

## The Duncan Aviation Search

Aaron Lane

May 2, 2023



## Who is Duncan Aviation?

Owned and operated by the Duncan family since our founding in 1956, Duncan Aviation is well-known and respected by operators, manufacturers and other service providers worldwide for our quality, value, timeliness, communication, work ethic and expertise.

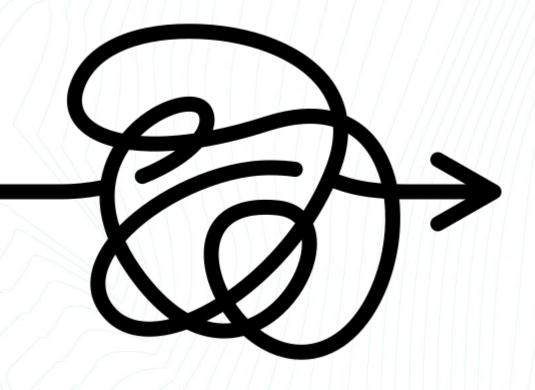
Our premier aircraft services-delivered on time-include airframe & engine maintenance, avionics installations, interior & paint completions/modifications, avionics/instrument/accessory repairs & overhauls and parts support.





## Delivering an "Experience. Unlike any other."

- Why Duncan Aviation needs a new PDM
- The following is what Duncan Aviation does and the hurdles we're trying to overcome





	Type and Press Enter	
ll Items	됨 List All 🚓 Hierarchy Tree Pin Document 🐉 Actions	
Folder		
Tolder Default Folder	Title 🕕	Owner
🖶 👕 Duncan Documents Database		
<ul> <li>Best Practices</li> </ul>		
<ul> <li>Talibration Services</li> </ul>	1125 ""Astra"" Engine/Airframe Ground Run	Pamela St
🕨 👕 Company Manuals		
<ul> <li>FAA Approved/Accepted Proce</li> </ul>	1205 Air Outlet	Norman T
Forms	1205 Air Outlet Disassembly / Reassembly Procedures	Norman T
Form Instructions	1203 Air Outlet Disassembly / Reassembly Procedures	Norman i
<ul> <li>Job Descriptions &amp; Evaluation</li> </ul>	123B & 125B, Fluke, Scopemeter	Rick Wilen
<ul> <li>Policies &amp; Procedures</li> </ul>		
<ul> <li>The second second</li></ul>	14 CFR 43 Appendix E Form	Pamela St
Tags & Stickers		
<ul> <li>Help</li> </ul>	2021 401k Annual Notice	Elizabeth
135 Operator Information		
Туре	2023 Benefits Guide - BTL, PVU, SAT	Elizabeth
Customer Service		
DMS	2023 Benefits Guide - LNK	Elizabeth :
Engineering		<b>E</b> 10 (1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
Environmental	2023 KKD Scholarship Application	Elizabeth
FBO Services	2023 KKD Scholarship Information and FAQ's	Elizabeth S



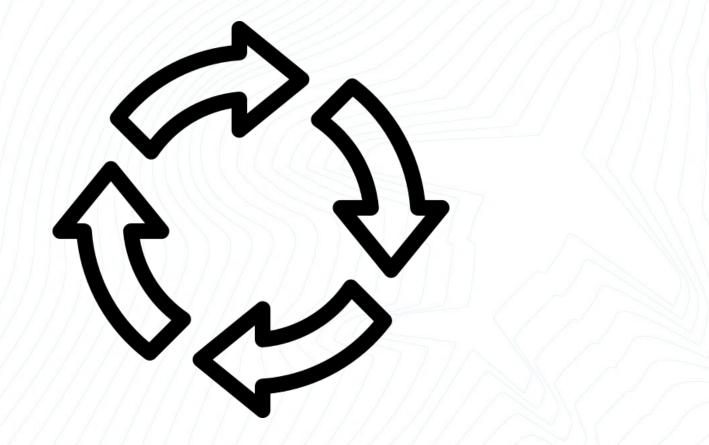
			ſ	Type and P	Press Enter			$\langle / / \rangle$		
			L	.,,po ana .				- / /		
All Items	:≡ List /	All الله	rarchy Tree	Pin Do	cument	Actions		12 2 3		
အီ Folder	:= List All marting herarchy free Fin Document an Actions						1 1 1			
👕 Default Folder	Tit						Owner	- X - X		
- Duncan Documents Database -	LANAA - A									
<ul> <li>Best Practices</li> </ul>	<u>File E</u> dit <u>V</u> ie	w <u>C</u> ommand	Actions Re	eport <u>W</u> ind	ow Help					
<ul> <li>Calibration Services</li> </ul>				Þ				🔇 🚔 🛒	WO E 🔝	myD 🔒
🕨 👕 Company Manuals	Alt-1 Inver	tory Alt:	2 Messages	Alt-3	ales Alf	4 Price Item Se	arch Alt-5 ST		ent Inventory	Alt-7 Worl
FAA Approved/Accepted Prov			-				$\neg$			·
🐨 Forms	Volo Aviat	ion LLC 💧 💋	Squawks	Sub Sh	ieet ()	WO Review/Tir	me Turnove	r 🛛 Log Book 🔪	Equipment	Item Ap
Torm Instructions		<u>5</u> qk#:	Sqk <u>D</u> isc:			Sgk Status:	<b>86</b>		Fa <u>x</u> ed: <all>▼</all>	1
🕨 👕 Job Descriptions & Evaluatio	_	Shop: <all></all>	Sub Disc:			Sub Status: <a< td=""><td> &gt;▼</td><td>Tean</td><td>n Leader:</td><td>(846) L</td></a<>	>▼	Tean	n Leader:	(846) L
Policies & Procedures		n off: <all>▼</all>				Sub CA:		Request Aircraft N		DAK-G
🕨 🖶 Non-Duncan Documents	<u>N</u> eeds sig		Suk Note:			SUD CA:	(	Request Aircraft P	love	DAN-G
👕 Tags & Stickers	TRK Tied	Attachme	Sqk/Sub	Status				Discrepand	;y	
🕨 👿 Help			)- 🔁 1	· ·		on Cadence CMS		- de alla sina Cadanaa	CMC Curris	
135 Operator Information			- 1			udio Amplifier	Install new ALTO TE	chnologies Cadence	CMS Systems	
កំ Type			- 3			d Certification				
Customer Service			- 4			t for Mounting new				
DMS			L 5 )-⊡ 2			h cabinets for New		E ONLY OF 2022 PI	DICING Ordow RV	002
Engineering					SOGO AVAN		2 115V - L311MAT		dend order.ok	лсэ,
		ØĠ	0-014			nwash Cabin LED	) Lighting			
Environmental			)- 🔁 5		OPI HD Movi					
FBO Services					lemove existii Engineering Su		tem and install a nev	moving map system	from DPI	
Finance			)- 🗖 6				nitor Rosen Bulk	nead (22") Wideso	r een Smart HI-	DEF Display
///////////////////////////////////////			)- 🗂 7			•	AUX INPUT TO FW	• •		
* / / / / / / / /			)- 🗖 8	· ·		L USB 5 VDC	·			
1 1 1 1 1 1 1 1			)- 🗂 9 )- 🗂 10			on Cadence CMS )0 -> 500 Upgra		5 CABIN AUDIO UP	GRADE)	
イントドメートリ			)- <b>1</b> 11			Enablement	ue			
			)- <b>1</b> 12				L (ALI) (VANITY, O	GALLEY, AISLE LIG	HTING)	
	•									
	Squawk In	voice Sub-s	quawk Ta	sks/Inspectio	ns Trackir	ng Labor Pa	rts Sold Parts On	Order Financial	FAA 8130-3	Customer Con
	Squawk:	Sub#:	Invoice:	🚯 Sho	p:					
						1 11	5 11 1 · · · ·			



Type and Press	Enter				
All Items					
ਜੀ Teams i≣ List All ਨੂੰ Hierarchy Tree Pin Docume	nt Actions				
Title 🔒	Owner				
🖌 👕 Duncan Documents Database 🗱 LANAA - AS400 for Windows Ver: 81989					
Best Practices      Elle Edit View Command Actions Report Window H					
Calibration Services		🦉 🚔 🛒 🚾 🗉 💷 👓 🔒 🖡			
Company Manuals Alt-1 Inventory Alt-2 Messages Alt-3 Sales	Alt-4 Price Item Search Alt-5 STC	Alt-6 Document Inventory Alt-7 Work			
FAA Approved/Accepted Pro     Volo Aviation LLC     Squawks     Sub Sheet (	WO Review/Time Turnover	Log Book Equipment Item Ap			
Form Instructions	Sok Status:	Faxed: <al>▼</al>			<u>1.141</u>
►	😼 ENOVIA SmarTeam				
▶      Policies & Procedures     Needs sign off: <all>     Sqk Note:</all>					
Non-Duncan Documents	<u>File Edit Actions View Tree Tools</u>	; <u>B</u> OM <u>W</u> orkFlow W <u>i</u> ndow <u>H</u> elp			
Tags & Stickers TRK Tied Attachme Sqk/Sub Status	Main PLM Add-Ins				
Help					
minimizer information and a second s		🖆 🔄 🔄 🛞 🖭 Baseline 占 🙆 Admin 🗞 🔤	i 🗋 🦧 🍡 🚨 🔌	🍠 ಶ 🔌 🕷	Ref. an
Customer Copice	- 🗅 🗁 ST00832MC-T Learlet 35A Cr	ockpit Cooling System Modification A.0 FOLD-015040 12/12/2022 10:47			
Customer Service		ta A.0 FOLD-015041 12/12/2022 10:48		Notes Revision Viewer	
Engineering Opn V GO		RMITY PLAN A.4 CERTDOC-015350 12/16/2022 10:18	<b>DUNCAN</b> AVIATION		
Image: Constraint of the second se		Mod C.2 CERTDOC-015330 12/12/2022 11:04	AVIATION		
FBO Services	E 🔔 🗁 Design Data A.0 FOLD-015	U42 12/12/2022 10:48 ICT MODIFICATION A.1 DWG-011783 04/06/2023 14:24	Folder		
Finance 2 Lck ▼ Eng ∅		N SYSTEM WIRING DIAGRAM A.11 DWG-011496 12/15/2022 11:27	1 older		_
(a) - □ 7 Opn ▼ RO		STEM BLOCK DIAGRAM A.4 DWG-011494 12/14/2022 10:07	Folder ID:	FOLD-015040	*
		TALLATION A.1 DWG-011784 04/06/2023 15:43	_		_
		ANGE A.3 CERTDOC-015794 03/28/2023 14:23	Description:	_ST00832MC-T LearJet 35A C	Jockpit Co
		A.7 CERTDOC-015659 02/28/2023 11:06 ERTDOC-015657 02/28/2023 10:42	TCDS Make	Learjet Inc	Select
		stem Modification A.1 CERTDOC-015824 04/05/2023 10:20	TCDS Model		
Squawk Invoice Sub-squawk Tasks/Inspections	🖻 🔂 🗁 LH Cabinet A.0 FOLD-01			354	Select
Squawk: Sub#: Invoice: 🚷 Shop:	🗄 📃 🧐 LH CABINET A.0 SW		TCDS Number	A10CE	Select
		9 CERTDOC-015331 12/12/2022 11:08	Serial Number		i I
			Los A Disp Northead		-
1 _ / / / / / / / / / / / / / / / /	Substantiation Data A.0 FOL		Input Reg Number		
	- Martin Control of Co	allation Analysis A.0 CERTDOC-015835 12/08/2022 14:09	ODA		
			STC Number	STOW	
				5107777WI	-
			MRA Number		



