## From Playbook to Performance:

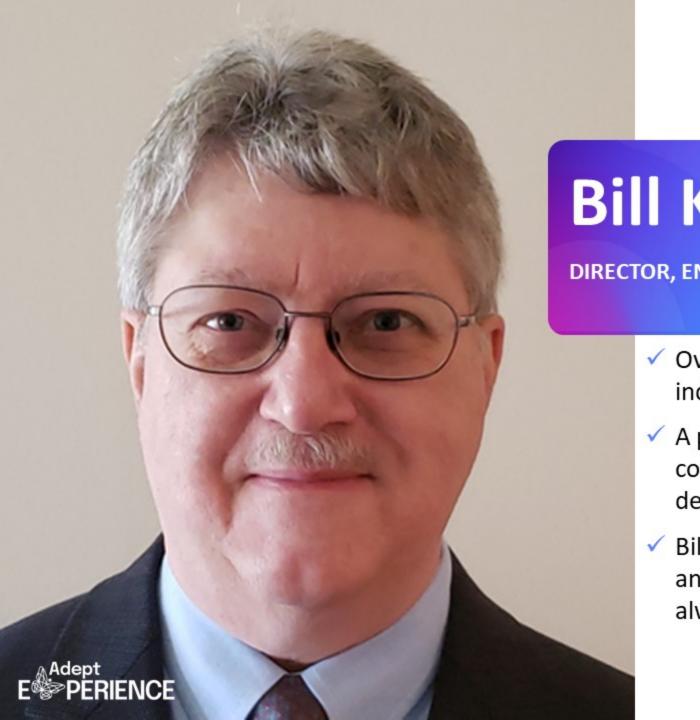
Buzzi's Pursuit of Operational Efficiency using Document Control

Bill Kovacs, PE

DIRECTOR, ENGINEERING & PROJECT MANAGEMENT







Bill Kovacs, PE

**DIRECTOR, ENGINEERING & PROJECT MANAGEMENT** 

- Over 43 years of experience in the cement industry worldwide
- A proven track record of successfully engineering, constructing and managing complex projects and delivering exceptional results
- Bill's personal interests include fishing, bicycling, and playing the bagpipes when time permits. He always enjoys spending time with family.

#### About Buzzi Unicem, USA

- Manufacturer of bulk cement
- ✓ International company | HQ Italy
- ✓ US subsidiary | HQ Pennsylvania
- √ 8 manufacturing US plants
- √ 35 regional US terminals
- Customers: Bulk industrial and Redi-Mix





## Corporate Technical Engineering/Project Management Group

**OVERVIEW** 





#### Corporate Technical Engineering/Project Mgmt. Group

Supports large Capital Projects and some smaller Plant level projects

Specifies engineering criteria and purchases main process equipment

Outsources engineering and construction services

Reviews and comments on designs from engineers | vendors | suppliers







#### Corporate Technical Engineering/Project Mgmt. Group



















**BUSINESS DRIVERS** 





Provide for a **fast search and retrieval-of-document** method supporting:

- ✓ Designing/Engineering development
- ✓ Review and comment stages
- ✓ Contract assembly and execution
- ✓ Procurement

- Construction
- Maintenance
- ✓ Spare Parts

Supports using a **better way to identify different document types** and more **effectively package them** to implement many project activities

- ✓ Differentiate by Technical Disciplines
- ✓ Differential by Equipment Classes
- ✓ Differentiate by Vendor/Supplier



Supports a more efficient and trackable Workflow especially during various technical review and comment stages of a project.



Provides for a better 'streamlined' process to transmit and receive documentation packages while being able to effectively track them.



For Buzzi, because of our planning -

We now more effectively organize, group and reconcile

document file names along with their associated revision numbers.



#### FROM A CORPORATE PERSPECTIVE:

- √Supports the company's interest in achieving Industry 4.0 Goals
- √ Is supportive of our Corporate Sustainability Goals
- √Through its use, we train and develop our future level of Project Managers in being more adaptive to the benefits of automated management tools of this type
- √ Via its use and familiarity, we can develop ways to expand its integration with our Plant automated control systems and maintenance systems
- ✓ Becomes a helpful tool if there are contractual disputes

## The Benefits of Adept at Buzzi Unicem, USA







### Ease of Use

Adept is easy and intuitive to navigate and use.

If it's not simple to access and use, Project and Plant personnel simply won't use it.







