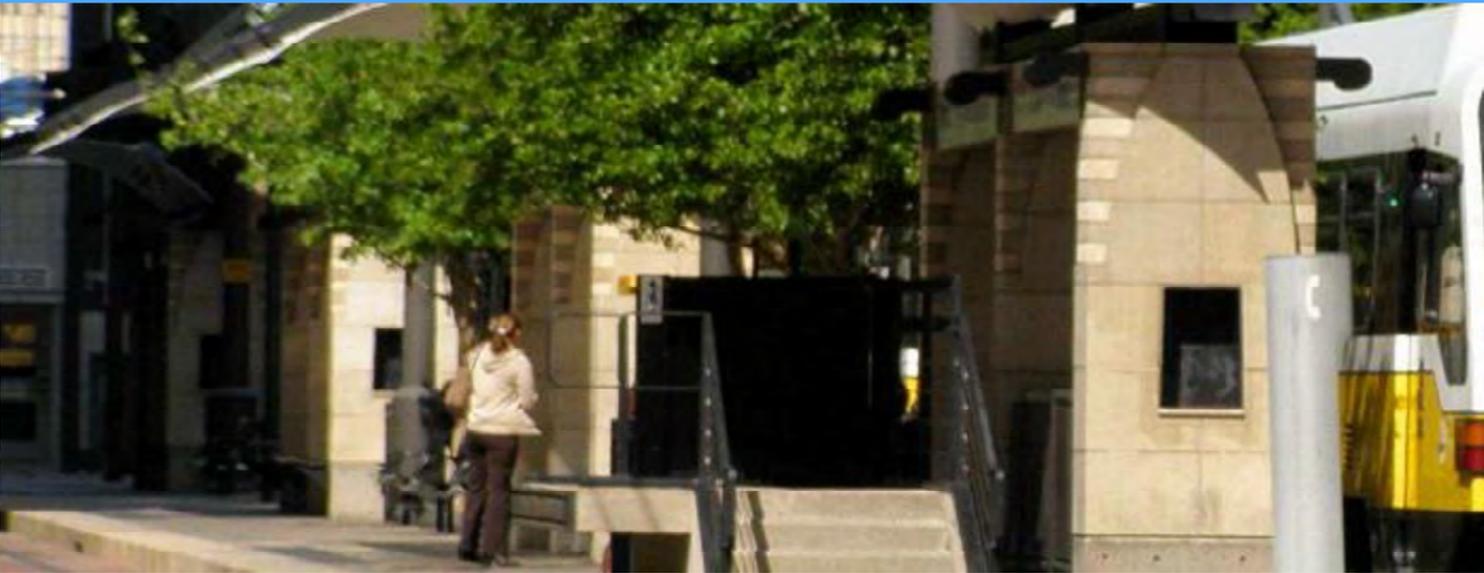




ROSENDI

Fred Mees
Corp B

or



the Number 1 largest privately held electrical contractor in North America. With over 4,300 specialized employees and a revenue of \$2 billion, we take the lead in today's market. Since our culture has always been to embrace the latest technology, we've entered new markets decades ago.

Years of experience in electrical construction, we serve a wide range of customers in:

- Technology
- IT Services
- Communications
- Corporate Industries

UNMATCHED EXPERIENCE

Expertise

Extensive, complex project expertise in high-risk/higher-value projects throughout North America

BIM

Proven BIM and 3D-modeling systems that increase installation speed and labor productivity

