



Water-Efficient
Plumbing from
Sloan Valve

IPRO 306

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TECHNOLOGY AND BUSINESS INNOVATIONS TO IMPROVE OPERATIONS

FACULTY INSTRUCTOR: JOHN CALTAGIRONE
PROJECT SPONSOR: STEVEN RODGERS, SLOAN VALVE

SLOAN.



Agenda

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Introduction

- Introduction & Team Structure

Supplier Data
Optimization
Review

- Supplier Data Optimization Review

Warehouse
Management
Review

- Warehouse Management Review

Conclusion

- Conclusion

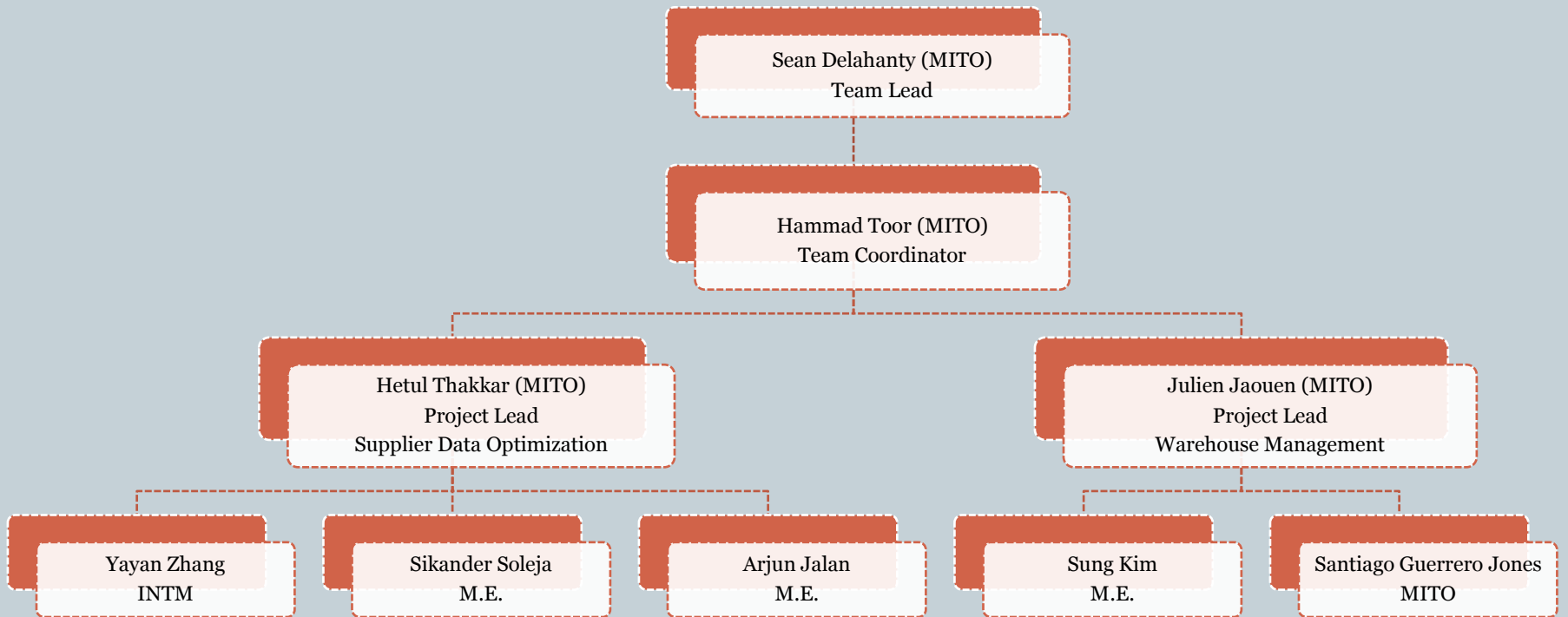
Introduction

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- **Sloan Valve**
 - Industry Leader and Innovator
 - Green Initiatives, Commitment to Sustainability
 - www.SloanValve.com
- **IIT Students**
 - Diverse Group of 9 INTM & ME students
- **IPRO 306**
 - Creating Process Efficiencies Through the Use of Technology
 - ✦ Optimization of Supplier Data
 - ✦ Warehouse Improvements via Warehouse Management System (WMS)

Team Structure

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Supplier Data Optimization Review

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Supplier Data Optimization – Global Sourcing