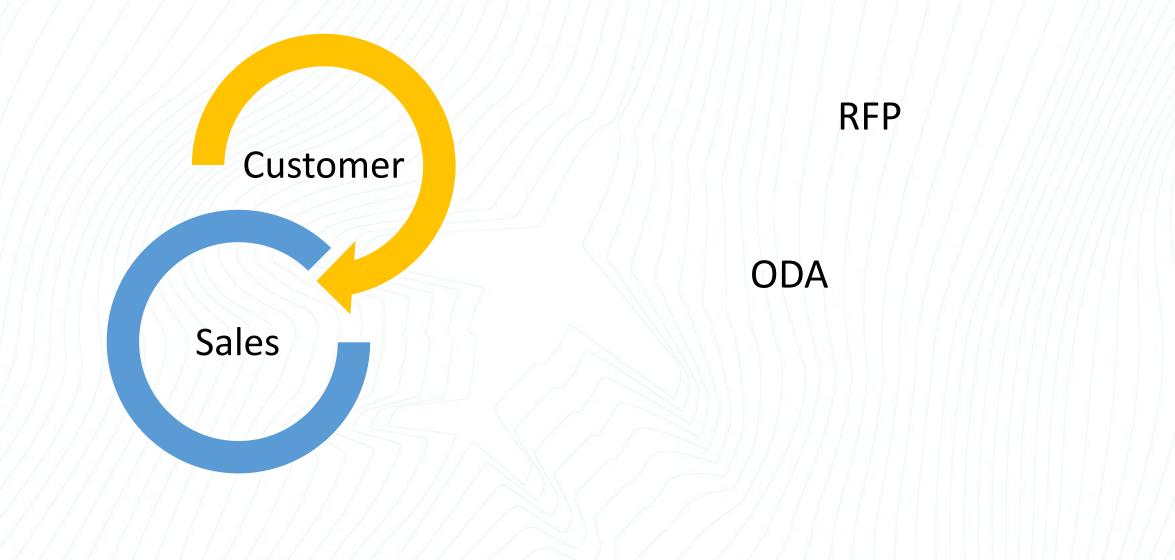
## **TYPICAL Design & Certification Cycle**