Leadership

Active leadership and authoring in a majority of industry electrical



 Office Locations

9.4

Million
Man hours

Nationally

1.6

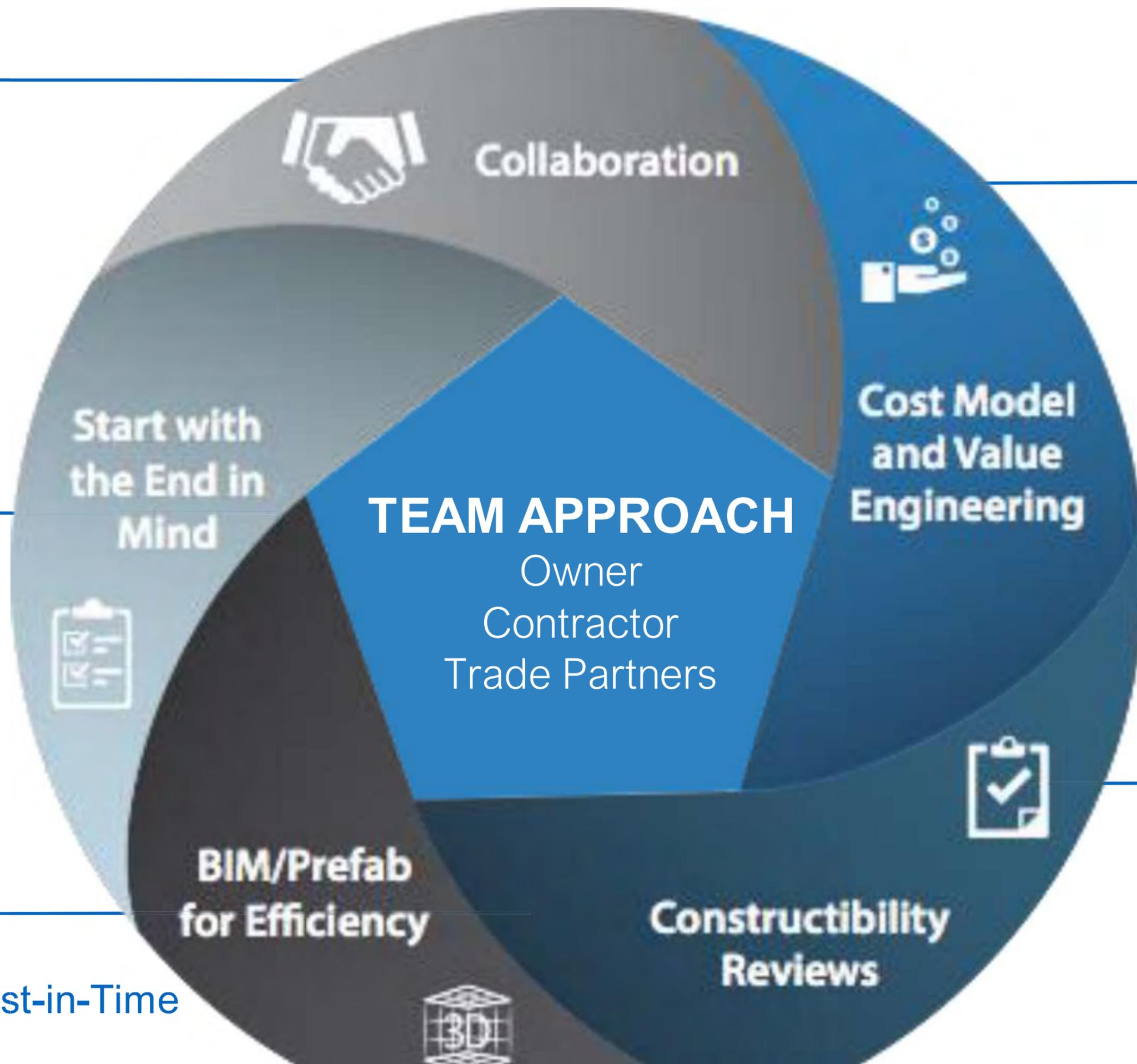
Million
Man hours

Division 4

ed hard to make safety part of the
re, and to empower workers to
n the job"

Tom Sorley, CEO for Rosendin





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 ...grades for input

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 ...ability review
 ...control

...Modeling and Just-in-Time
 ...Prefabrication

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Challenges & Opportunities

Technology becoming more and more relevant to our industry, many are still figuring out how to manage the selection, pilot, implementation support.

From this from both the perspective of BIM and IT there are a number of opportunities for companies to advance and grow, but with that comes a number of human nature and general technology issues.

