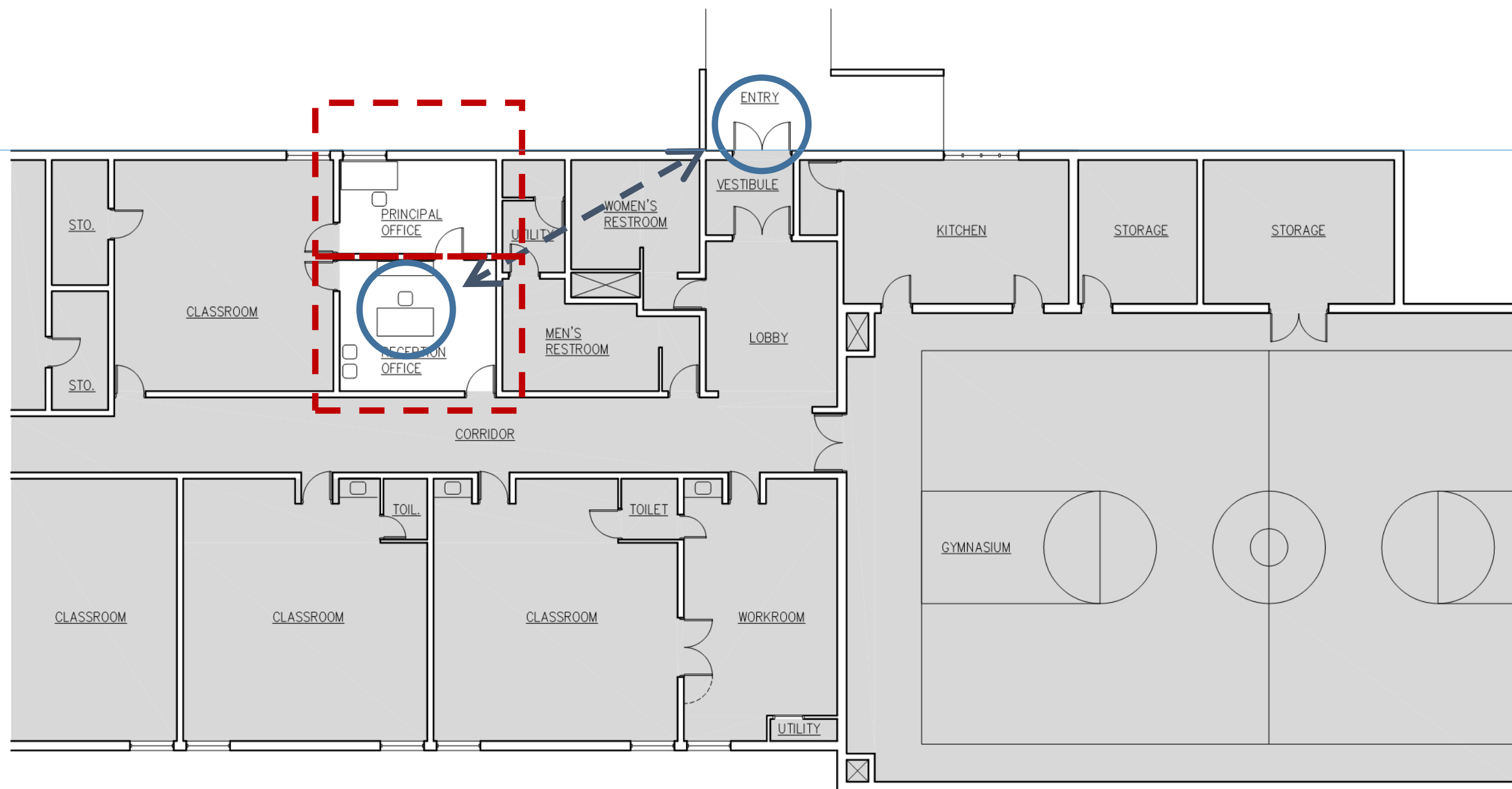
Simplicity over Complexity

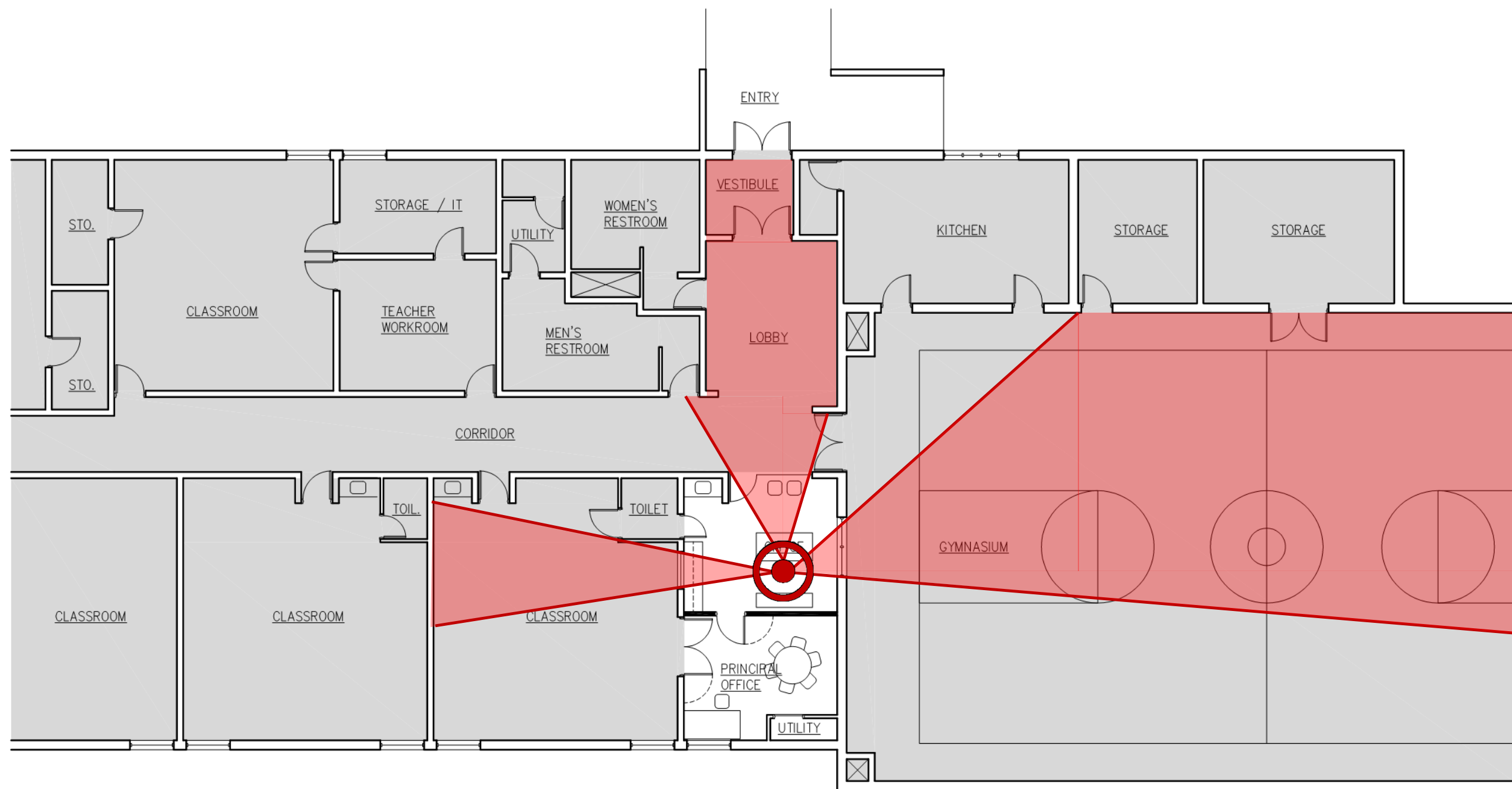