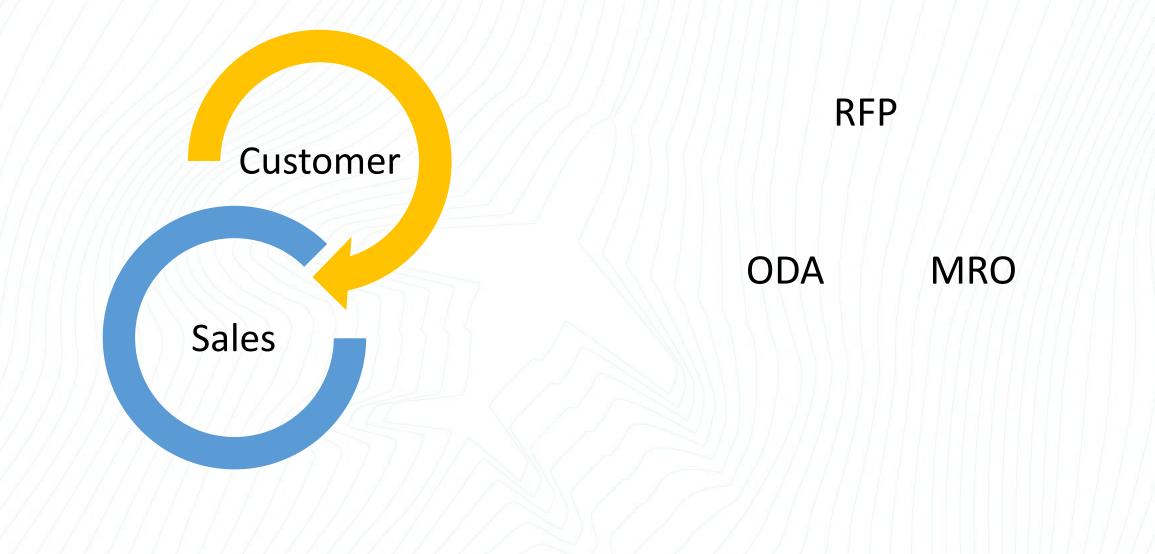




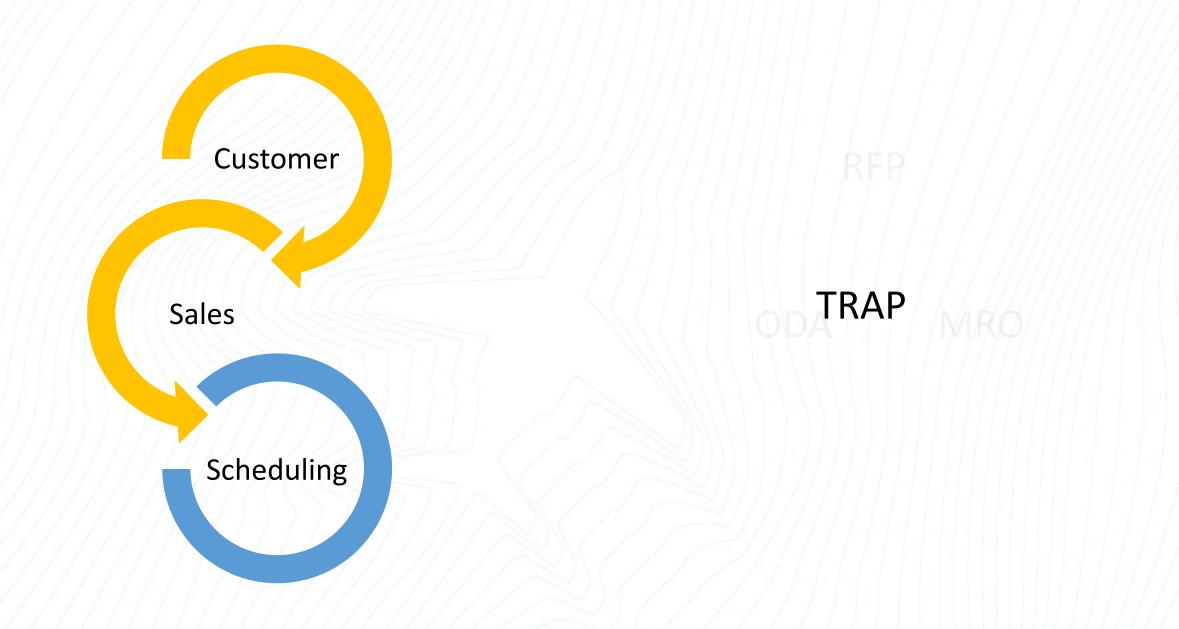




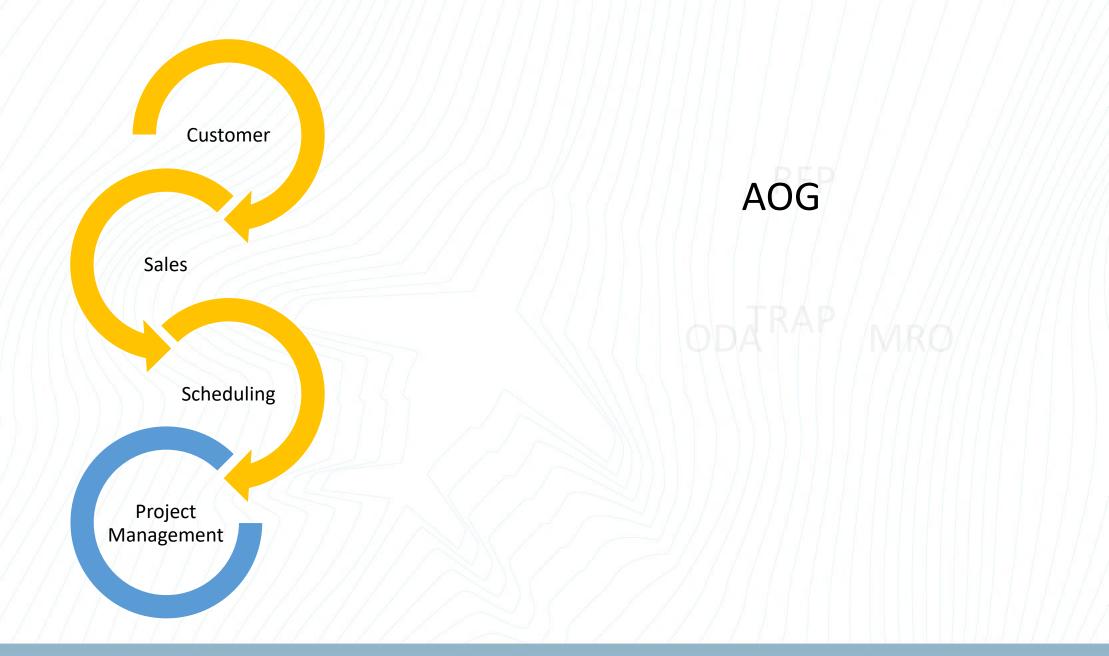




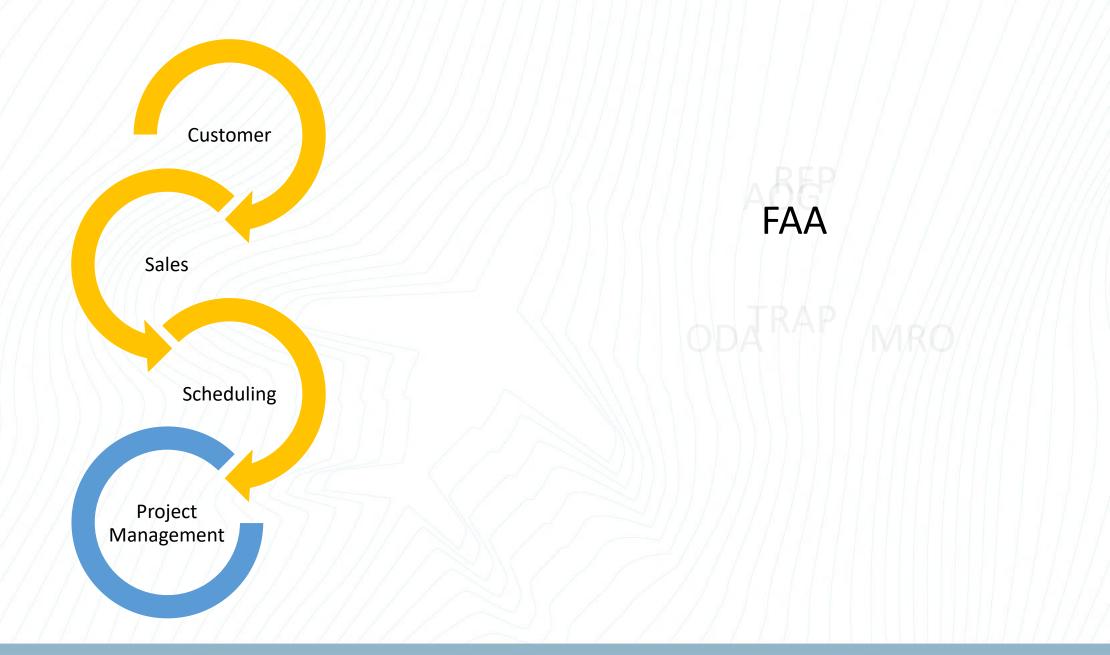




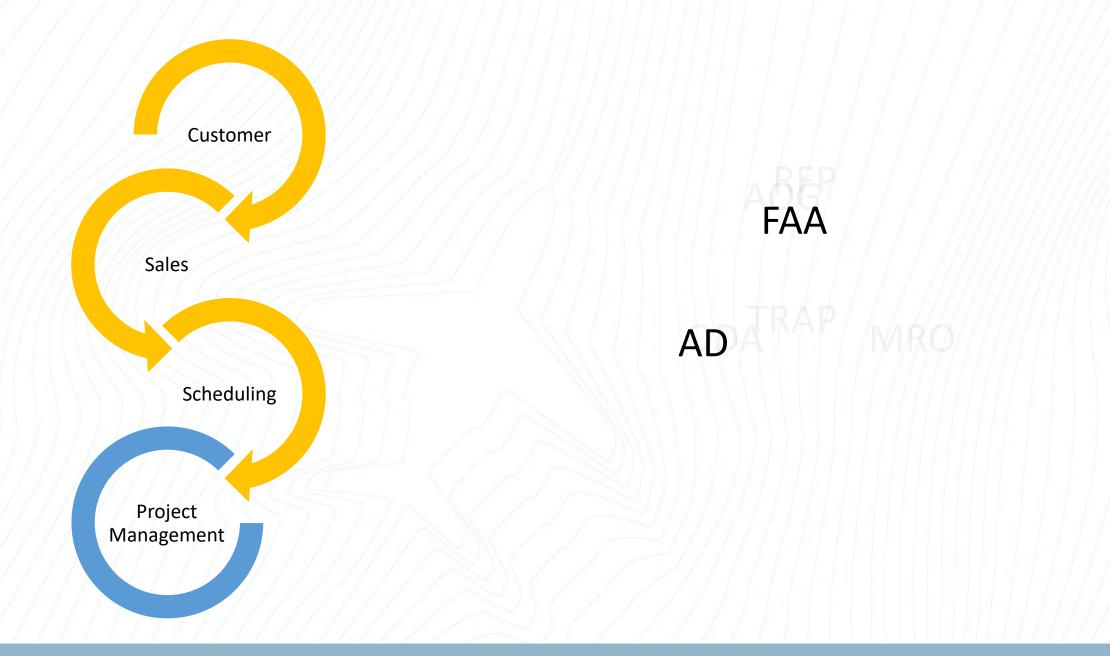




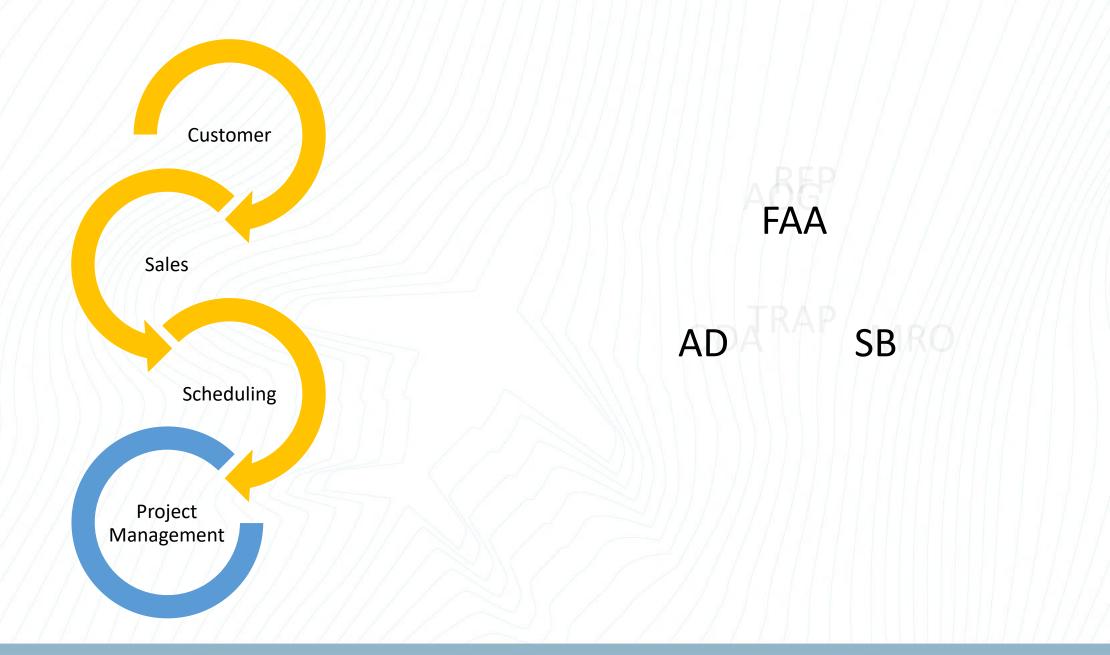




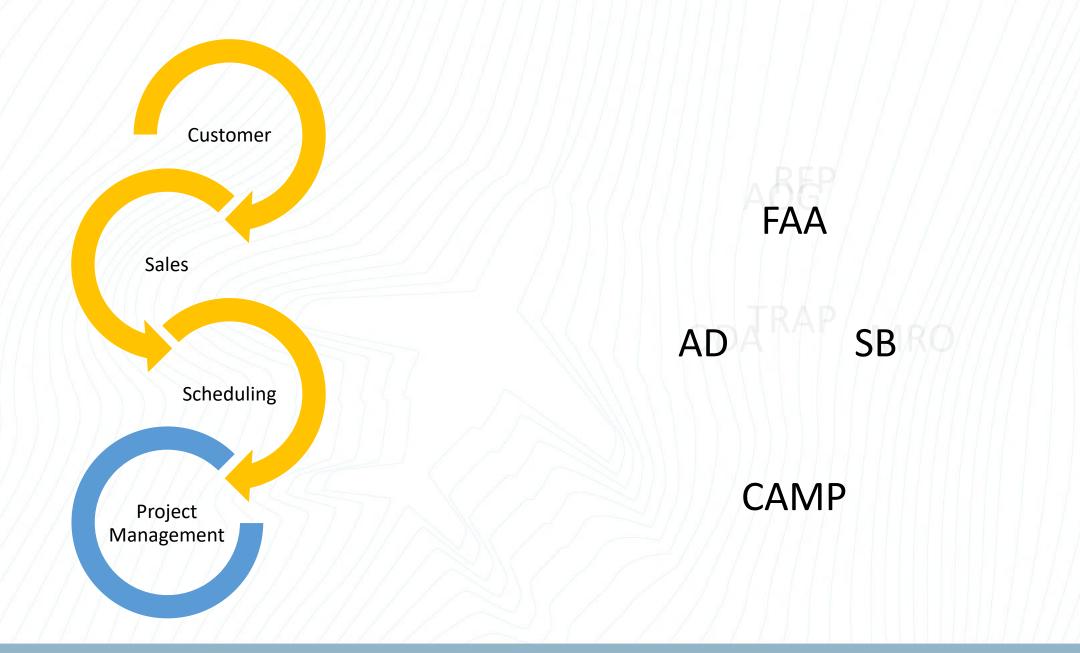




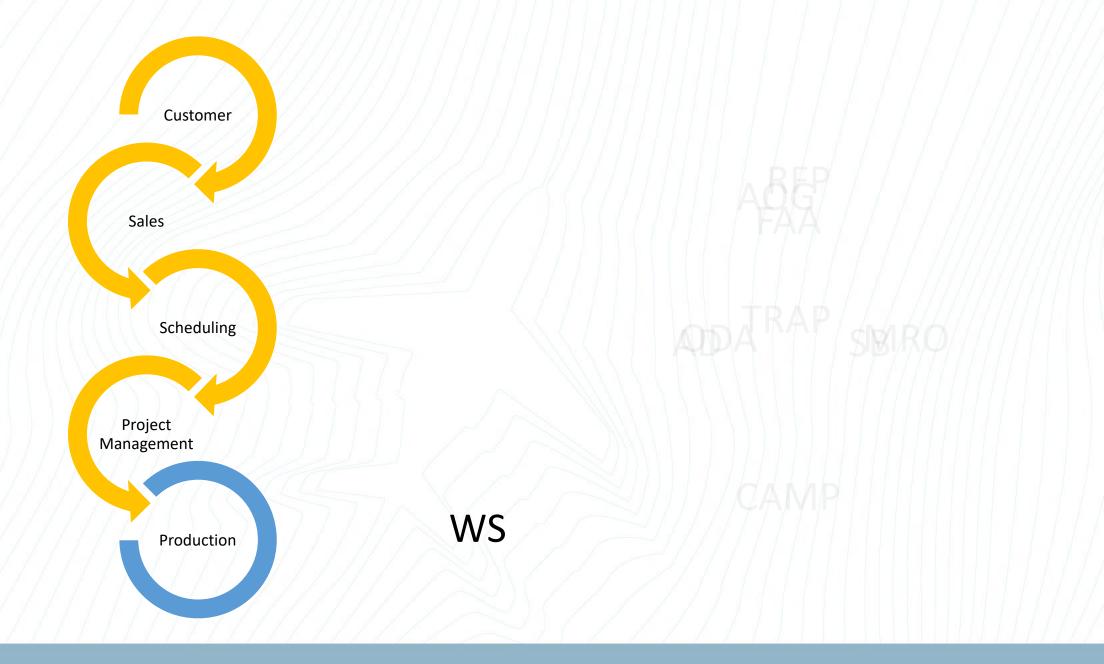








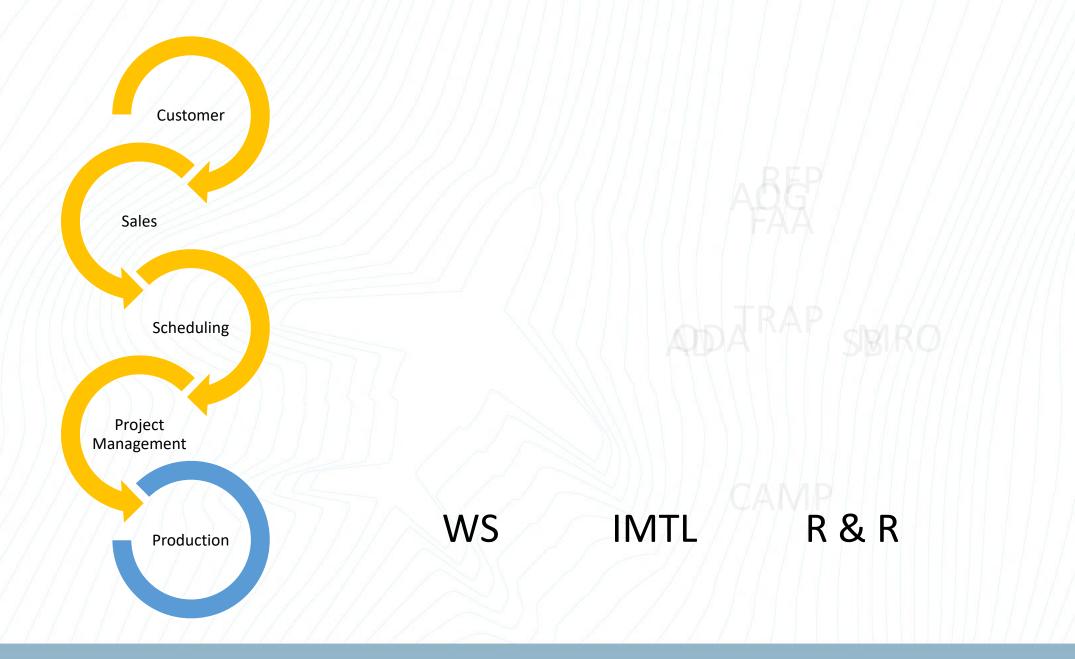




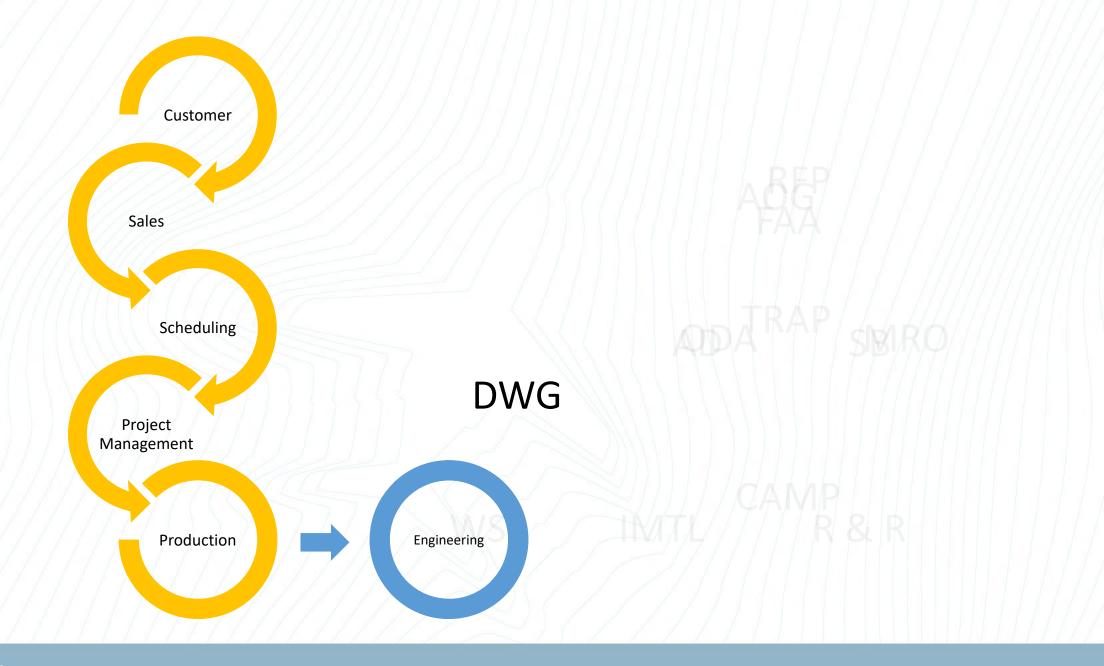




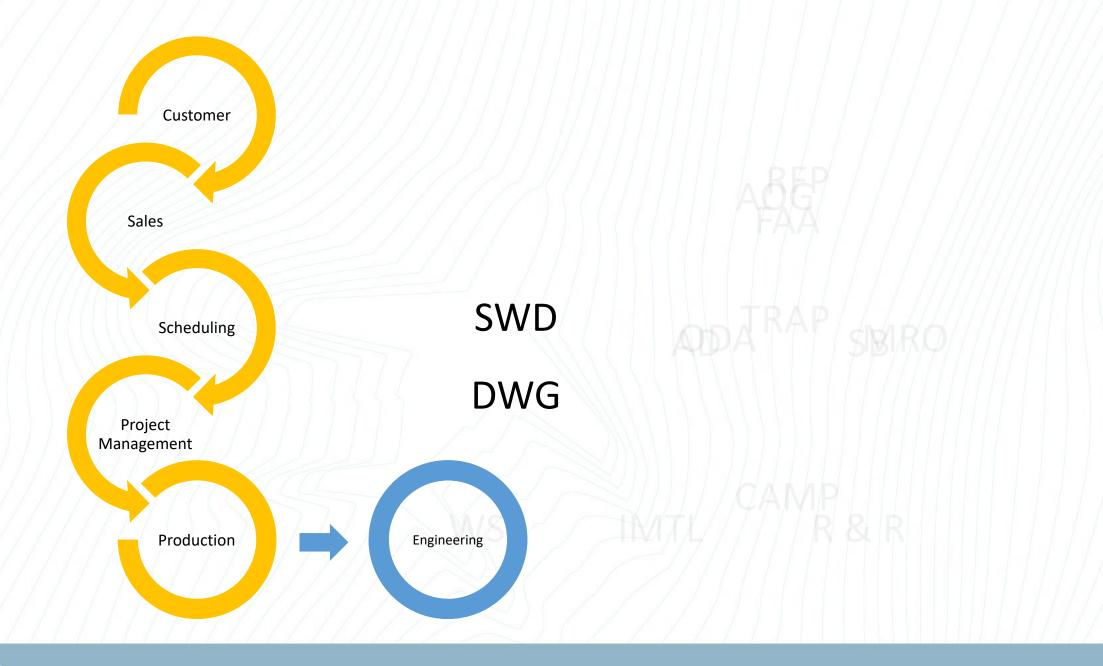




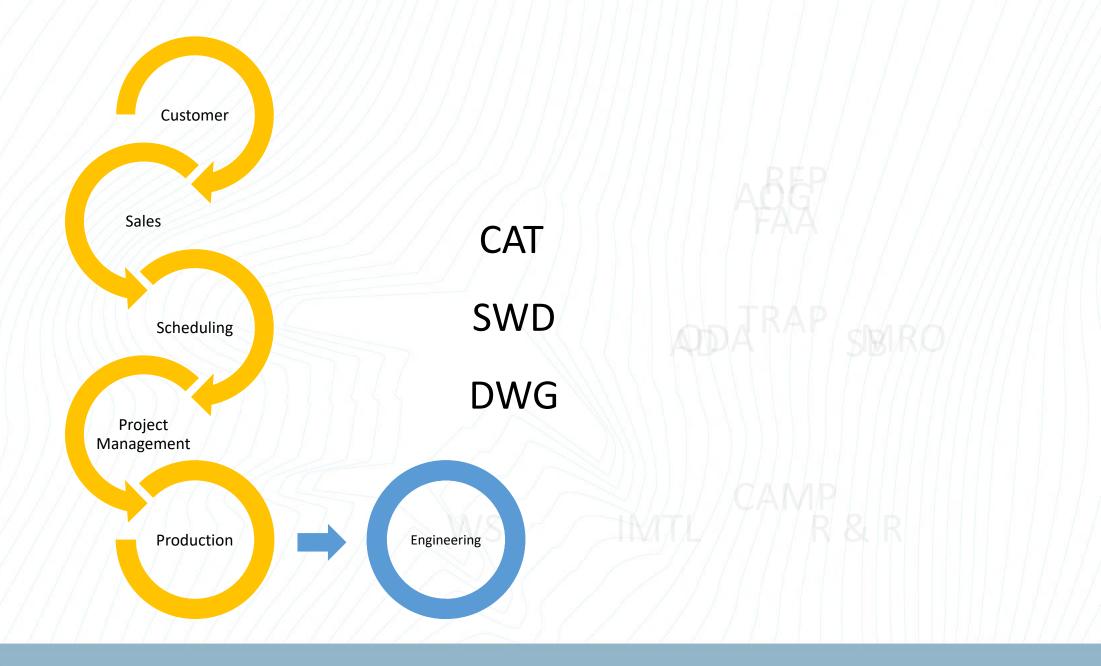




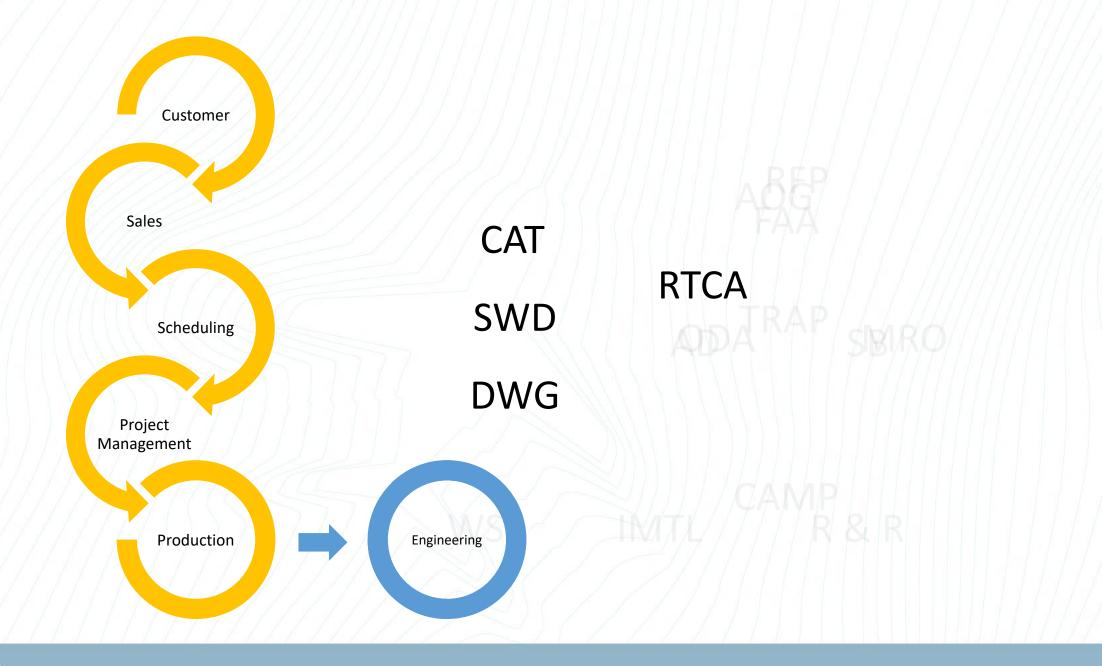




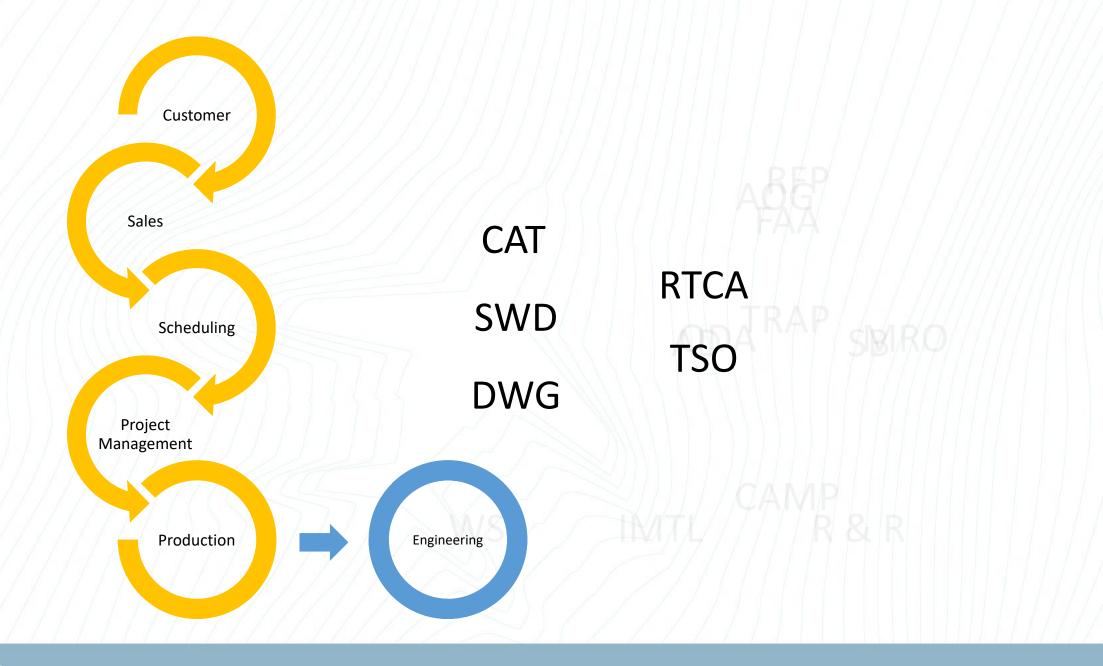