from Rosendin About Implementing Change

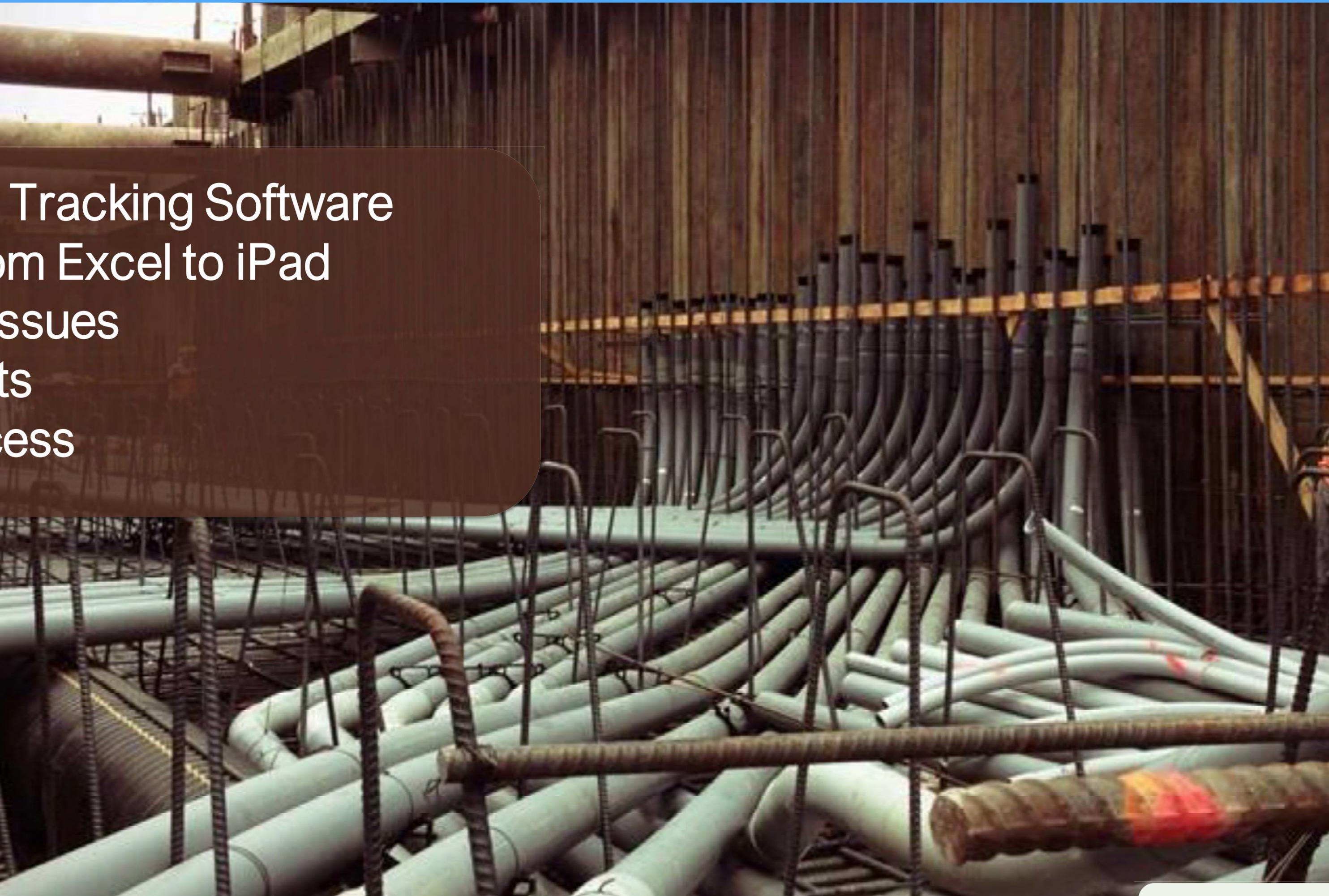
Importance of BIM & IT Working Together

Opportunities in the Market

Good, The Bad, The Ugly - Lessons Learned



Tracking Software
from Excel to iPad
Issues
ts
ess



IT as a Service

Application multiple times at request of business
Feedback to keep modifying the software
IT responsible for deployment, struggled with traction
Low adoption
Customizing application

Library that connects different data sources with different applications
- Revit/SharePoint/AutoCAD/Access/Excel
Application "Surveyor App"
Application "Dashboard"
Data Standardization
Increased efficiency provided
- Feeder Schedule