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Issues

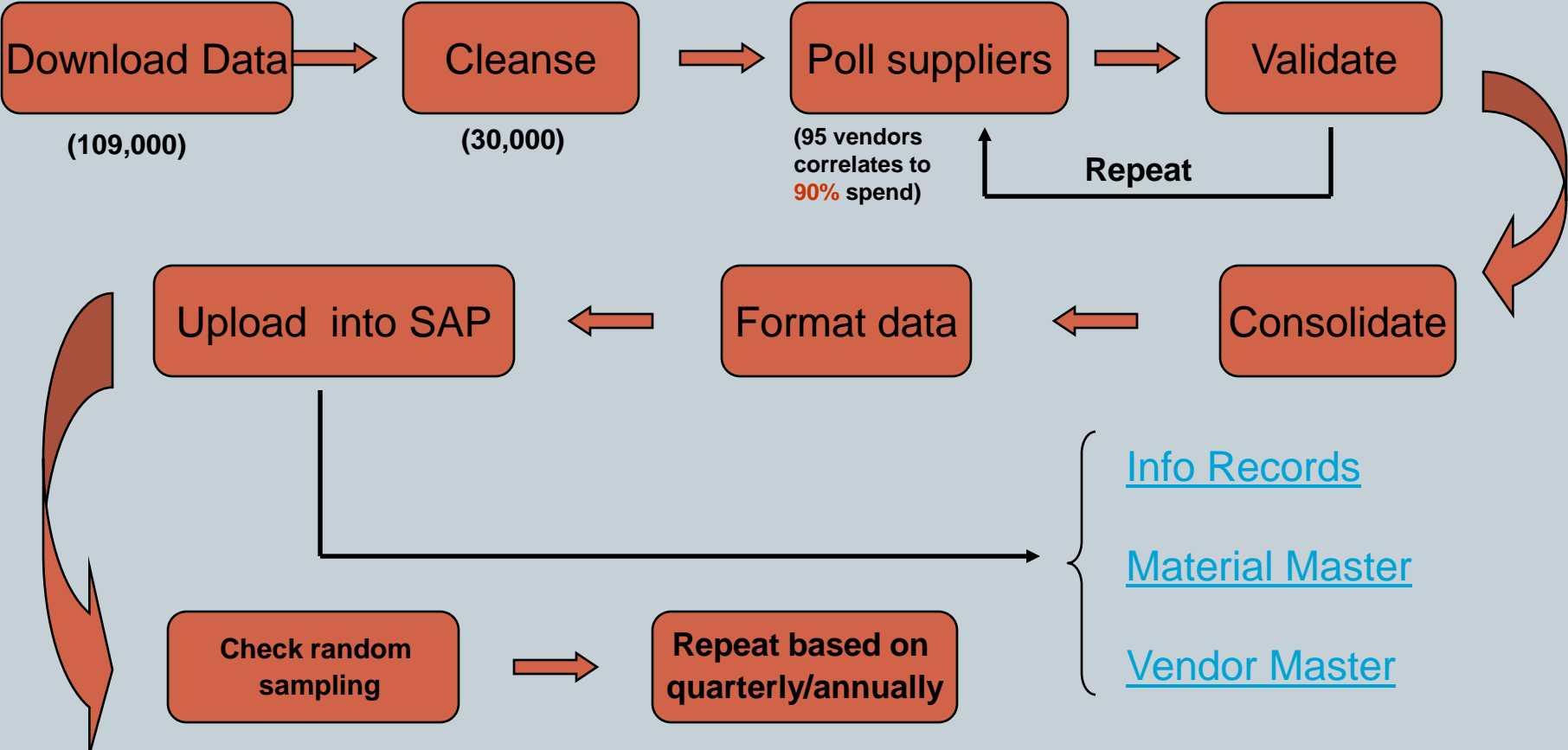
7

- 109,000 Suspect Data Records Currently in SAP
- Data Records Are Obsolete, Duplicate or Have Incomplete Information
- Currently No Process Exists to Manage and Accurately Maintain Data



To-Be Process

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Solutions

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Tactical Solution (Short)