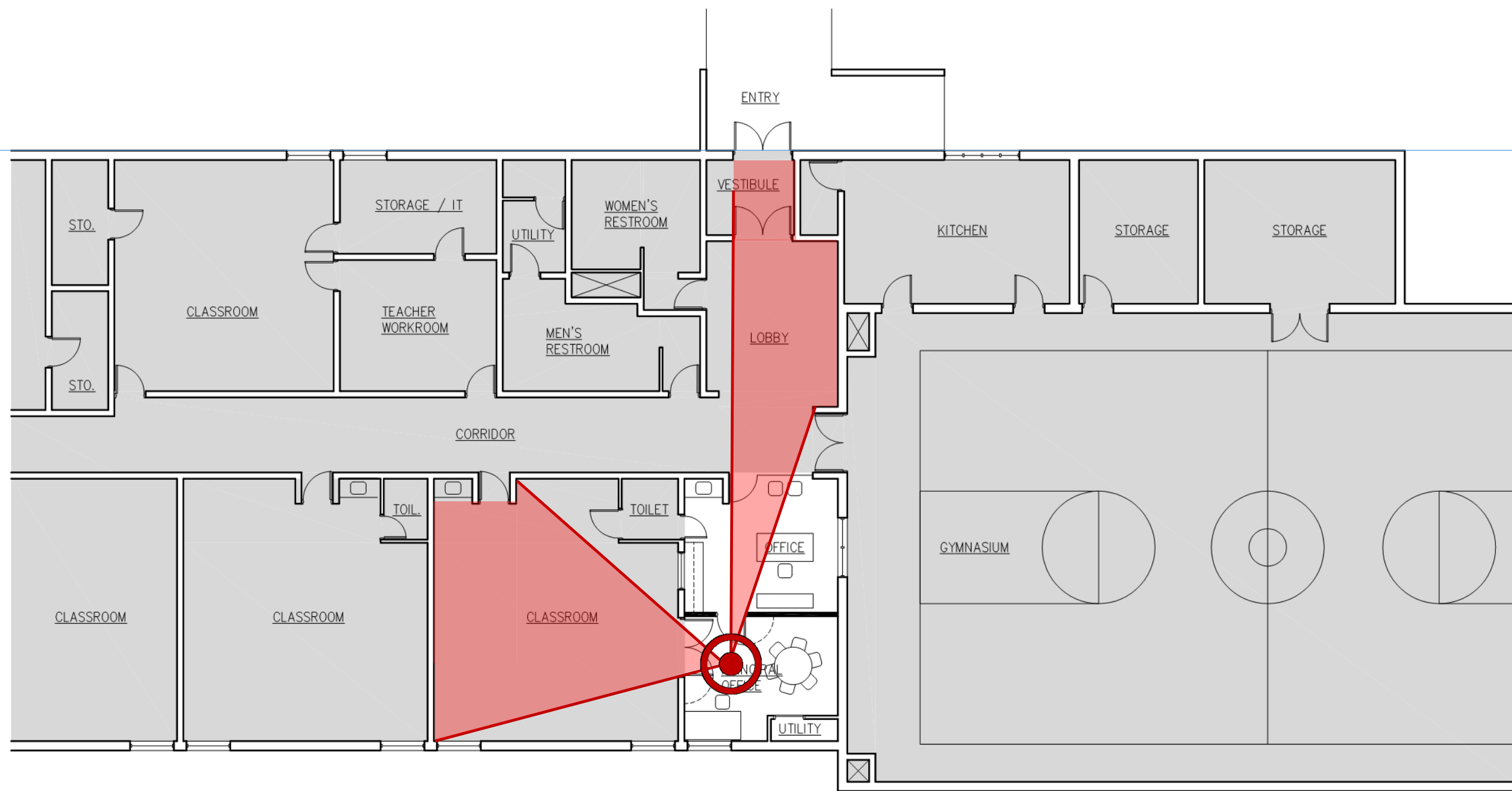
Vision over Technology



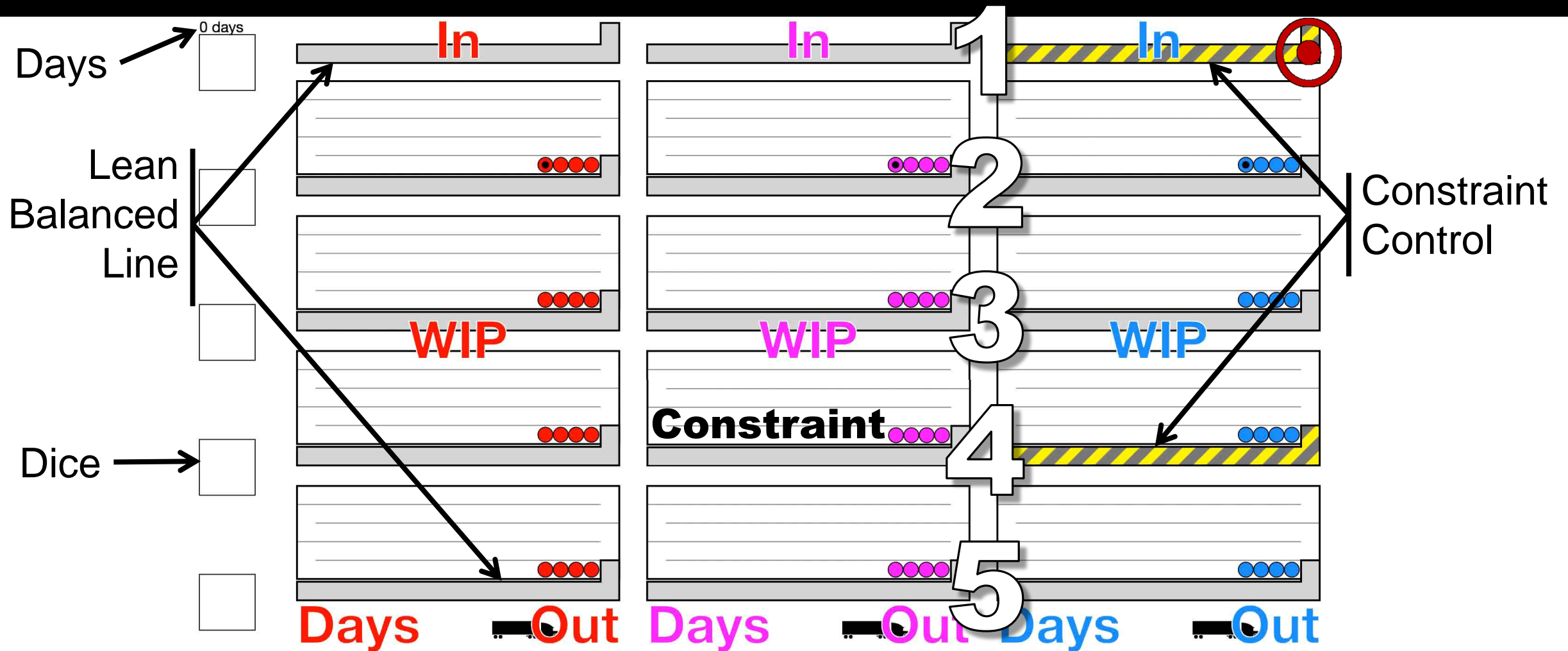
Greater Lansing Adventist School