Feeder Schedule Summary - Job: 220191

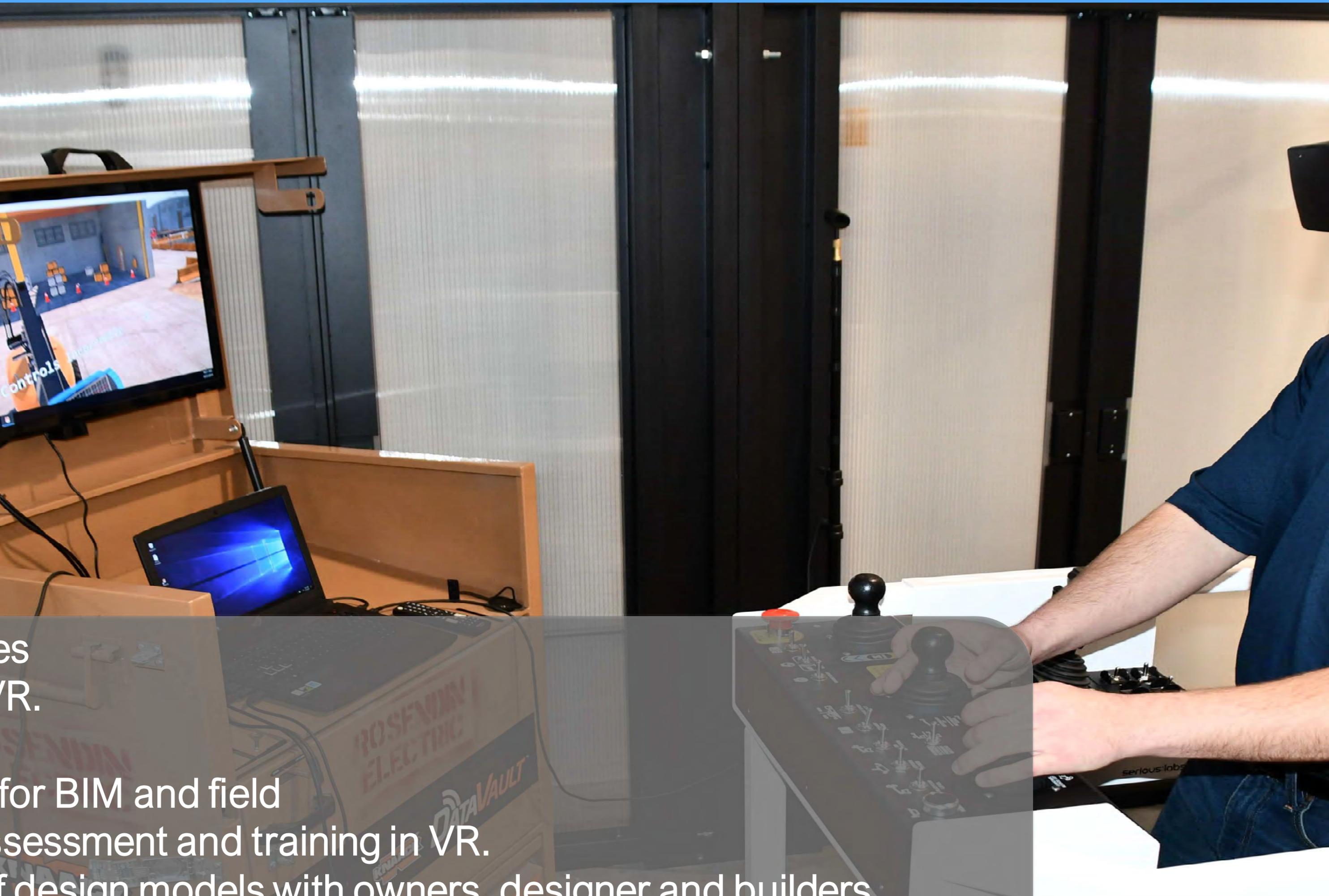
EQ Type	To Equipment	To EQ Type	Feeder Tag	Conduit Size	Model Conduit Data						Phase Counting		Neutral Conductors		Ground Conductors		
					EMT	MC	PVC	RMC	OTHER	Total Conduit Length	Segregation Code	Phase 1	Phase 2	No of Neutral	Neutral Size	No of Ground	Ground Size
MSB	SWHP1 08	HD	H_1600-4_AL	3.5	0.00	0.00	25.07	0.00	0.00	25.07	P	3	600MCM	1	600MCM	1	350MCM
MSB	T1-5B	T	kva_225-400-3	2	117.50	0.00	0.00	0.00	0.00	117.5	F	3	250MCM	0		1	1
MSB	T1-5B	T	kva_225-400-3	2	117.34	0.00	0.00	0.00	0.00	117.34	F	3	250MCM	0		1	1
MSB	T1-65B	T	H_500-3_AL	2	302.49	0.00	0.00	0.00	0.00	302.49	F	3	350MCM	0		1	1/0
MSB	T1-65B	T	H_500-3_AL	2	300.38	0.00	0.00	0.00	0.00	300.38	F	3	350MCM	0		1	1/0
MSB	ATS#2	ATS	H_1200-3	2.5	175.84	0.00	0.00	0.00	0.00	175.84	P	3	350MCM	0		1	3/0
MSB	ATS#2	ATS	H_1200-3	2.5	176.69	0.00	0.00	0.00	0.00	176.69	F	3	350MCM	0		1	3/0
MSB	ATS#2	ATS	H_1200-3	2.5	177.47	0.00	0.00	0.00	0.00	177.47	F	3	350MCM	0		1	3/0
MSB	ATS#2	ATS	H_1200-3	2.5	178.31	0.00	0.00	0.00	0.00	178.31	F	3	350MCM	0		1	3/0
MSB	ATS#5	ATS	H_600-3	2.5	0.00	0.00	21.92	0.00	0.00	21.92	F	3	350MCM	0		1	1
MSB	ATS#5	ATS	H_600-3	2.5	0.00	0.00	21.94	0.00	0.00	21.94	P	3	350MCM	0		1	1
MSB	ATS#7	ATS	H_1800-3	3	177.69	0.00	0.00	0.00	0.00	177.69	F	3	500MCM	0		1	250MCM
MSB	ATS#7	ATS	H_1800-3	3	176.84	0.00	0.00	0.00	0.00	176.84	F	3	500MCM	0		1	250MCM
MSB	ATS#7	ATS	H_1800-3	3	176.09	0.00	0.00	0.00	0.00	176.09	P	3	500MCM	0		1	250MCM
MSB	ATS#7	ATS	H_1800-3	3	175.28	0.00	0.00	0.00	0.00	175.28	F	3	500MCM	0		1	250MCM