## Integrates with Autodesk Products

- Easier for Project Managers and Engineers to edit/create drawings\*.
- Adept is open to accepting many different electronic file types, and in many different formats. Allows us to be more interactive with companies, who use different software products and tools than we do
- \*Especially due to outsourcing engineering along with drafting services limiting in-house changes.







## **Long-Term Repository**

Provides a long-term repository for storage of record documents and can be managed to only show the "latest document version"





### Standardization

## Supports the standardization of document formats for engineering companies and equipment suppliers

\*This is a challenge when working with many outside firms having their own standards or supporting proprietary information







## **Synergis Support**

Proven Helpdesk support, technical and custom development services.







## Integration with Oracle ERP

Proven experience integrating with Oracle ERP systems for implementation at a future date.







## Other Strengths

"Robust."

"Easy to transition from Windows."

"Cost effective."

"Secure."





# Implementation Playbook



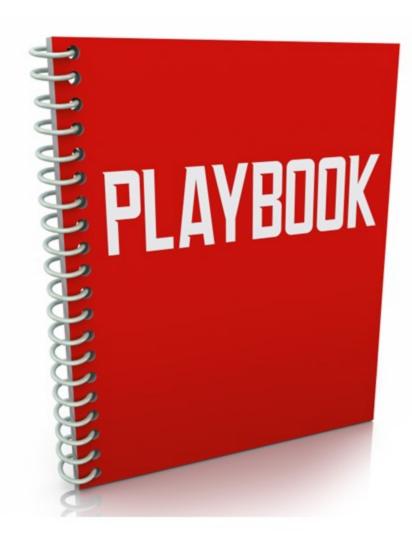


#### IMPLEMENTATION PLAYBOOK

## Strategy

To be cost & Efficiency Focused -

- ✓ We started with Project Management & 
  Engineering as the initial user base
- ✓ Then we extended to all Plants
- ✓ We funded expansion through large capital project budgets on a per plant basis



#### IMPLEMENTATION PLAYBOOK

## Step-by-Step Guide

- Steering Committee & Planning
- System Configuration
- Establish a Library Structure
- Data Card Structure & Build
- Transmittals & Workflows

- Assign Admins & Users/Groups
- Training Materials
- Supplemental Services
- Initiate User Training at 8 Plants

## **Steering Committee & Planning**

Upfront planning is crucial: You may need to go through several iterations to discover the best structure based upon Locations and Support

Selecting and limiting the number of steering committee members supports success in this process

- Steering Committee Member types are important:
  - Project Managers
  - Legal
  - Engineers
  - IT Admins



## **Steering Committee & Planning**

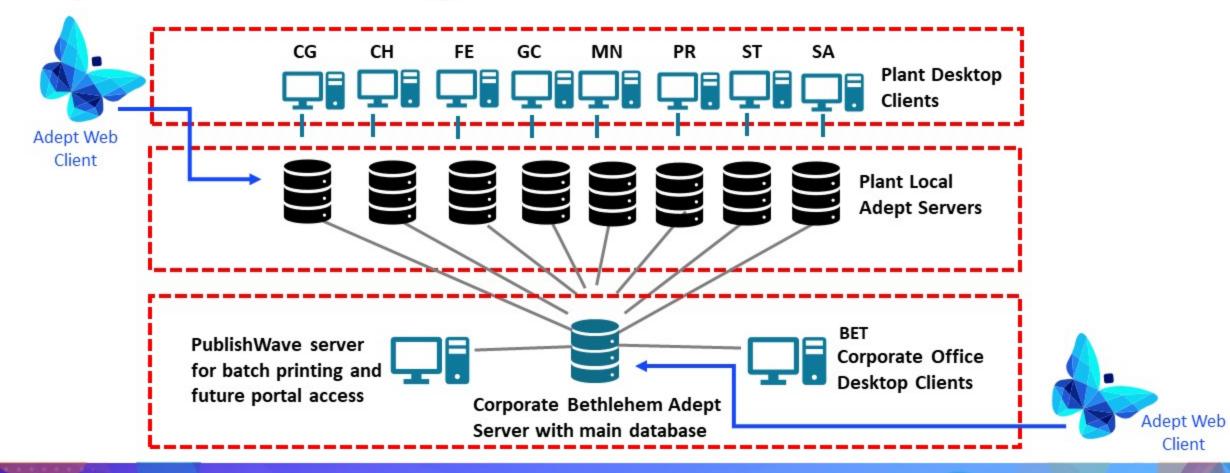
#### √ Who will be the initial Users?