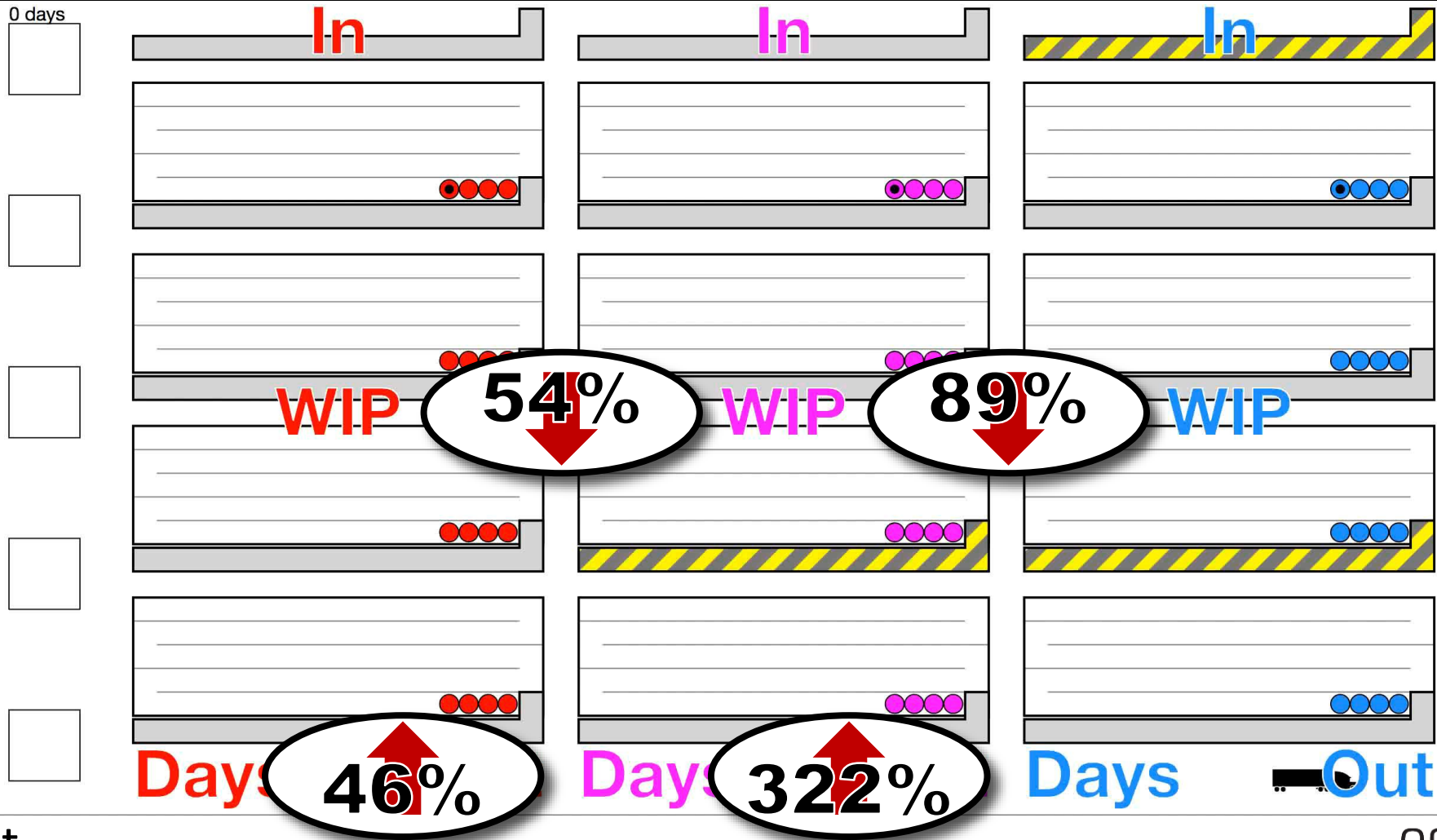




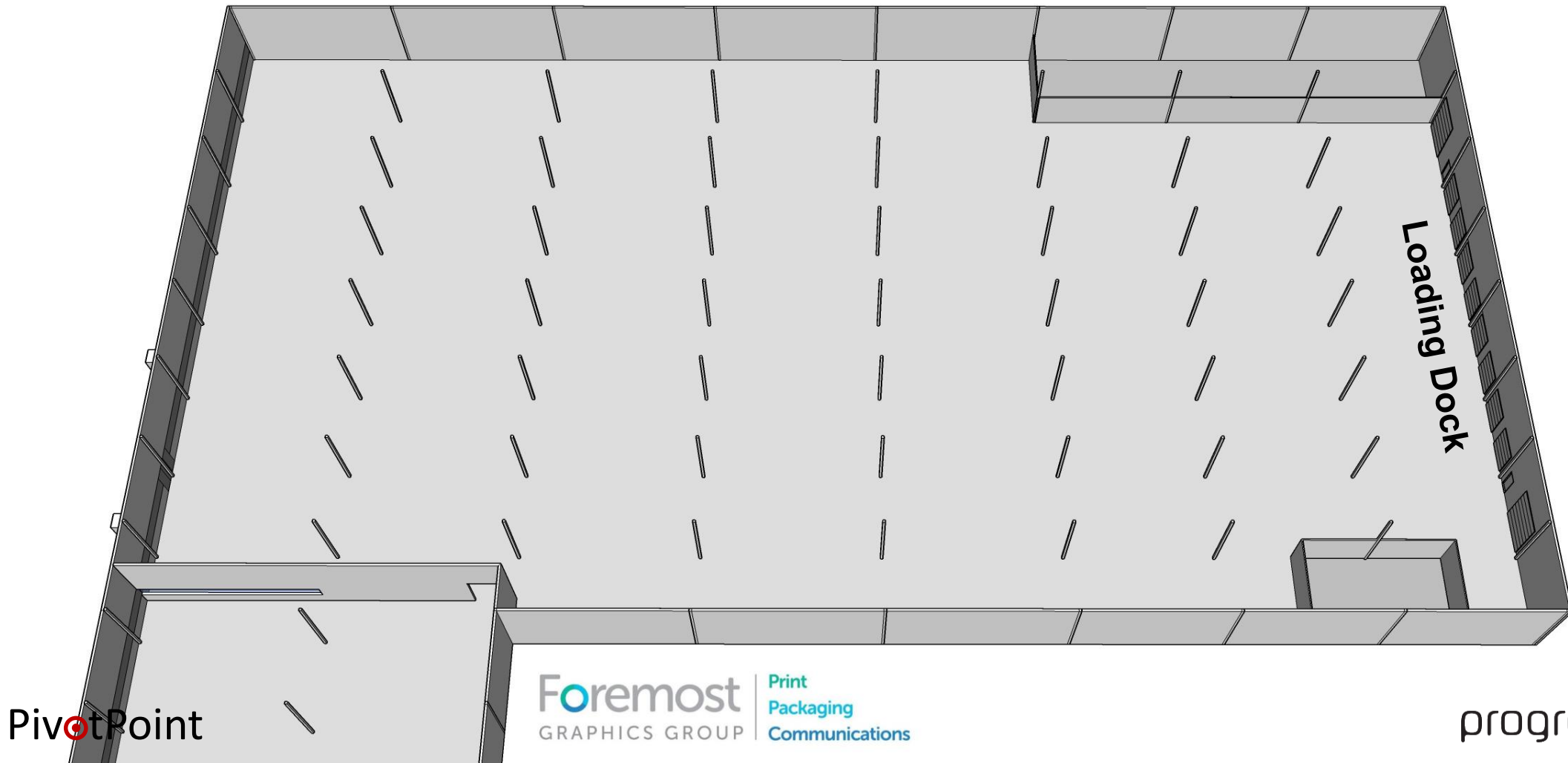
Seeking a Production Pivot Point