MSB	ATS#7	ATS	H_1800-3	3	174.47	0.00	0.00	0.00	0.00	174.47	P	3	500MCM	0		1	250MCM
MSB	ATS#6	ATS	H_1600-4	3	0.00	0.00	28.60	0.00	0.00	28.6	F	3	400MCM	1	400MCM	1	4/0
MSB	ATS#6	ATS	H_1600-4	3	0.00	0.00	29.39	0.00	0.00	29.39	F	3	400MCM	1	400MCM	1	4/0
MSB	ATS#6	ATS	H_1600-4	3	0.00	0.00	30.16	0.00	0.00	30.16	F	3	400MCM	1	400MCM	1	4/0
MSB	ATS#6	ATS	H_1600-4	3	0.00	0.00	30.94	0.00	0.00	30.94	F	3	400MCM	1	400MCM	1	4/0
MSB	ATS#6	ATS	H_1600-4	3	0.00	0.00	31.71	0.00	0.00	31.71	P	3	400MCM	1	400MCM	1	4/0
MSB	T1-0B	T	kva_500-800-3	3	0.00	0.00	35.04	0.00	0.00	35.04	F	3	400MCM	0		1	3/0
MSB	T1-0B	T	kva_500-800-3	3	0.00	0.00	35.00	0.00	0.00	35	F	3	400MCM	0		1	3/0
MSB	T1-0B	T	kva_500-800-3	3	0.00	0.00	34.96	0.00	0.00	34.96	P	3	400MCM	0		1	3/0
MSB	T1-1B	T	kva_150-300-3	2.5	70.16	0.00	0.00	0.00	0.00	70.16	F	3	500MCM	0		1	2
MSB	T1-2B	T	kva_300-500-3	2	82.55	0.00	0.00	0.00	0.00	82.55	F	3	350MCM	0		1	1/0
MSB	T1-2B	T	kva_300-500-3	2	83.03	0.00	0.00	0.00	0.00	83.03	F	3	350MCM	0		1	1/0
MSB	T1-3B	T	kva_150-300-3	2.5	93.73	0.00	0.00	0.00	0.00	93.73	F	3	500MCM	0		1	2
MSB	T1-4B	T	kva_150-300-3	2.5	103.99	0.00	0.00	0.00	0.00	103.99	P	3	500MCM	0		1	2
MSB	DHP1 0C	HD	H_1600-4_AL	3.5	0.00	0.00	20.64	0.00	0.00	20.64	F	3	600MCM	1	600MCM	1	350MCM
MSB	DHP1 0C	HD	H_1600-4_AL	3.5	0.00	0.00	19.17	0.00	0.00	19.17	F	3	600MCM	1	600MCM	1	350MCM
MSB	DHP1 0C	HD	H_1600-4_AL	3.5	0.00	0.00	19.31	0.00	0.00	19.31	P	3	600MCM	1	600MCM	1	350MCM
MSB	DHP1 0C	HD	H_1600-4_AL	3.5	0.00	0.00	22.62	0.00	0.00	22.62	F	3	600MCM	1	600MCM	1	350MCM