Mass Emailing

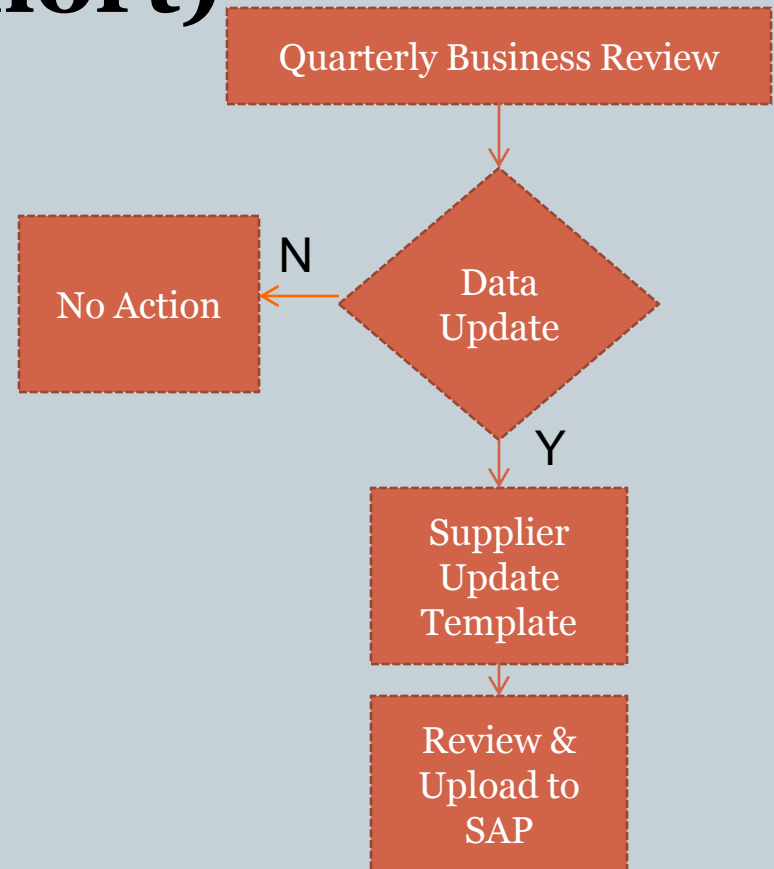
Quarterly Review

Tool

Microsoft Access

Mail Merge

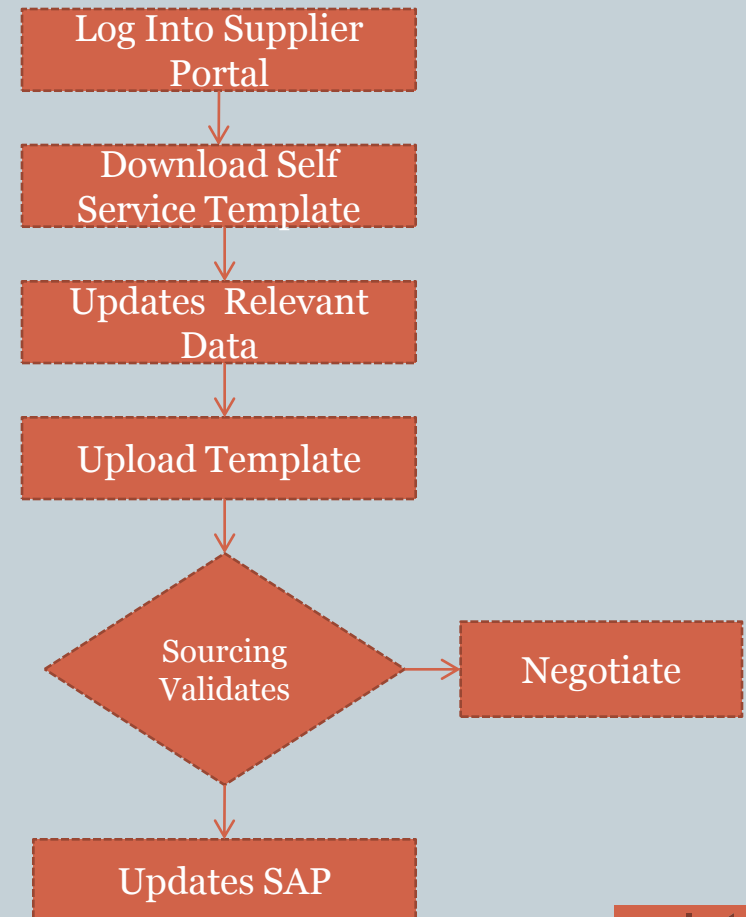
Mail Group



Solutions (cont'd)

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- **Strategic Solution (Long)**
Supplier Web Portal



Implementation

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- Supplier Portal Development / Creation
 - Web Development Process
- Data Record Management Process
- Refine Process