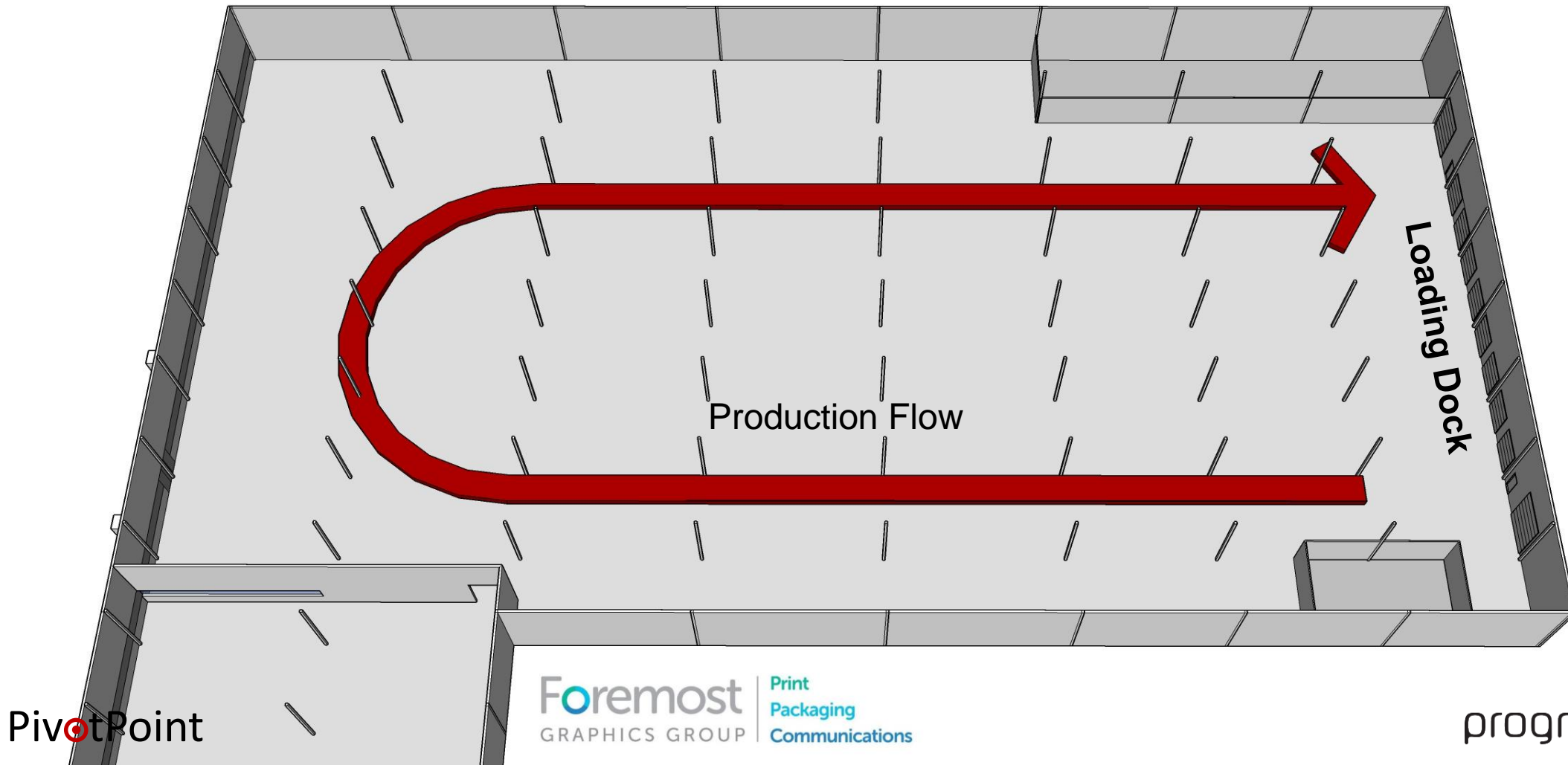
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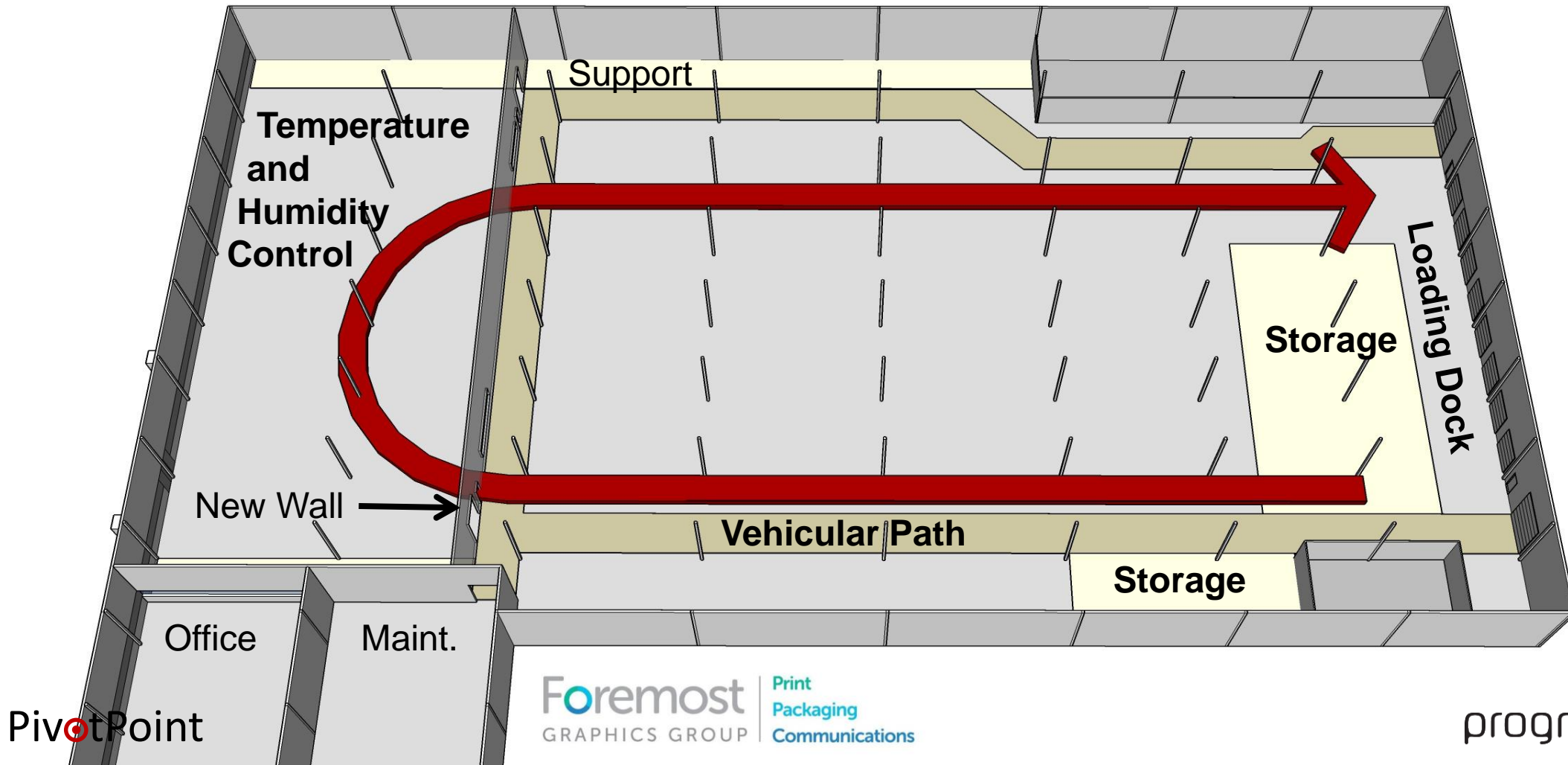