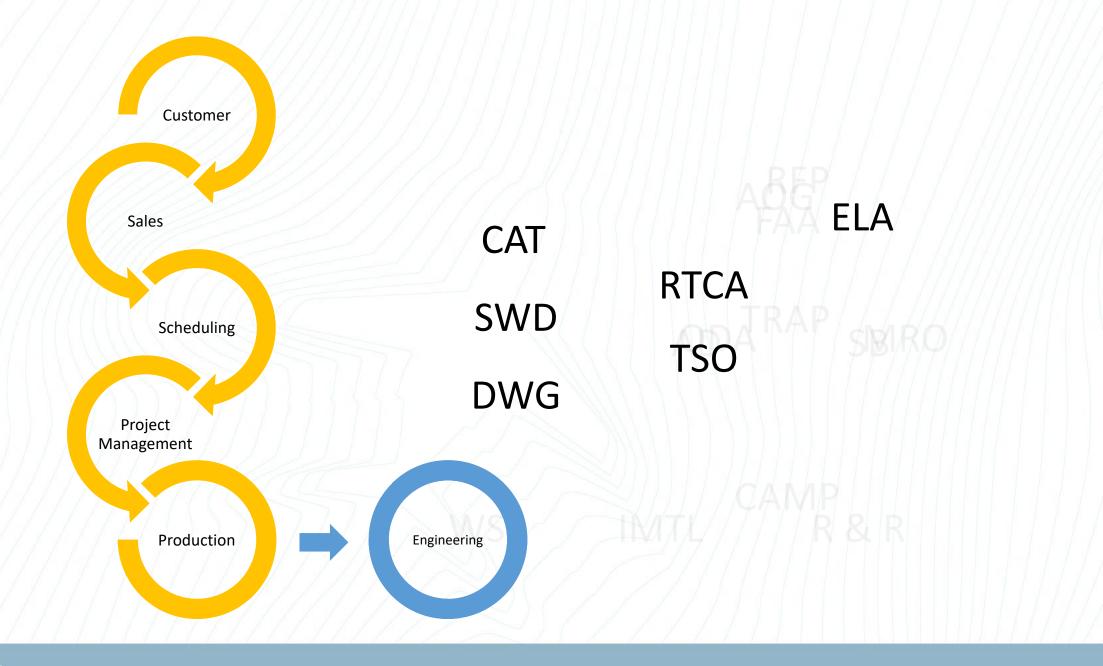




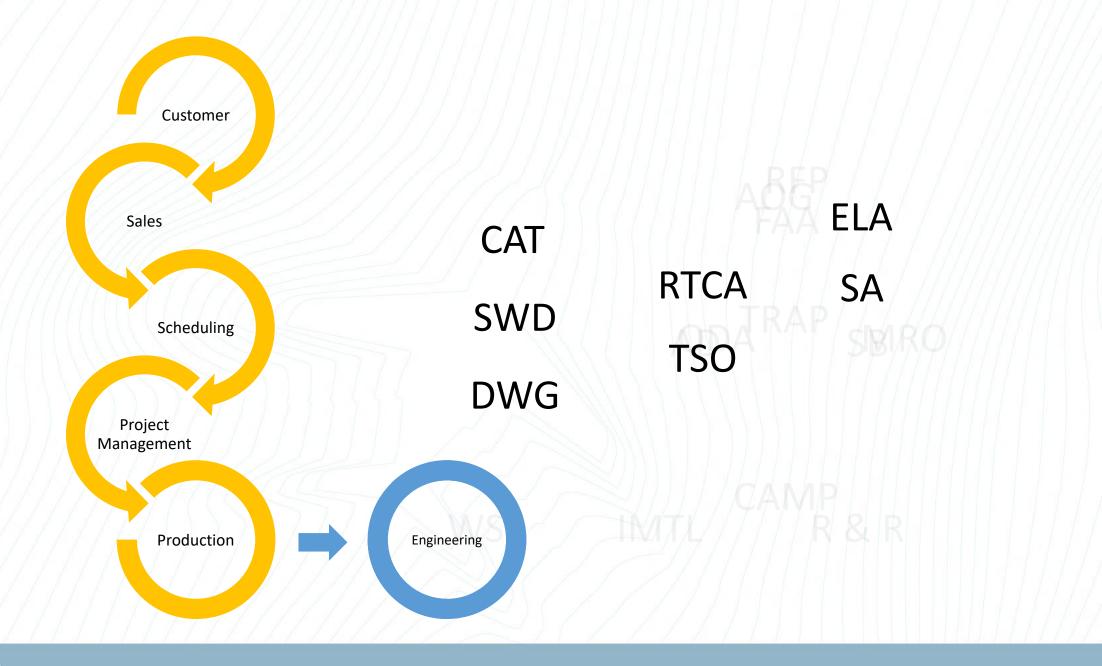




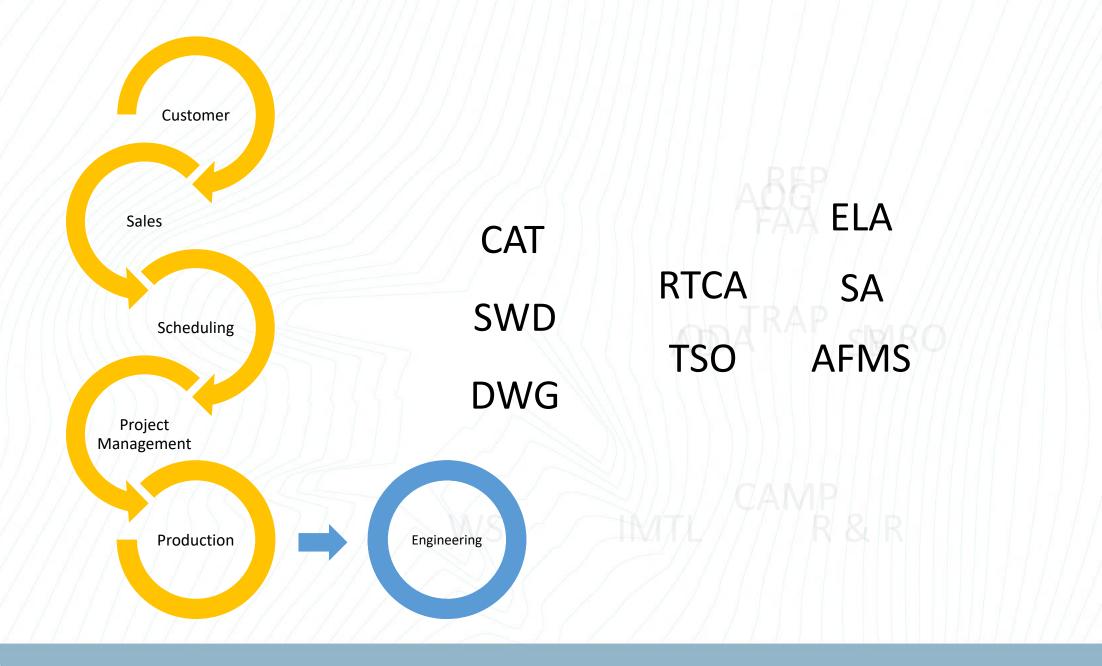




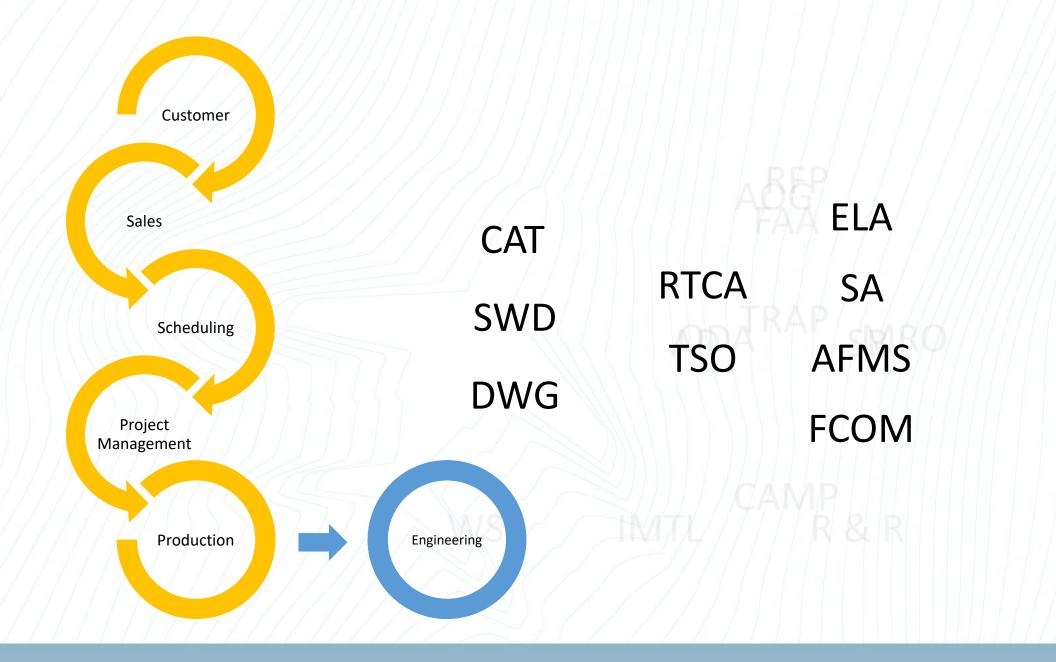




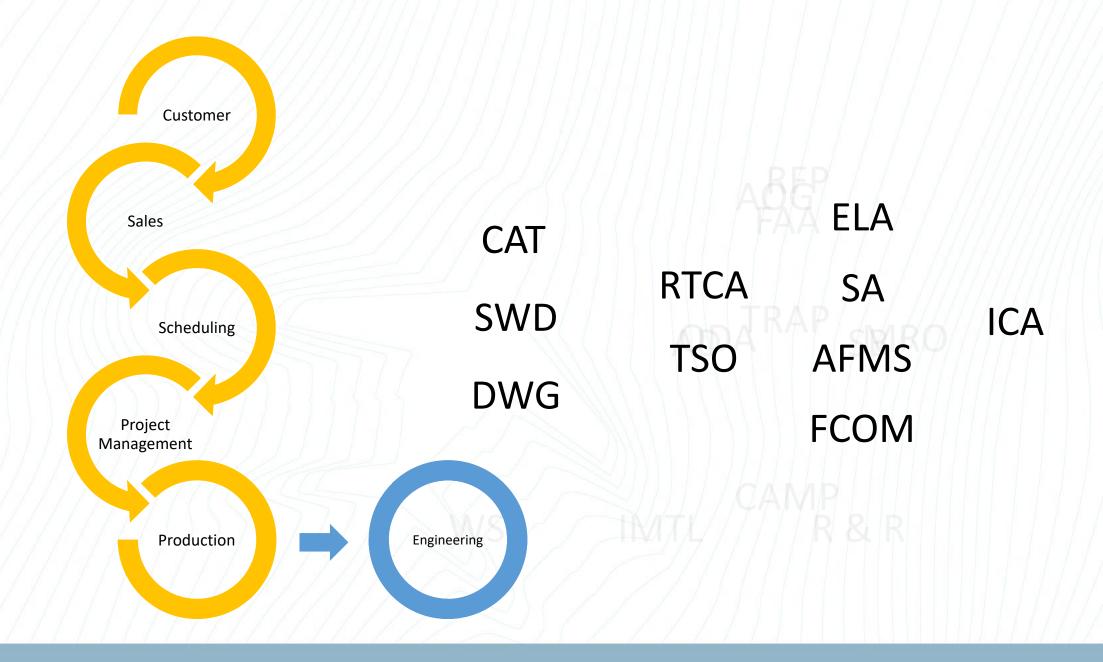




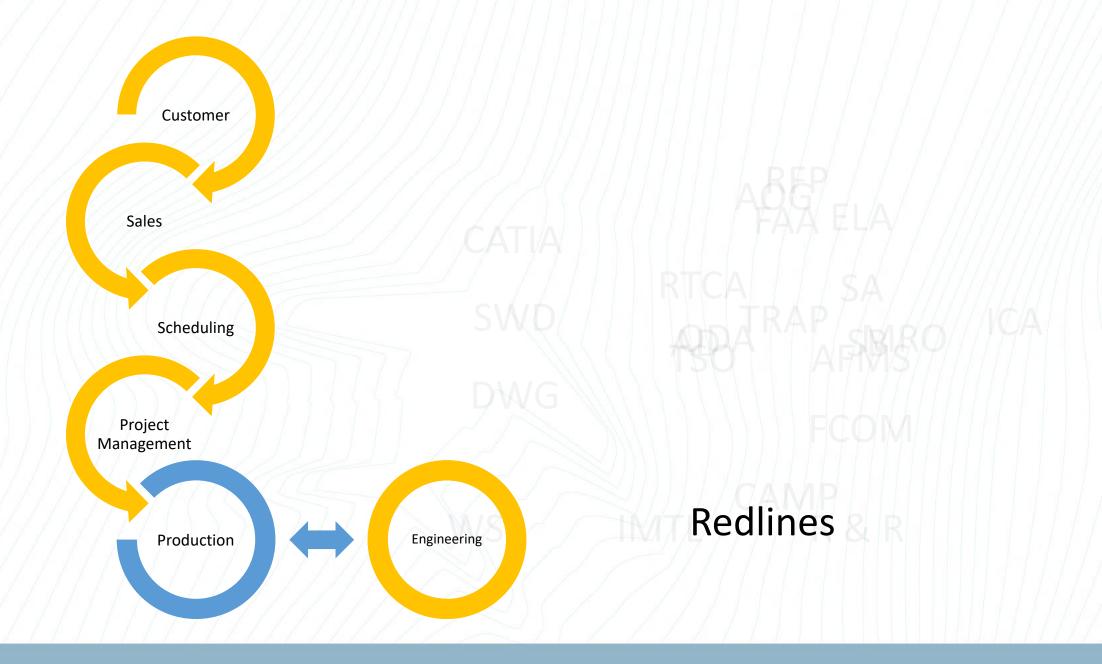




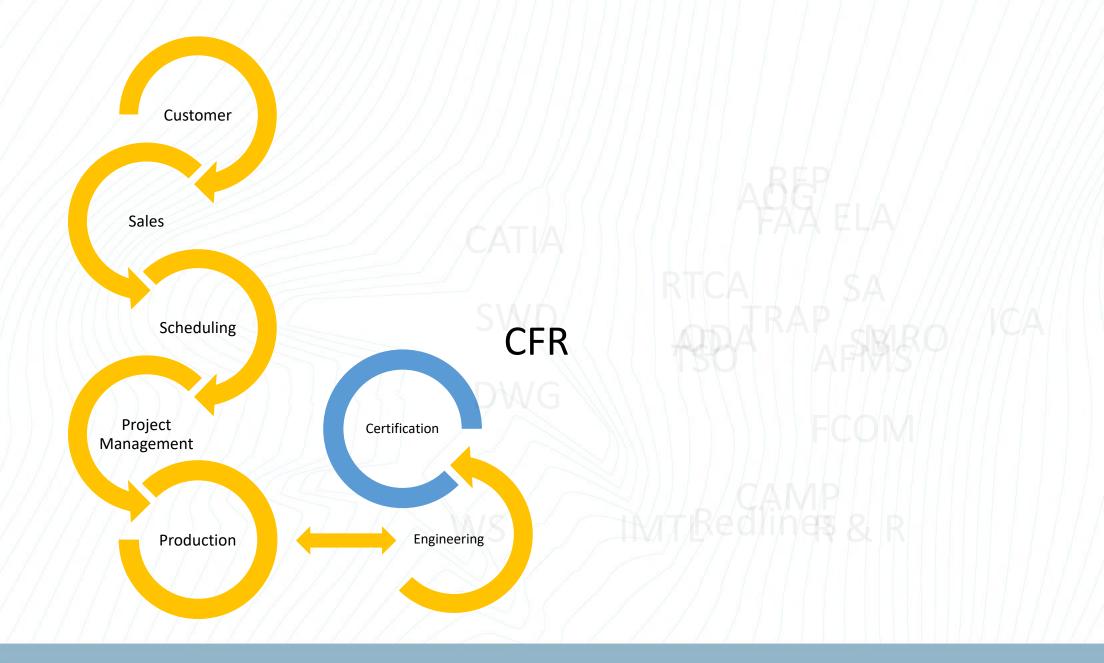




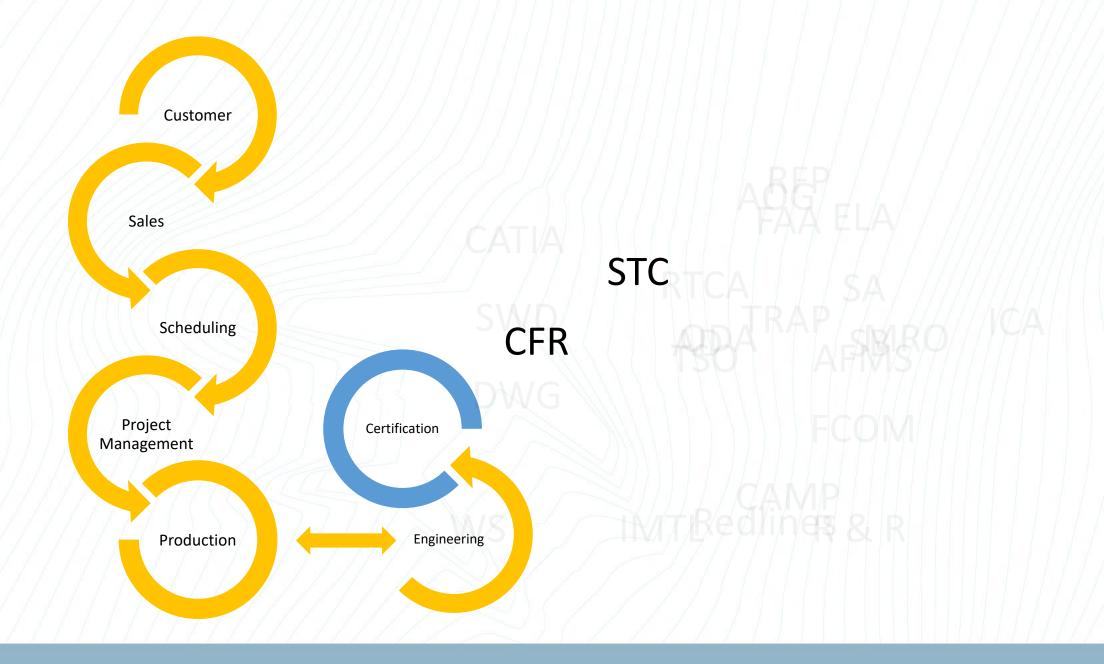




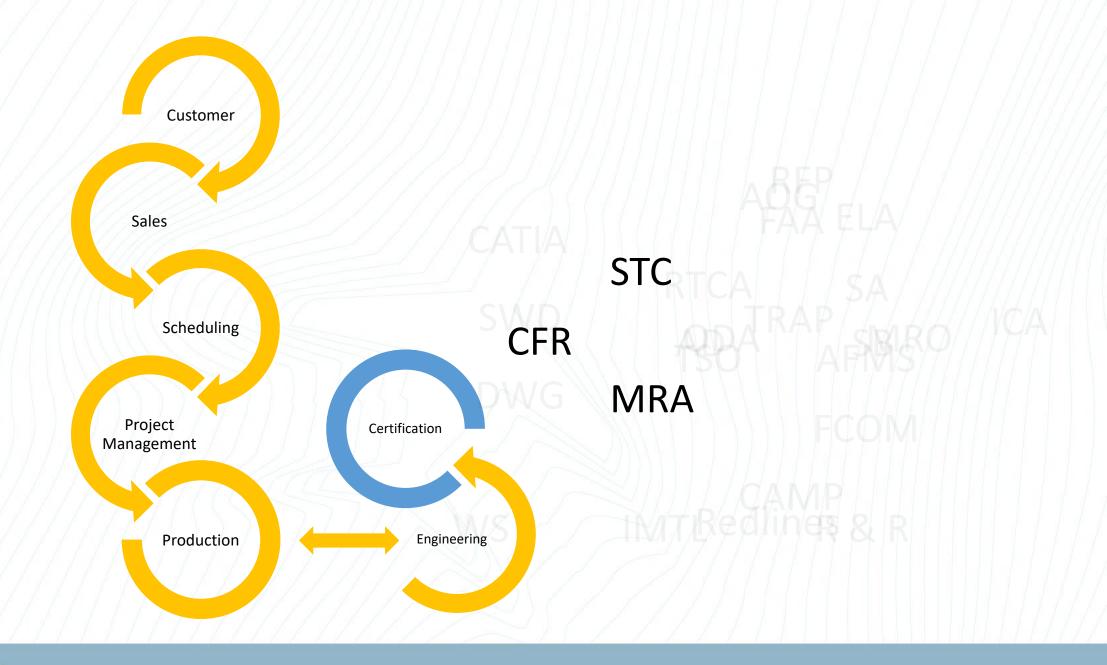




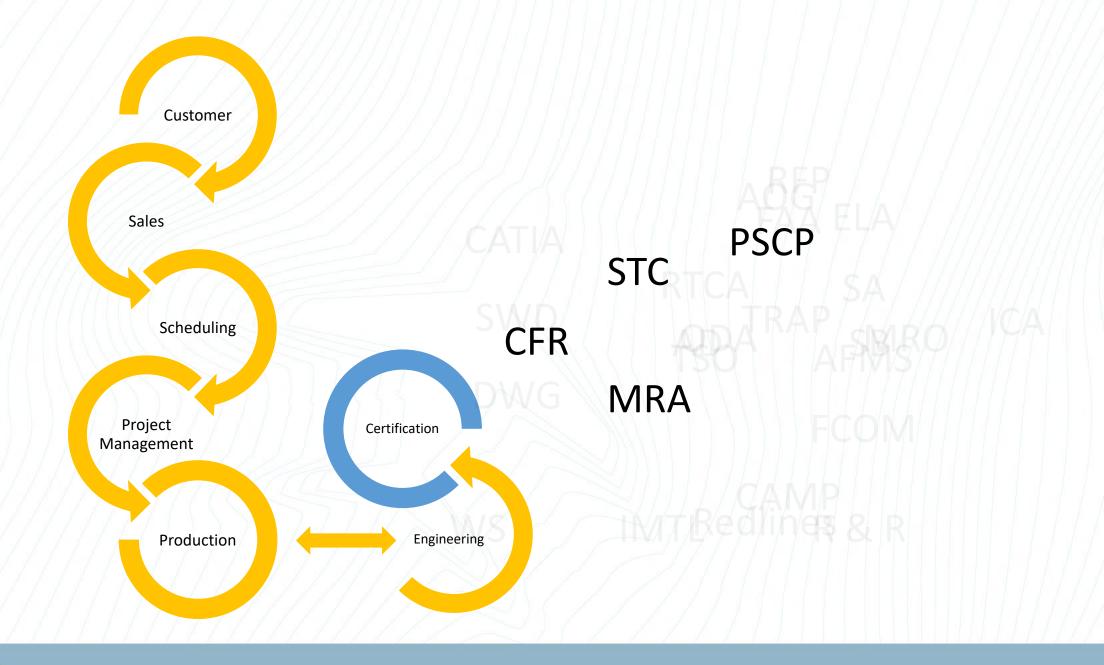




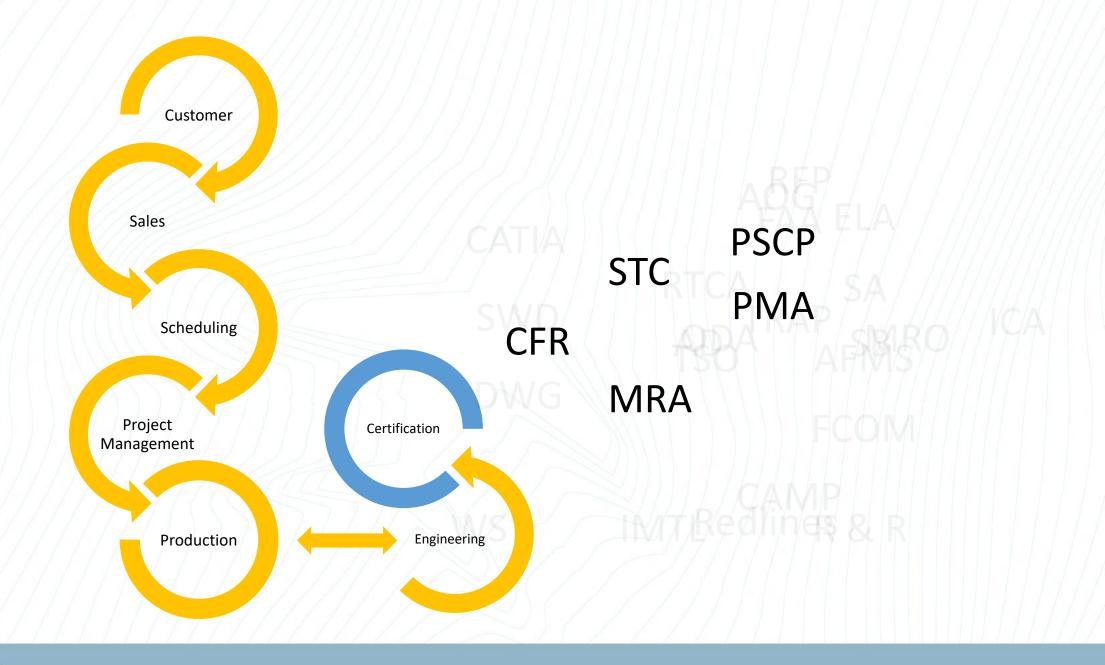




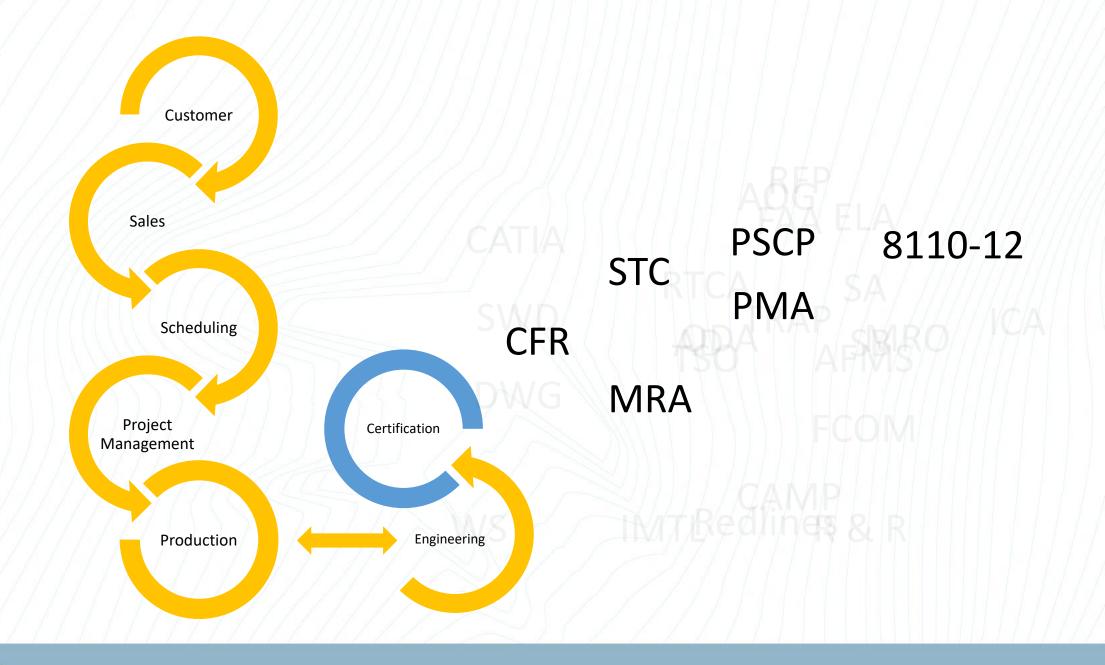




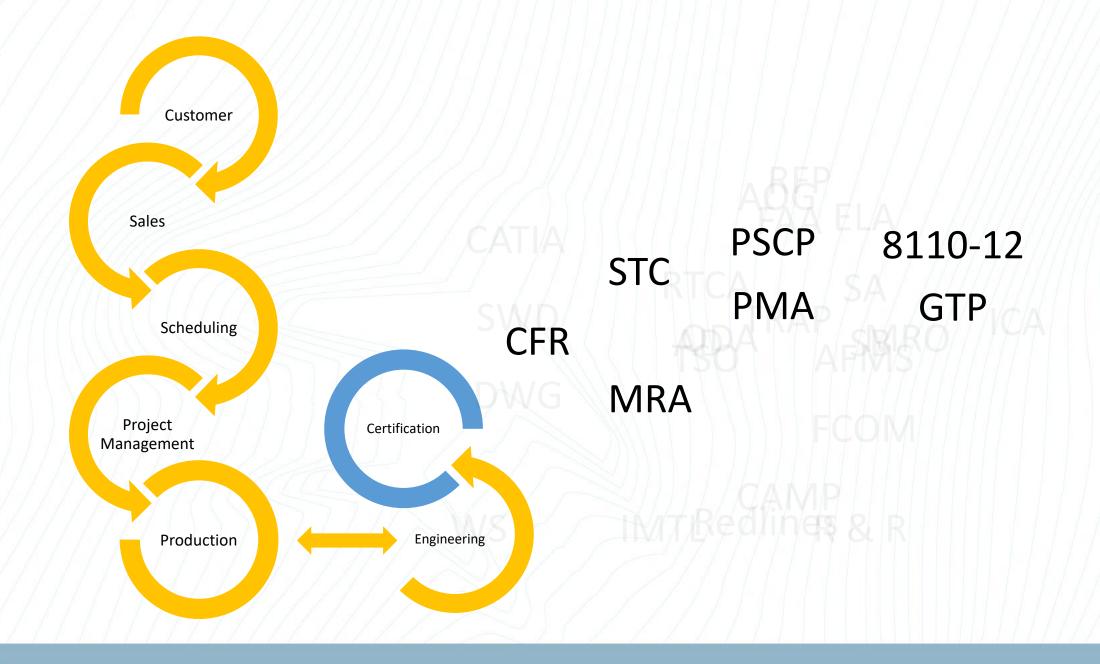




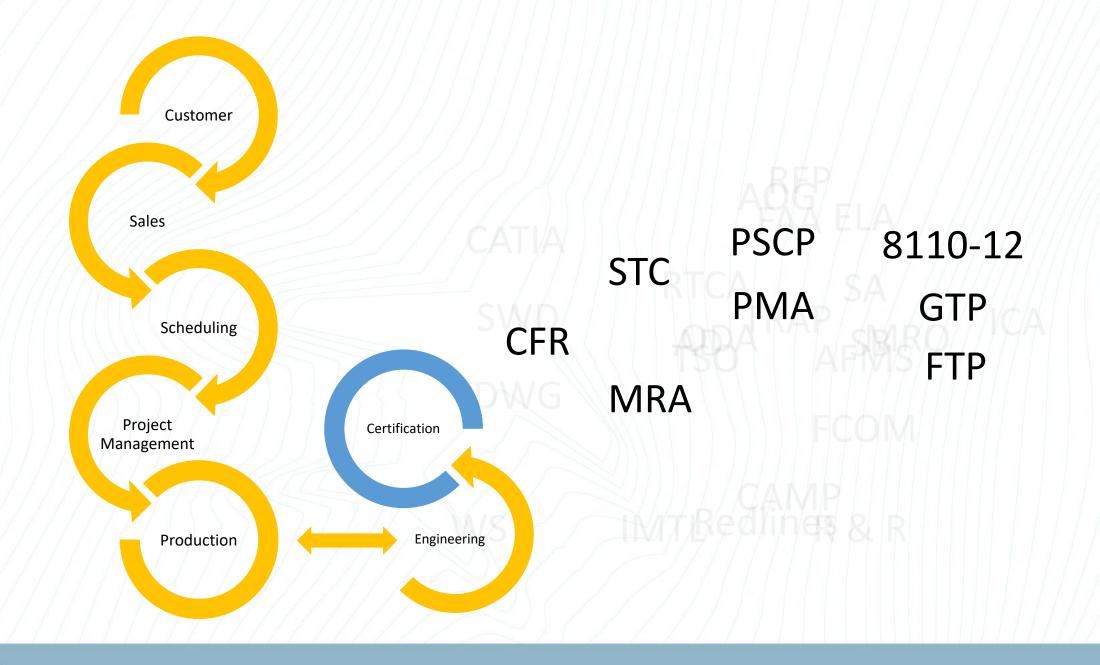




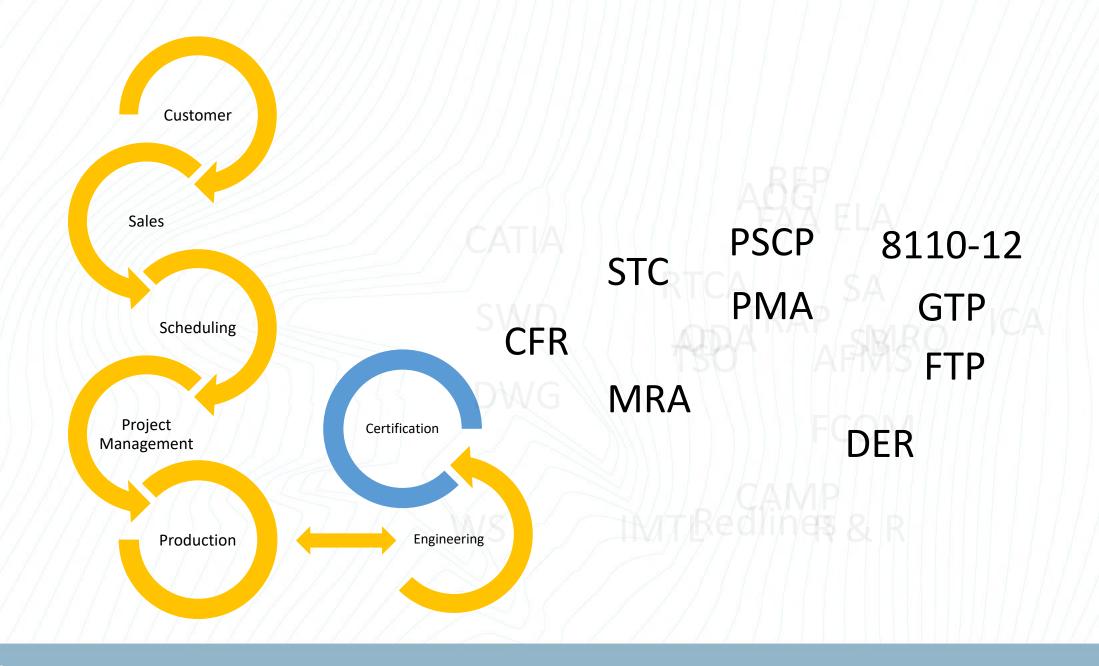