Warehouse Management Review

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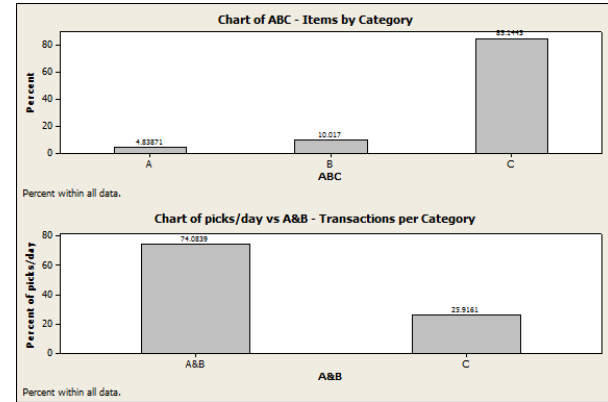
Supply Chain Optimization – Current Issues

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- Increased operational complexity
- No formal procedures on how to store items
 - Manual processes
 - Wrong people making put-away decisions
- Warehouse organization
 - Hard to identify products in storage locations
 - Bins not clearly defined
 - Inventory is not stored by volume of transactions
- Shipping errors on outbound and internal orders

Accomplishments

New ABC \rightarrow Identify fast movers



CD 1	CD 2	CD 3	CD 4	CD 5	CD 6	CD 7	CD 8	CD 9	CD 10	CD 11	CD 12	CD 13	CD 14	CD 15	CD 16	CD 17	CD 18	CD 19	CD 20
CD 21	CD 22	CD 23	CD 24	CD 25	CD 26	CD 27	CD 28	CD 29	CD 30	CD 31	CD 32	CD 33	CD 34	CD 35	CD 36	CD 37	CD 38	CD 39	CD 40
CD 41	CD 42	CD 43	CD 44	CD 45	CD 46	CD 47	CD 48	CD 49	CD 50	CD 51	CD 52	CD 53	CD 54	CD 55	CD 56	CD 57	CD 58	CD 59	CD 60

CD 61	CD 62	CD 63	CD 64	CD 65	CD 66	CD 67	CD 68	CD 69	CD 70	CD 71	CD 72	CD 73	CD 74	CD 75	CD 76	CD 77	CD 78	CD 79	CD 80
CD 81	CD 82	CD 83	CD 84	CD 85	CD 86	CD 87	CD 88	CD 89	CD 90	CD 91	CD 92	CD 93	CD 94	CD 95	CD 96	CD 97	CD 98	CD 99	CD 100
CD 101	CD 102	CD 103	CD 104	CD 105	CD 106	CD 107	CD 108	CD 109	CD 110	CD 111	CD 112	CD 113	CD 114	CD 115	CD 116	CD 117	CD 118	CD 119	CD 120

CD 121	CD 122	CD 123	CD 124	CD 125	CD 126	CD 127	CD 128	CD 129	CD 130	CD 131	CD 132	CD 133	CD 134	CD 135	CD 136	CD 137	CD 138	CD 139	CD 140
CD 141	CD 142	CD 143	CD 144	CD 145	CD 146	CD 147	CD 148	CD 149	CD 150	CD 151	CD 152	CD 153	CD 154	CD 155	CD 156	CD 157	CD 158	CD 159	CD 160
CD 161	CD 162	CD 163	CD 164	CD 165	CD 166	CD 167	CD 168	CD 169	CD 170	CD 171	CD 172	CD 173	CD 174	CD 175	CD 176	CD 177	CD 178	CD 179	CD 180

CD 181	CD 182	CD 183	CD 184	CD 185	CD 186	CD 187	CD 188	CD 189	CD 190	CD 191	CD 192	CD 193	CD 194	CD 195	CD 196	CD 197	CD 198	CD 199	CD 200
CD 201	CD 202	CD 203	CD 204	CD 205	CD 206	CD 207	CD 208	CD 209	CD 210	CD 211	CD 212	CD 213	CD 214	CD 215	CD 216	CD 217	CD 218	CD 219	CD 220
CD 221	CD 222	CD 223	CD 224	CD 225	CD 226	CD 227	CD 228	CD 229	CD 230	CD 231	CD 232	CD 233	CD 234	CD 235	CD 236	CD 237	CD 238	CD 239	CD 240

CD 241	CD 242	CD 243	CD 244	CD 245	CD 246	CD 247	CD 248	CD 249	CD 250	CD 251	CD 252	CD 253	CD 254	CD 255	CD 256	CD 257	CD 258	CD 259	CD 260
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PACKING AREA