Planning the Plant Floor



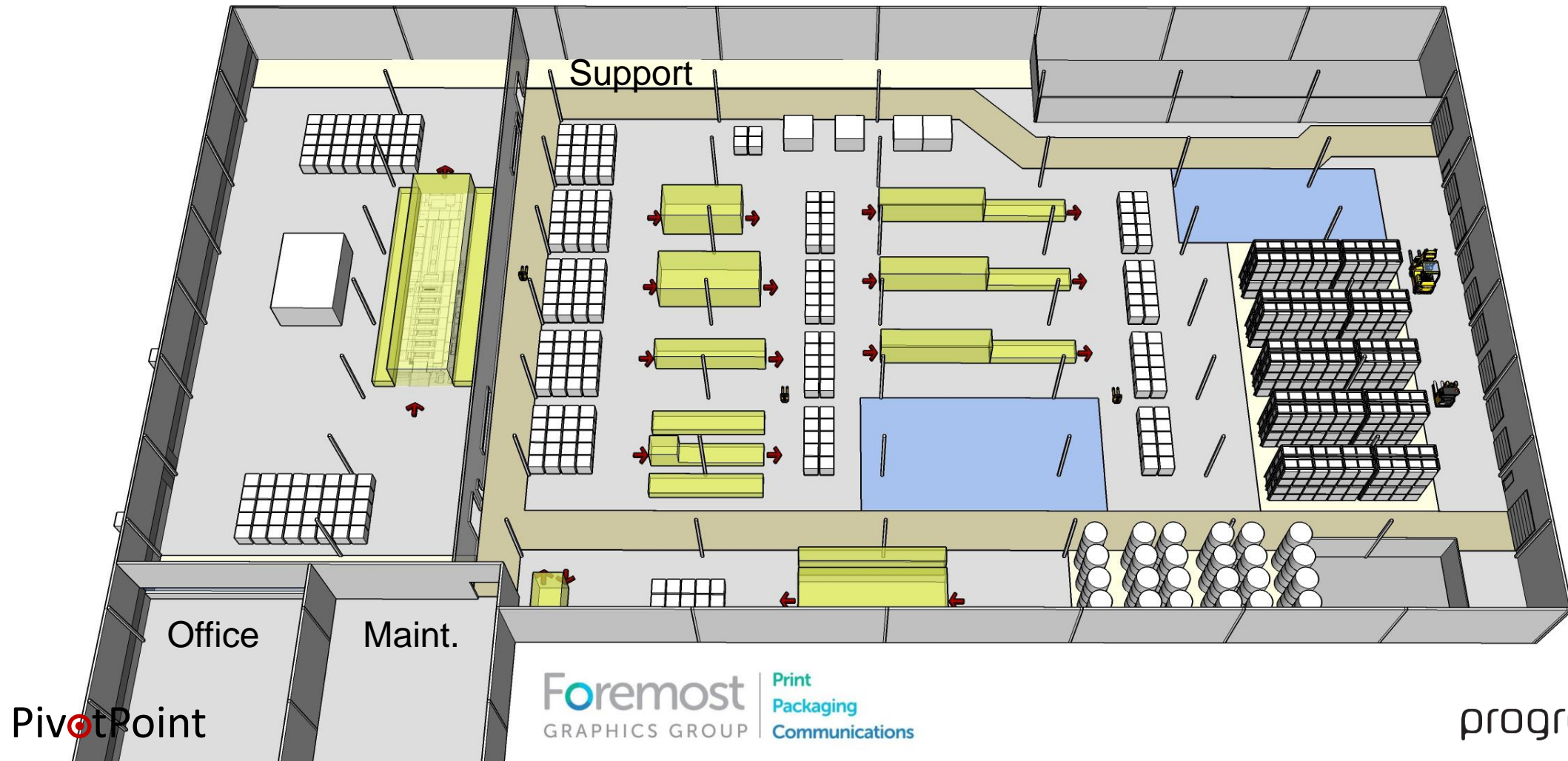
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