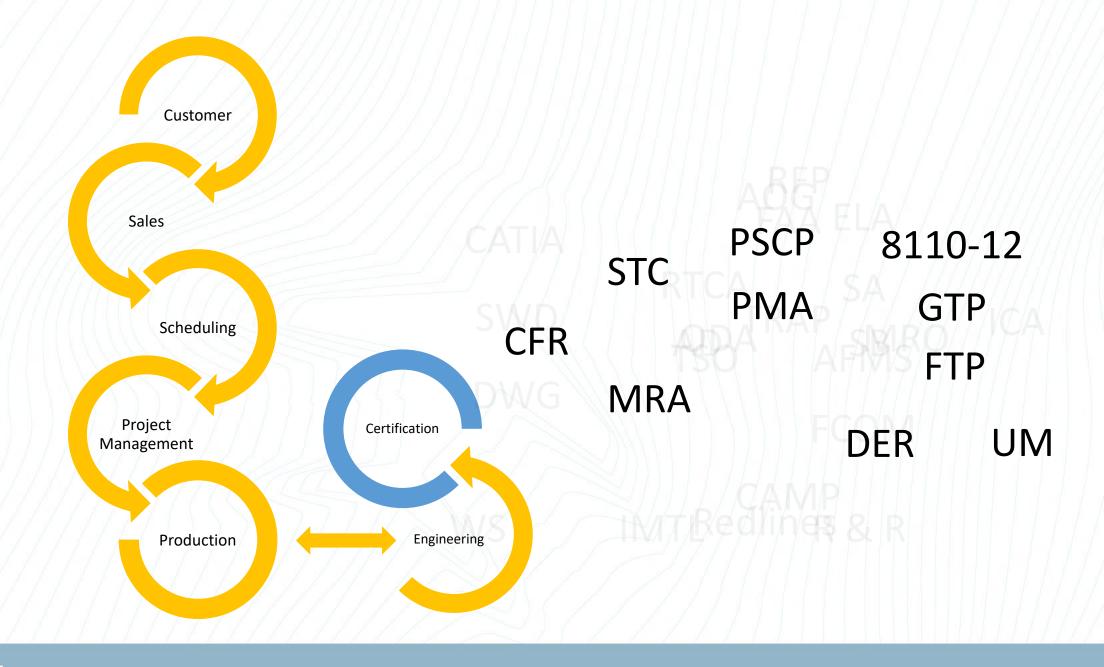




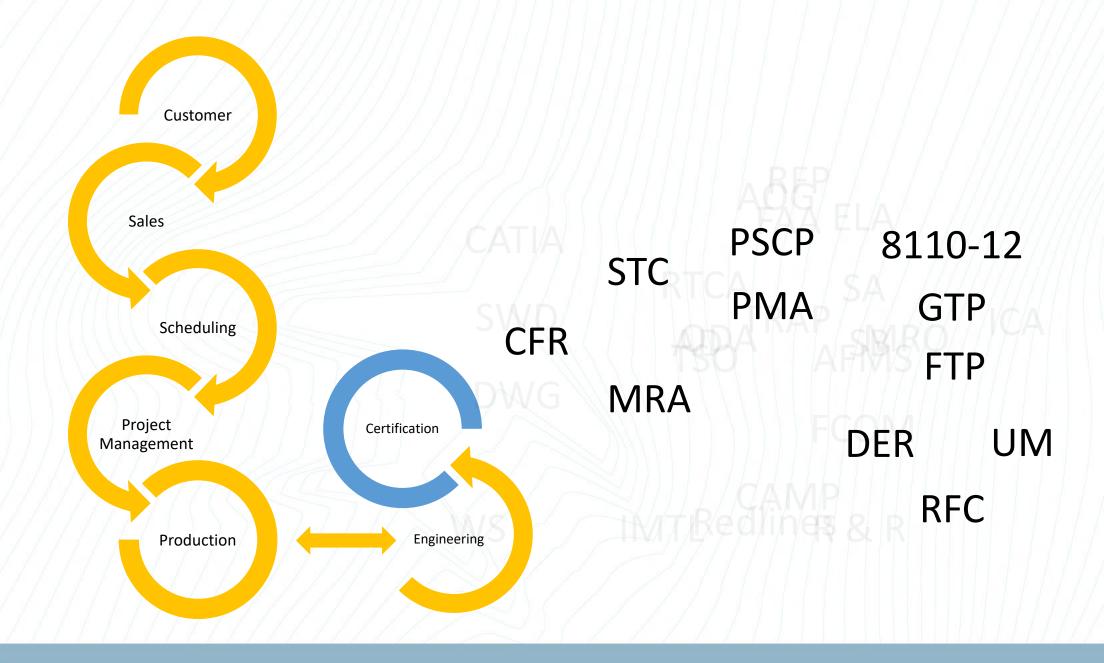




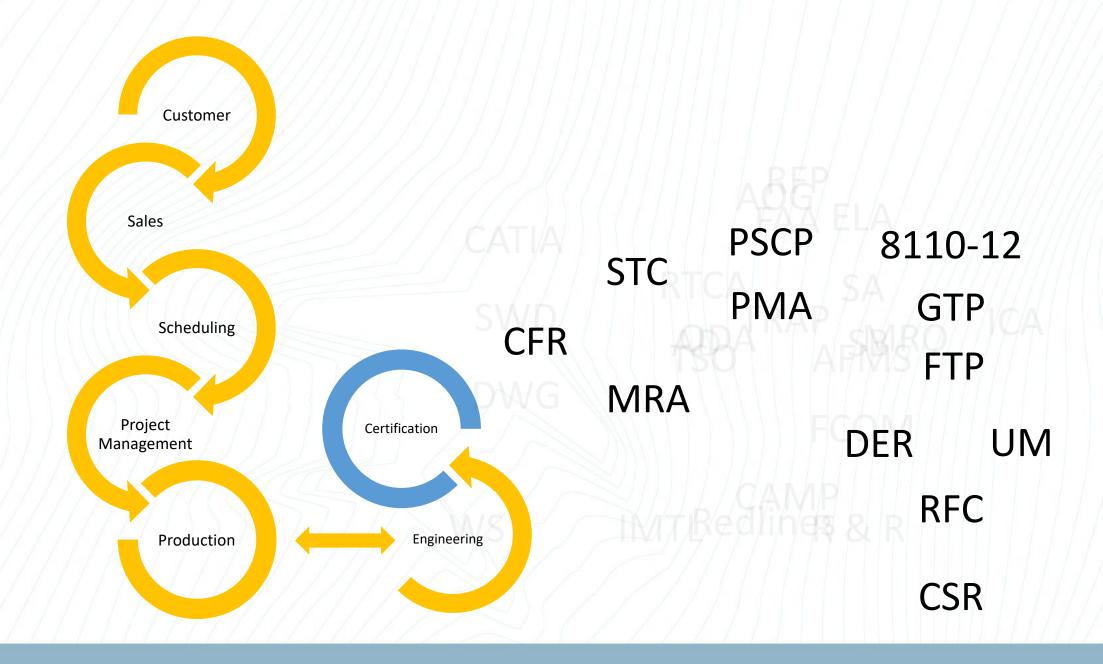




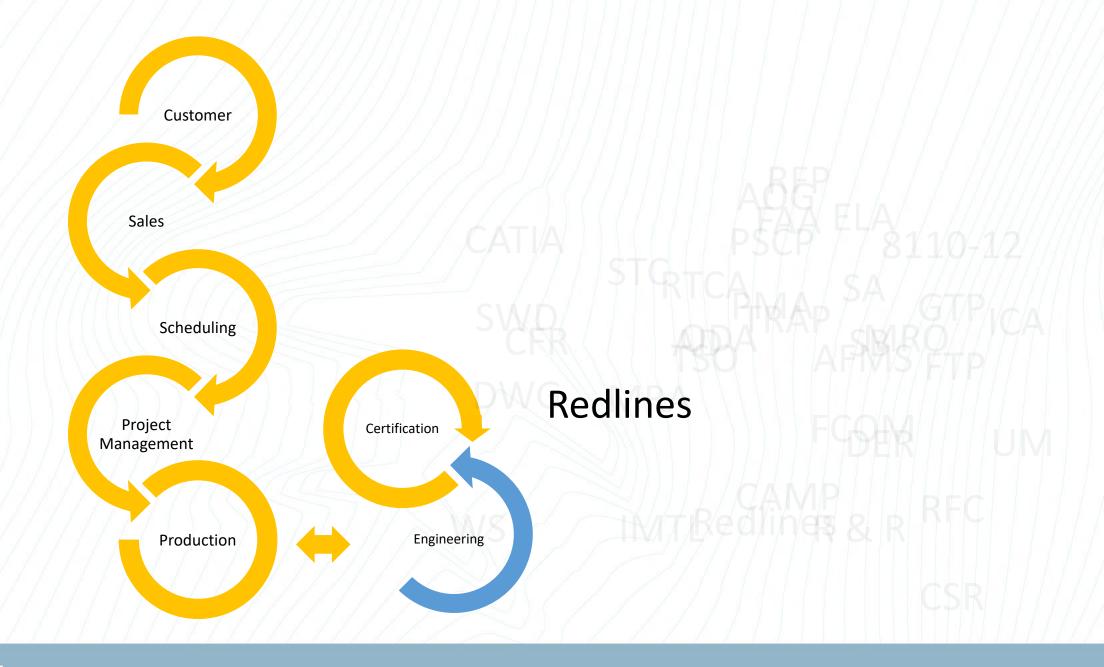






























#### • Criteria



#### **Requirements Specification**

for

A New Product Lifecycle/Data Management System (PLM/PDM)



Version 1.0



- Criteria
  - Functional Requirements





- Criteria
  - Functional Requirements
    - What does the end user need?





- Criteria
  - Functional Requirements
  - Technical Requirements





- Criteria
  - Functional Requirements
  - Technical Requirements
    - What infrastructure are we willing to pay for?



