- Project Managers
- Corporate Engineers
- Plant Engineers
- Plant Maintenance Mgmt.
- Plant Production Mgmt.

#### √Who may be follow-up Users?

- Legal Department
- Purchasing
- Plant Shipping/Receiving
- International Tech Service Groups

## **System Configuration**

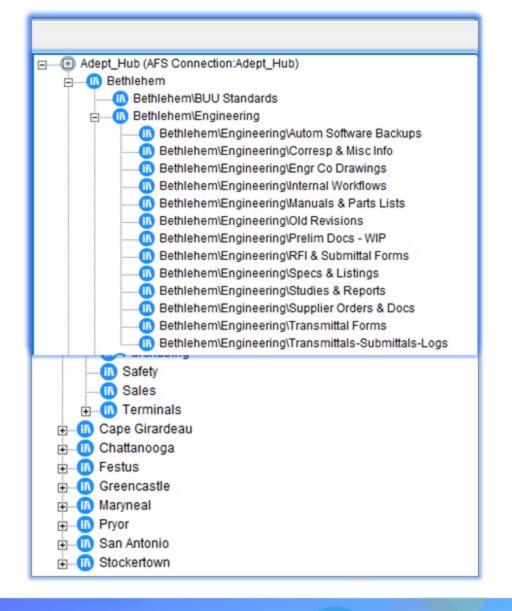




#### IMPLEMENTATION PLAYBOOK

## **Library Structure**

- ✓ Organize data by Location
- ✓ Develop by Key Classification
- Expand A Library by Document Types



#### Data Card: Metadata for Document Numbers

DISCIPLINE Code		<u>C</u> ATEGO	RY Co	de (as given in Bold Text only)		DARD				
Р	PROCE	SS			-					
	C M MECHANICAL						ELECTRICA	AL		
	E		С	Chutes with Design Details			A	Automation - Device & Instr Listings, I/O and Alarm		
	F		D	Ducting with Design Details			<b>^</b>	Listings, Network and Fiber Configurations, Logic and		
	G		E	Environmental Special Equip - Dust Collection				SAMA Diagrams, Functional Specs, Programming and		
	R		F	Flowsheets & Equipment Lists				Graphics		
			G	General Standards and Specifications	1		В	Branch Systems - Low Voltage Panelboard Directories for		
	S		Н	Hoppers / Bins with Design Details				Control & Power loads (normal & standby). NOTE: Lightin		
	V			L Layouts - Conceptual				Panels are with Lighting Arrangements.		
		_	M	Mechanical Arrangements with Sections			С	Control- Elementary or I/O Schematics for "Discrete"		
	Х			Piping - Arrangements & Flow Diagrams with Details - Air, (	C			Devices, Motors, Equipment Assemblies (incl. IO Cabs),		
	Y		V	Vendor - Supplier Docs incl O&M Manuals			D	Details (Equipment Mounting & Installation) - Devices and		
				(include Brief Description of Doc Type)			0	Equipment (Control & Instrument), Raceway, etc.		
	Z		X	Demolition Arrangements, Plans, and Details			E			
			Y	Miscellaneous - define Type in the Dwg Ttitleblock			_ E	Earthing & Grounding with Details- Underground Earthing		
			Z	Fire Protection Systems	1			& Exposed Grounding Arrangements, Lightning Protection,		
							-	with legends & details		
					1		1	Flow Diagrams - Electrical Flows Diagrams, P&IDs		