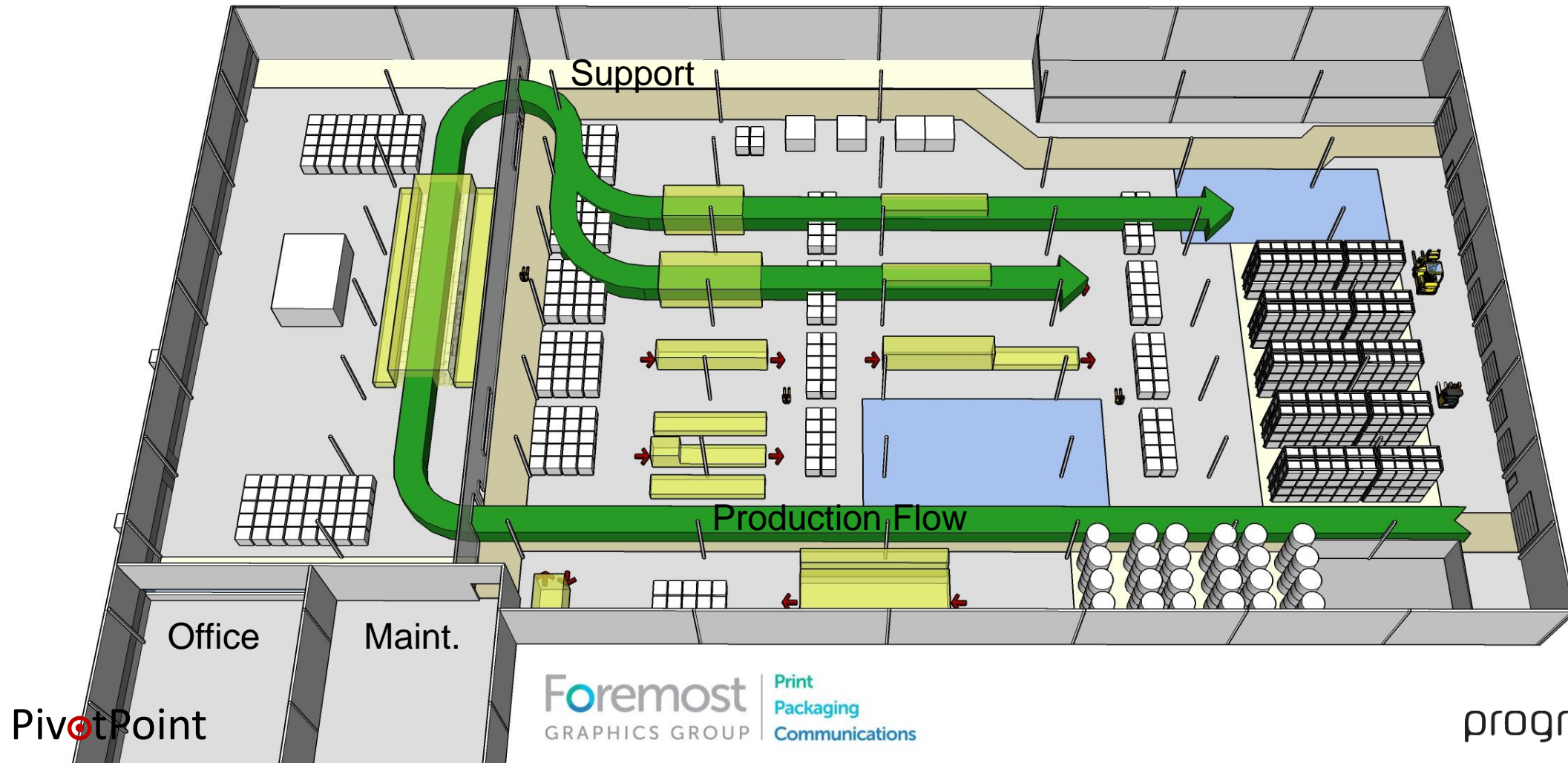
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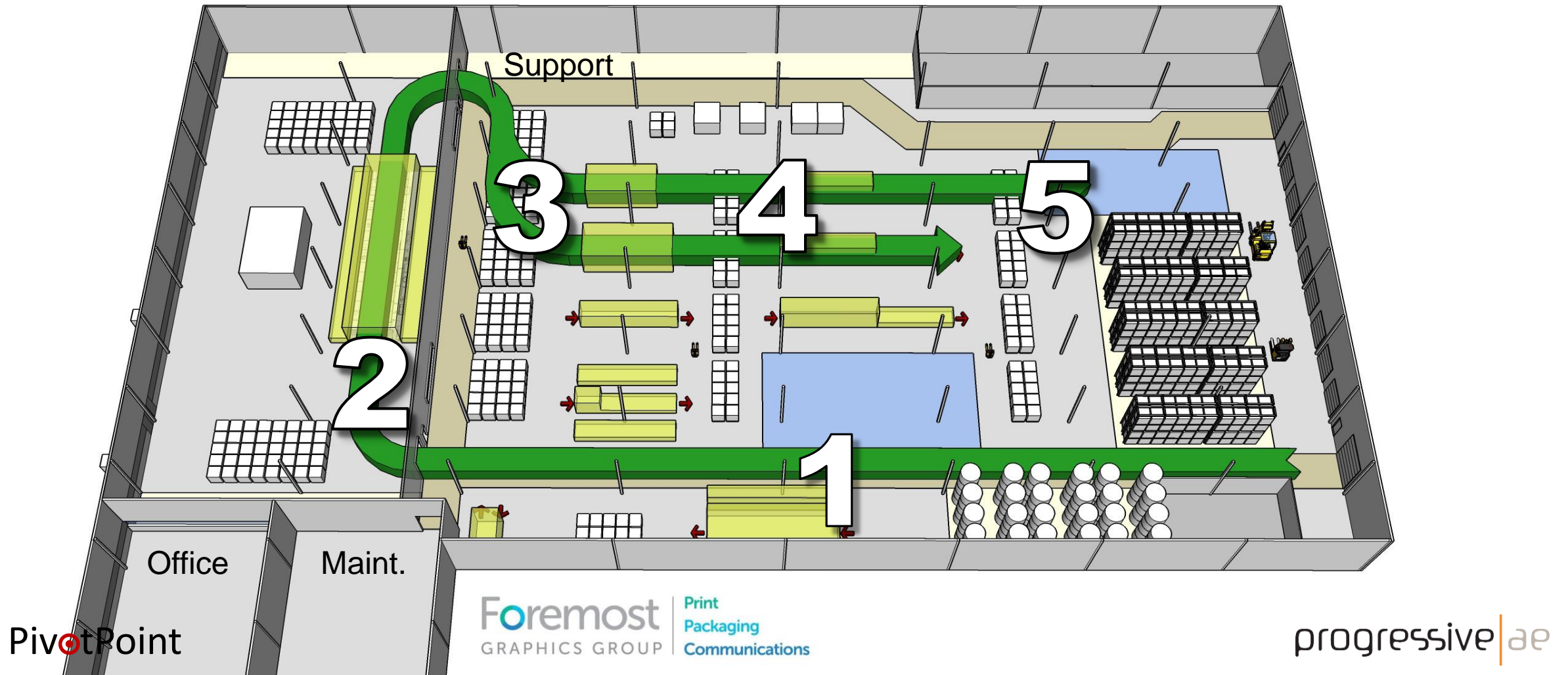