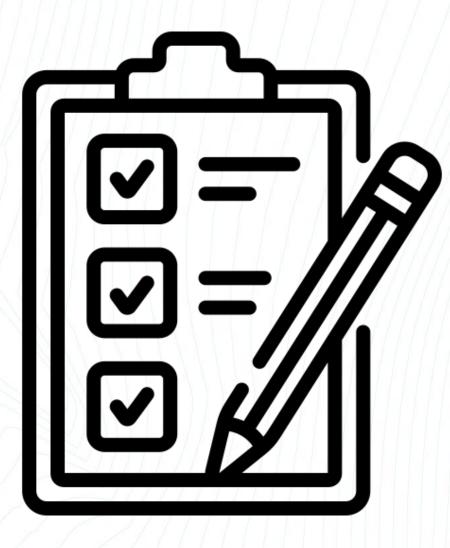






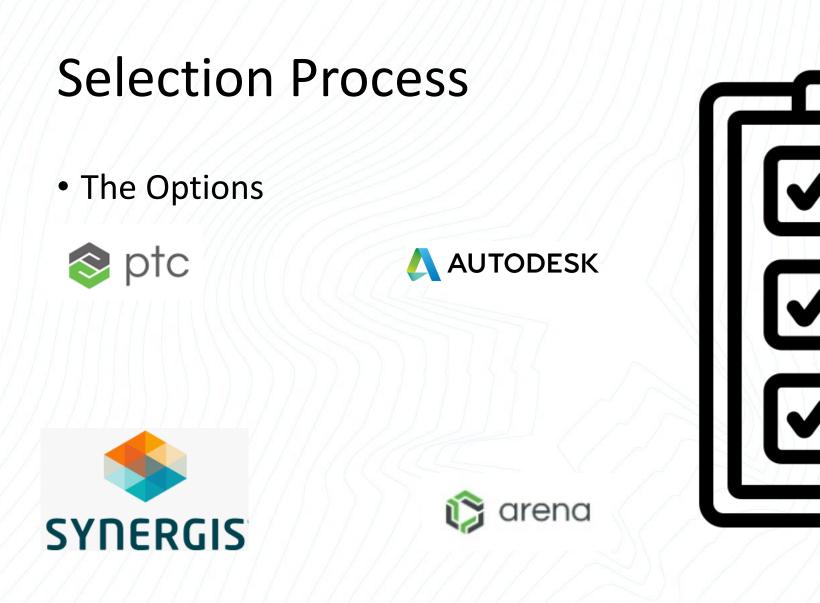




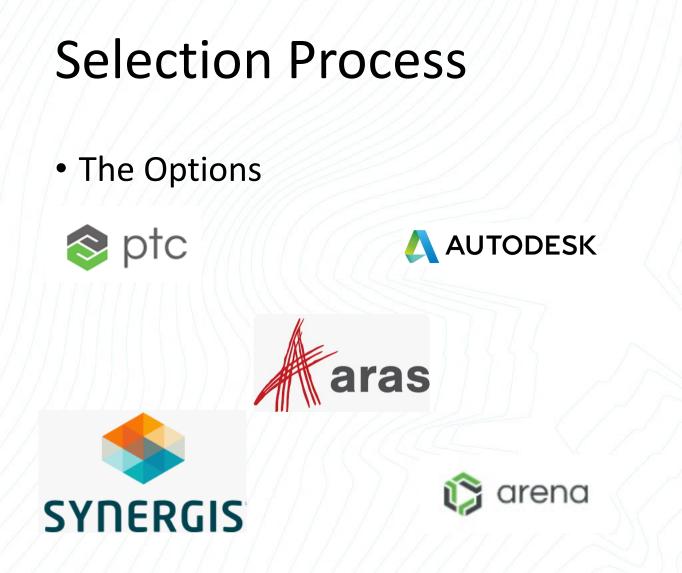
















• Eliminating factors





- Eliminating factors
  - Geared toward a pure manufacturing environment





- Eliminating factors
  - Geared toward a pure manufacturing environment
  - Did way more than we needed





- Eliminating factors
  - Geared toward a pure manufacturing environment
  - Did way more than we needed
  - Not enough power in the redline tools





- Eliminating factors
  - Geared toward a pure manufacturing environment
  - Did way more than we needed