stance of IT and BIM working together. Both need to be able to fully leverage the shared benefit.

Many Opportunities As Well As Some Challenges.





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VR.

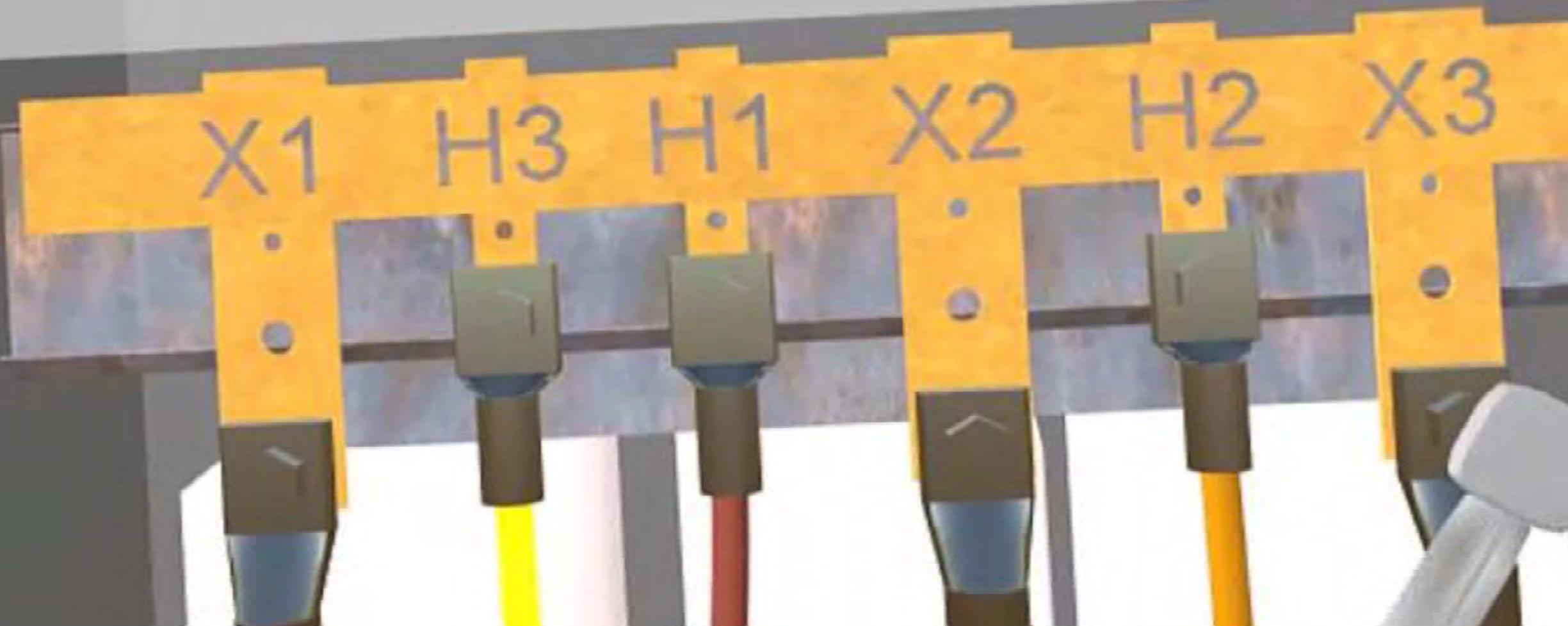
for BIM and field
assessment and training in VR.