#### IMPLEMENTATION PLAYBOOK

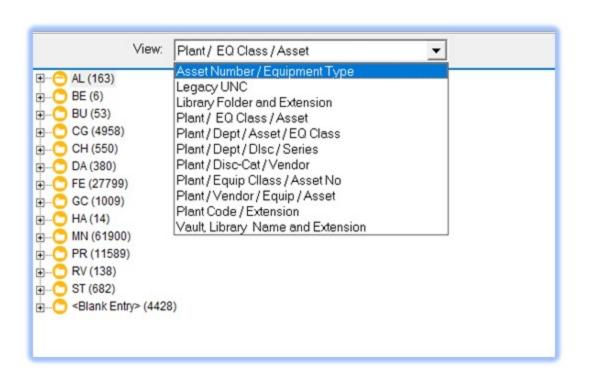
#### Data Card - Structure & Build

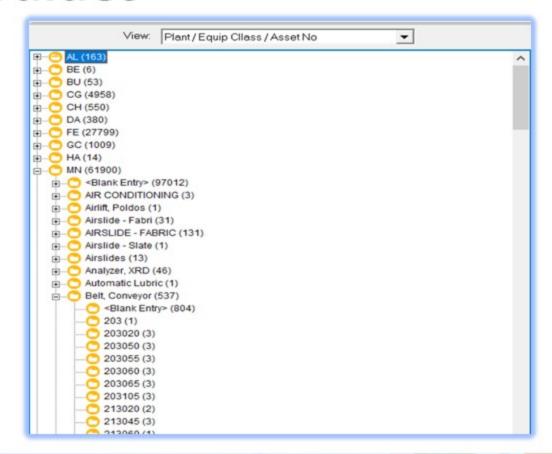
DI II I Dea Number	CG-600-EE-6600			Sheet Number	09		
BUU Doc Number					109		
Windows OS Filename	CG-600-EE-6600-09-0.dwg			Total Sheets			
B.U. File #	CG-600-EE-6600-09-0	Ext	.dwg	Revision	10		
Library Path:	Cape Girardeau\Engineeri	ng\Engr Co Drawi					
Vendor Filename	CG-600-EE-6600-09-0		Document Ty	pe			
Vendor Name	Vestal Corporation	~	Drawings				
AFE Number							
Department Name	Other Utility Systems	·					
Asset Number	3CG305000						
	0100-17-35, Grounding ,	Grounding System	Interconnec	tions, Condu	t Race		
Notes/Comments							
Notes/Comments							
	THOUSENED THOUGH A CONTROL	0.7	To-	7			
Equip. Class - Oracle	INSTRUMENTATIONS & CONTR	OL.					
Equip. Class - Oracle	INSTRUMENTATIONS & CONTR	OL					
Equip. Class - Oracle Equip. Function Suffix	INSTRUMENTATIONS & CONTR		ļ.				
Equip. Class - Oracle Equip. Function Suffix			and the same of th				
Equip. Class - Oracle Equip. Function Suffix		TITLE BLOCK INFO	and the same of th				
Equip. Class - Oracle Equip. Function Suffix  Discipline and Category		TITLE BLOCK INFO	and the same of th		••••		
Equip. Class - Oracle Equip. Function Suffix  Discipline and Category Description / Title	ELECTRICAL-EARTHING & GR	TITLE BLOCK INFO	and the same of th		•••		
Equip. Class - Oracle Equip. Function Suffix  Discipline and Category Description / Title Asset / ID Number	ELECTRICAL-EARTHING & GR	TITLE BLOCK INFO	and the same of th		••••		
Equip. Class - Oracle Equip. Function Suffix  Discipline and Category Description / Title Asset / ID Number Plant / Process Area	ELECTRICAL-EARTHING & GR GROUNDING INSTALLATION D 600 GENERAL SERVICES	TITLE BLOCK INFO	RMATION	CAPE G	МО		
Notes/Comments  Equip. Class - Oracle Equip. Function Suffix  Discipline and Category Description / Title Asset / ID Number Plant / Process Area Project - Plant - Location Description of Revision	ELECTRICAL-EARTHING & GR GROUNDING INSTALLATION D 600 GENERAL SERVICES	TITLE BLOCK INFO	RMATION	CAPE G	МО		

	JCA
uthor	JGJ
lev Date	09/01/2017
reation Date	05/10/2017
ile Date	02/26/2018 00:31:00
ssue Status	IFC- Issued For ( -
Plant Code Department Co	
Olscipline / Cate	egoly Code EE T