  - Not enough power in the redline tools
  - Not enough flexibility in the workflow tools





- Eliminating factors
  - Geared toward a pure manufacturing environment
  - Did way more than we needed
  - Not enough power in the redline tools
  - Not enough flexibility in the workflow tools
  - Licensing pay structure too complex





- Eliminating factors
  - Geared toward a pure manufacturing environment
  - Did way more than we needed
  - Not enough power in the redline tools
  - Not enough flexibility in the workflow tools
  - Licensing pay structure too complex
  - Not able to work well in a CMMC environment









• Data Migration





- Data Migration
- Workflows





- Data Migration
- Workflows
- Approvals/Stamping





- Data Migration
- Workflows
- Approvals/Stamping
- Redline Process





- Data Migration
- Workflows
- Approvals/Stamping
- Redline Process
- Vendor Data





- Data Migration
- Workflows
- Approvals/Stamping
- Redline Process
- Vendor Data
- Audit





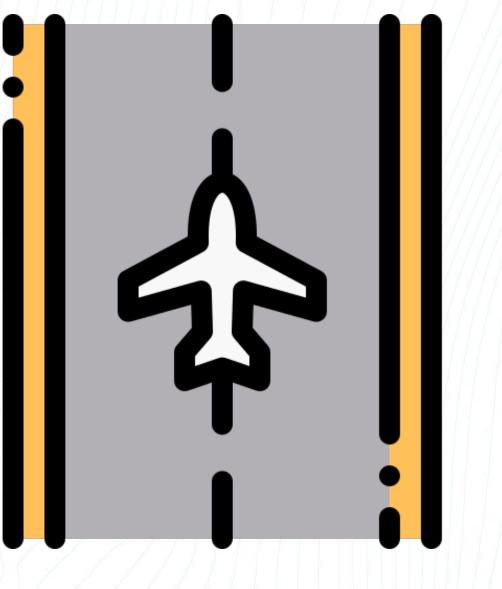


Quoting

• Response to our req doc

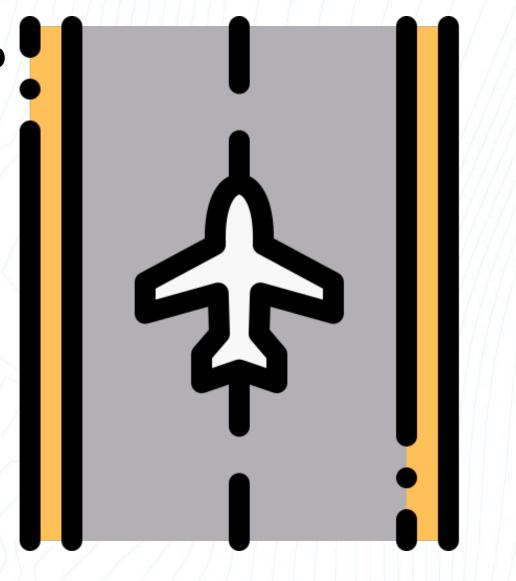


- Quoting
  - Response to our req doc
- Discovery
  - On site visit





- Quoting
  - Response to our req doc
- Discovery
  - On site visit
- Solution Development
  - Collaborative











# Thank You