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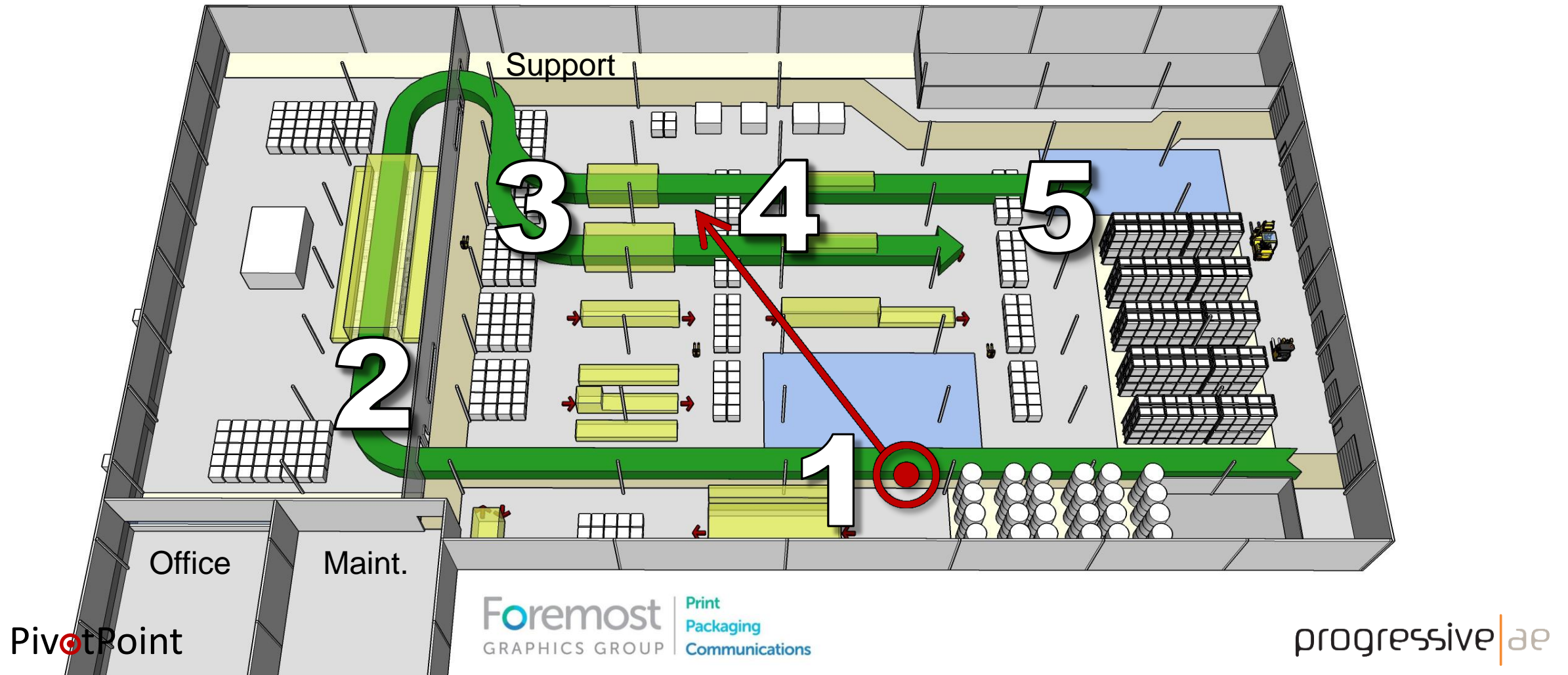
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