of design models with owners, designer and builders

ing and Assessment

PULL TRIGGER TO
ACTIVATE/DEACTIVATE TORQUE

15 FT-LB



ation



could be:

challenges

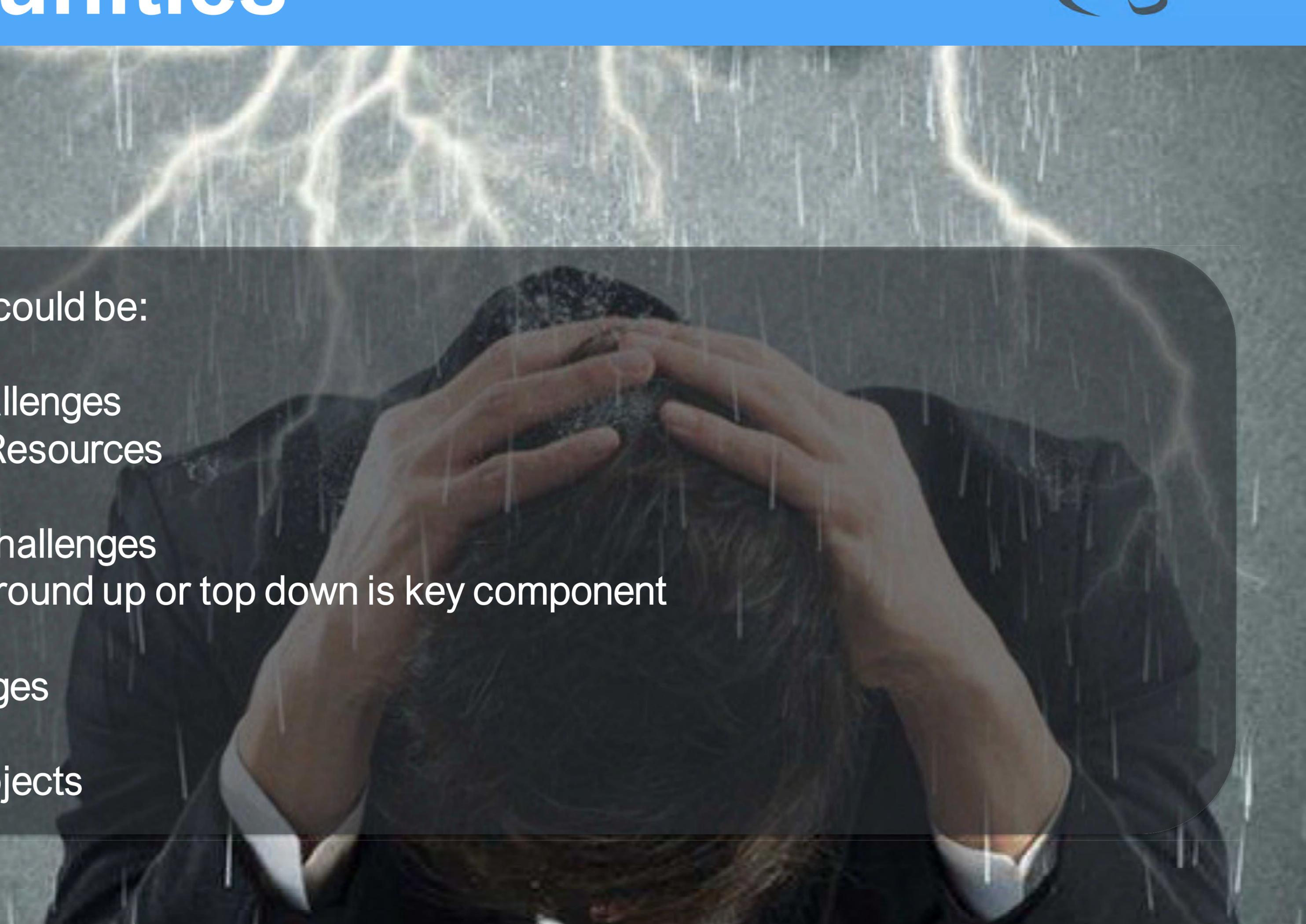
Resources

challenges

round up or top down is key component

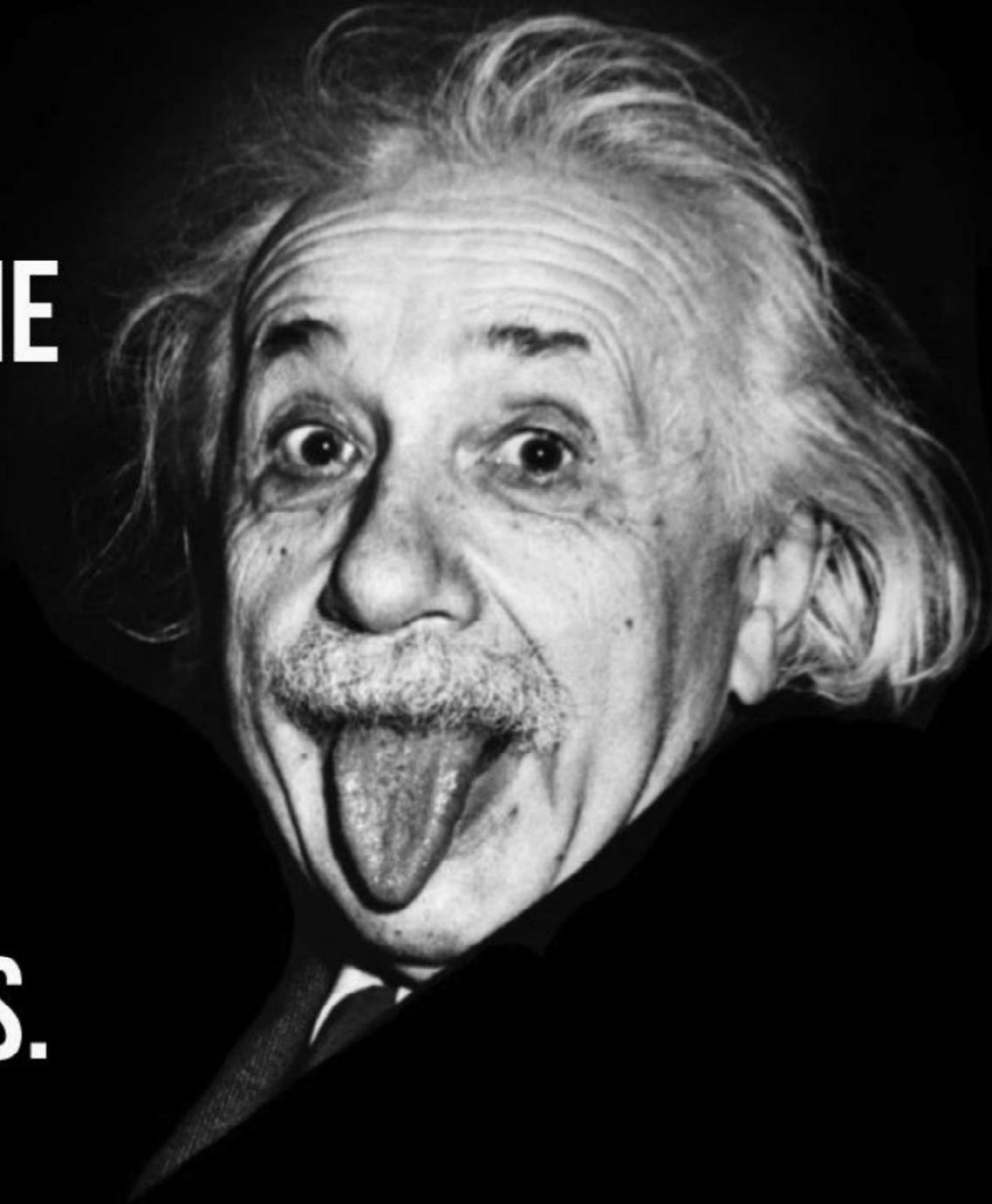
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**INSANITY: DOING THE
SAME THING OVER
AND OVER AGAIN,
AND EXPECTING
DIFFERENT RESULTS.**



ed

ly operation buy in and implementation

ng Integrations and other software that
forms a similar or complementary function

ping stakeholders informed and engaged

o be in it for the long haul

ng the physical and emotional changes

ny new process

Questions?



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Thank you

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