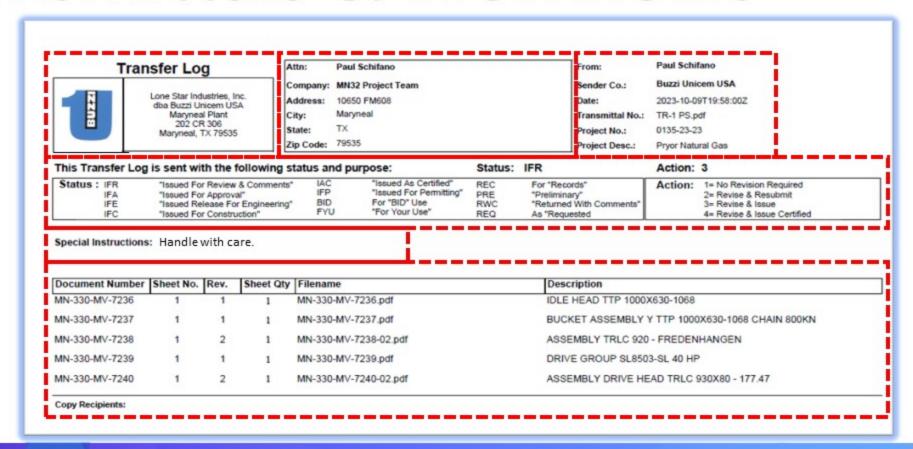
#### IMPLEMENTATION PLAYBOOK

#### Data Card Structure: FileGuides



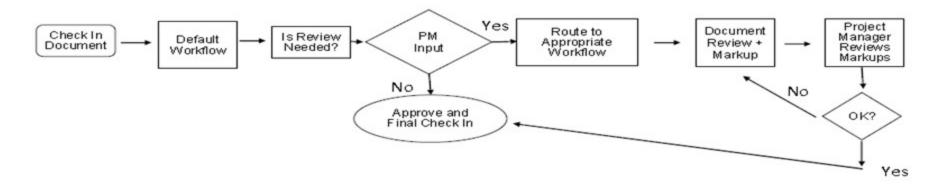


## **Transmittals & Workflows**





### **Transmittals & Workflows**

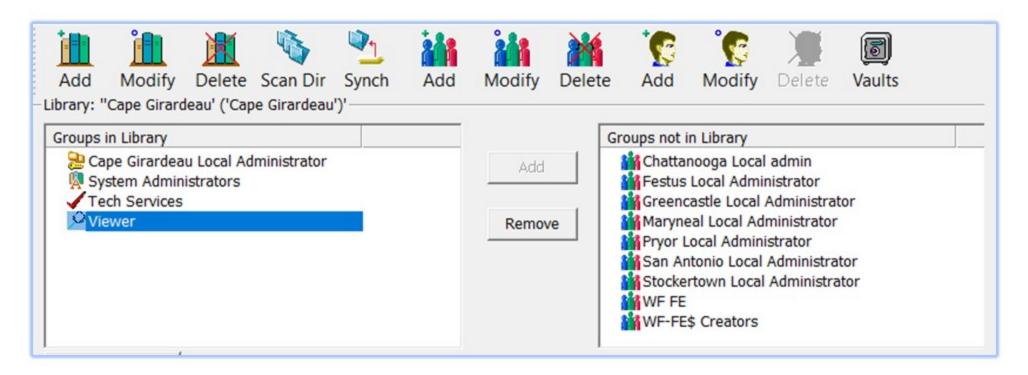


	Elapsed Time	Workflow	Workflow Step	Version	Arr. Date-Time	Dep. Cmd	Dep. Date-Time	Dep. User	Comment	Workflow Id
	0 hours 0 mins	Default	Enter Workflow	0.1	10/13/2023 09:49:57	First Check In	10/13/2023 09:49:58	Jesse Caleca	Dep User is Originator	25D5130E-256C-402A-8F
	0 hours 0 mins	Default	Step 1 Routing	0.1	10/13/2023 09:49:58	Reroute Workflow	10/13/2023 09:50:34	Jesse Caleca	Revision needed Per Artur	25D5130E-256C-402A-8F
	0 hours 10 mins	FE-FM4 Document Re	Step 1 - Comments	0.1	10/13/2023 09:50:34	Approve	10/13/2023 10:01:31	Artur Matuszewski	Rewied, transimt comment to vendor	EC491389-324E-43A2-BA
	0 hours 6 mins	FE-FM4 Document Re	Step 2 - Distribution	0.1	10/13/2023 10:01:31	Approve	10/13/2023 10:08:11	Jesse Caleca		EC491389-324E-43A2-B/

## **Assign Admins & User Groups**

- ✓ Identify how each type of user organizes, searches for, and uses information by assigning Rights and Permissions:
  - Administrator Level
  - ✓ Project Management Group Level
  - ✓ Plant User Level (Maintenance & Operations)