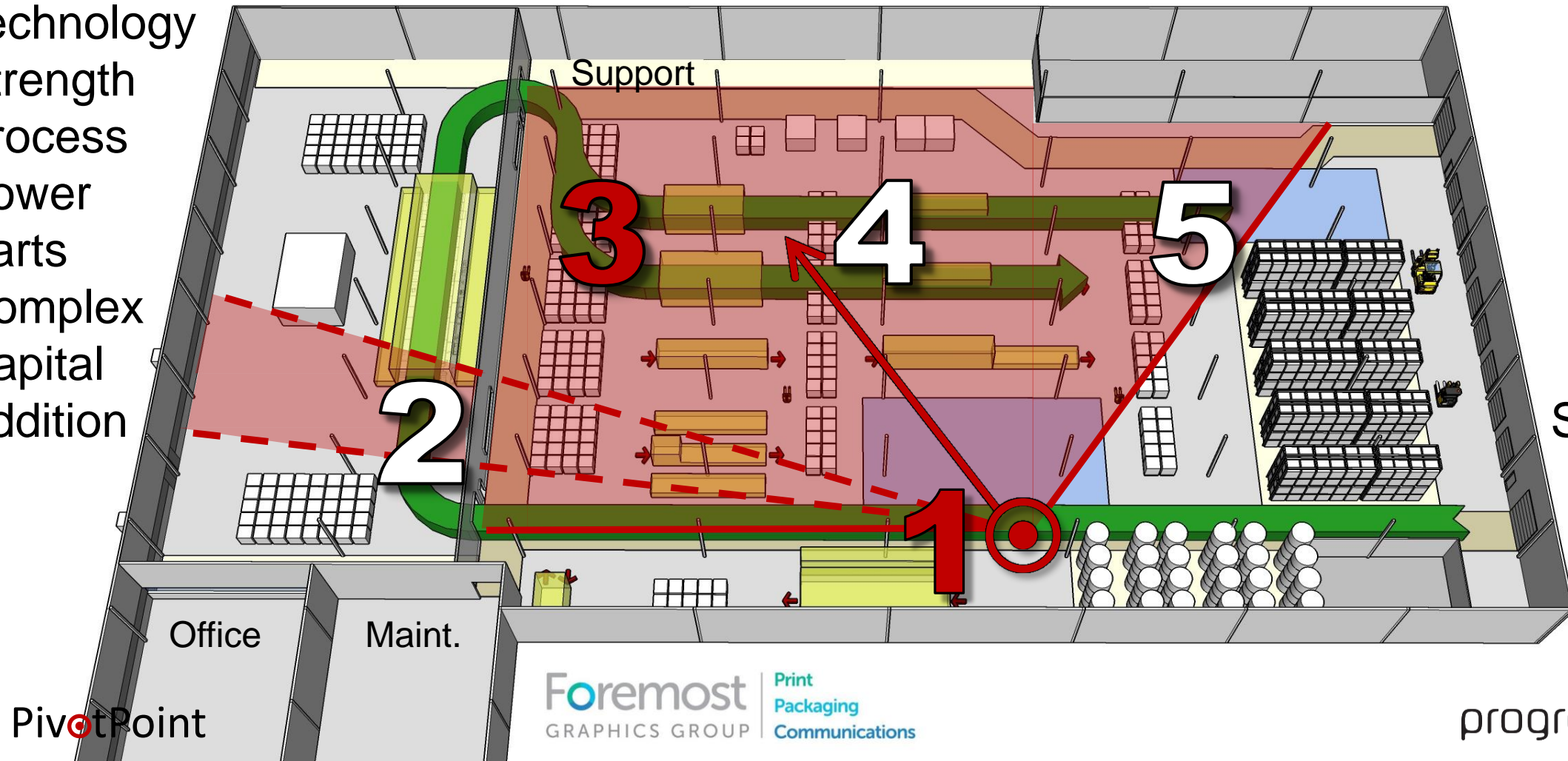
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PivotPoint