## **Assign Admins & User Groups**

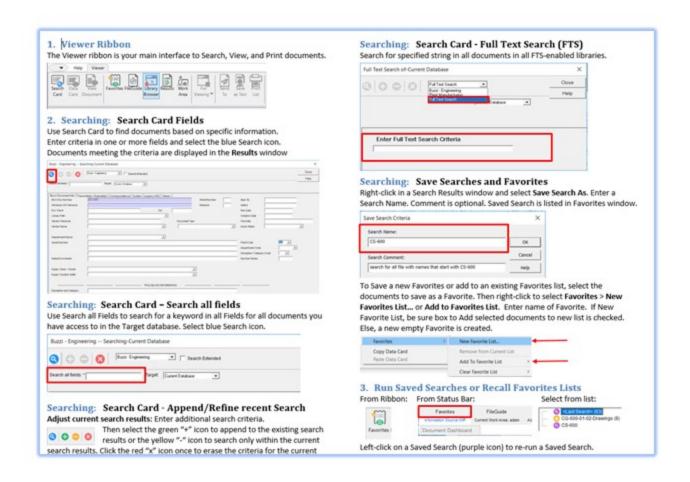




#### IMPLEMENTATION PLAYBOOK

## **Training Tools**

- ✓ Training Manuals
- ✓ Training Sessions
- ✓ Training Videos
- ✓ Hands-on Approach
- ✓ Retraining as Needed



## **User Training: Company-Wide**

- √ Video Library
- ✓ Web Meetings
- ✓ On-site Training Sessions (by Owner Admins)
- ✓ Synergis Training Sessions



## **Supplemental Services**

- Annual Health Audits
- ✓ Software Version Updates
- Add Customizations
- ✓ Admin Update Training
- ✓ Annual Planning and Budget Development

# Value Realized with Adept





### Value Realized

- ✓ Improved efficiency in projects.
- ✓ Faster resolution of mismatches between internal and external filenames and revisions.
- Easy to find documents
- ✓ Projects are easy to organize and can be distinguished differently from past projects via use of project number/ year/asset numbers/ project name.





### Value Realized

Added the use of document functional codes to help quickly identify document types.

✓ Added Oracle asset type codes to quickly identify equipment types in both DMS and ERP (helpful in a plant environment).





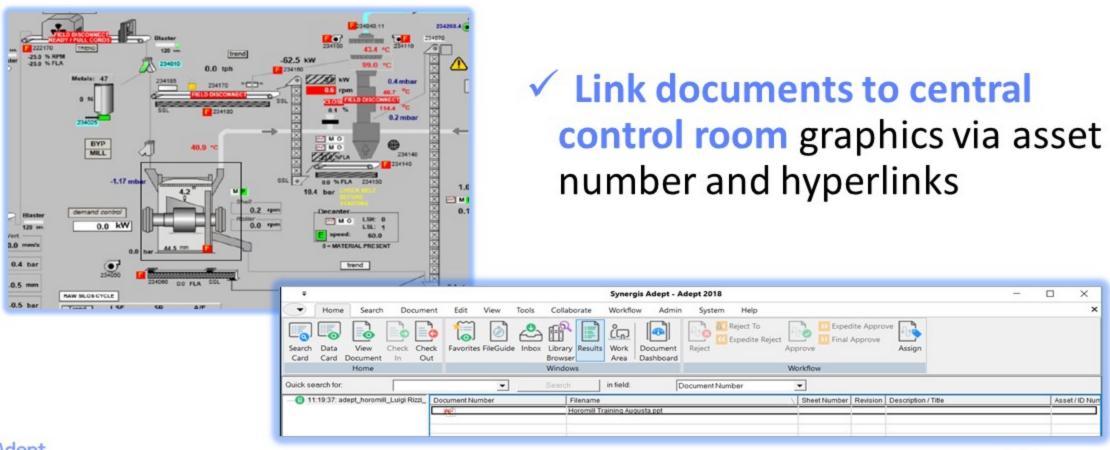
## Value Realized

- ✓ Reduced the overall Hours/Project needed to manage documents
- Freed up Project Managers to be able to focus on other activities
- ✓ Allowed for the Review and Comment Stage to be expedited.
- Provided greater ability to track the status of workflow activities
- Created efficiencies in the transmitting process
- ✓ By using such a tool, new younger team members are embracing its
  capabilities and helping others to use the product
- ✓ Typical project duration can be lessened





## **Future Projects**







## **Future Projects**

- ✓ Roll out web version for greater portability and accessibility
- ✓ Introduce web to global sites and grow usage in EU
- ✓ Perform a Trail using other languages (German, Italian, Spanish)
- ✓ Portable tablet/field access for maintenance
- ✓ Look into future speak-to-text search engines (especially for plant use)





## Key Takeaways



## Adept is yours to exploit!

Anyone is welcome to find new, exciting, and innovative ways to use and grow with Adept.

The success of developing and implementing any document management system should be continually supported by upper management!

Use a top-down approach.





## Thank You!