CD 261	CD 262	CD 263	CD 264	CD 265	CD 266	CD 267	CD 268	CD 269	CD 270	CD 271	CD 272	CD 273	CD 274	CD 275	CD 276	CD 277	CD 278	CD 279	CD 280
CD 281	CD 282	CD 283	CD 284	CD 285	CD 286	CD 287	CD 288	CD 289	CD 290	CD 291	CD 292	CD 293	CD 294	CD 295	CD 296	CD 297	CD 298	CD 299	CD 300
CD 301	CD 302	CD 303	CD 304	CD 305	CD 306	CD 307	CD 308	CD 309	CD 310	CD 311	CD 312	CD 313	CD 314	CD 315	CD 316	CD 317	CD 318	CD 319	CD 320

CD 321	CD 322	CD 323	CD 324	CD 325	CD 326	CD 327	CD 328	CD 329	CD 330	CD 331	CD 332	CD 333	CD 334	CD 335	CD 336	CD 337	CD 338	CD 339	CD 340
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CD 361	CD 362	CD 363	CD 364	CD 365	CD 366	CD 367	CD 368	CD 369	CD 370	CD 371	CD 372	CD 373	CD 374	CD 375	CD 376	CD 377	CD 378	CD 379	CD 380

CD 381	CD 382	CD 383	CD 384	CD 385	CD 386	CD 387	CD 388	CD 389	CD 390	CD 391	CD 392	CD 393	CD 394	CD 395	CD 396	CD 397	CD 398	CD 399	CD 400
CD 401	CD 402	CD 403	CD 404	CD 405	CD 406	CD 407	CD 408	CD 409	CD 410	CD 411	CD 412	CD 413	CD 414	CD 415	CD 416	CD 417	CD 418	CD 419	CD 420
CD 421	CD 422	CD 423	CD 424	CD 425	CD 426	CD 427	CD 428	CD 429	CD 430	CD 431	CD 432	CD 433	CD 434	CD 435	CD 436	CD 437	CD 438	CD 439	CD 440

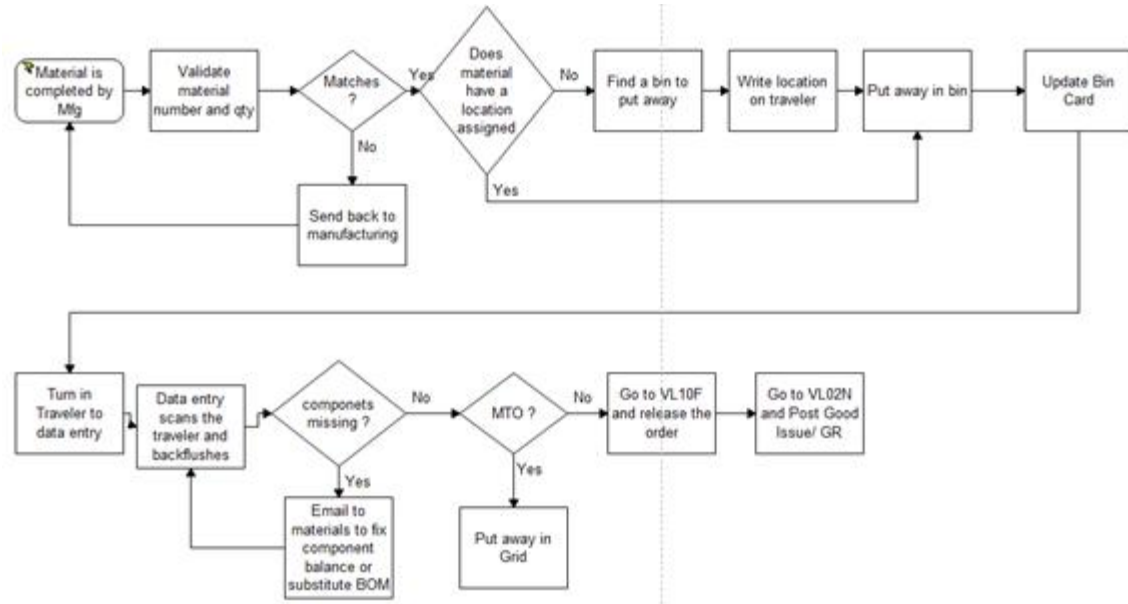
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CD 481	CD 482	CD 483	CD 484	CD 485	CD 486	CD 487	CD 488	CD 489	CD 490	CD 491	CD 492	CD 493	CD 494	CD 495	CD 496	CD 497	CD 498	CD 499	CD 500

PACKING AREA

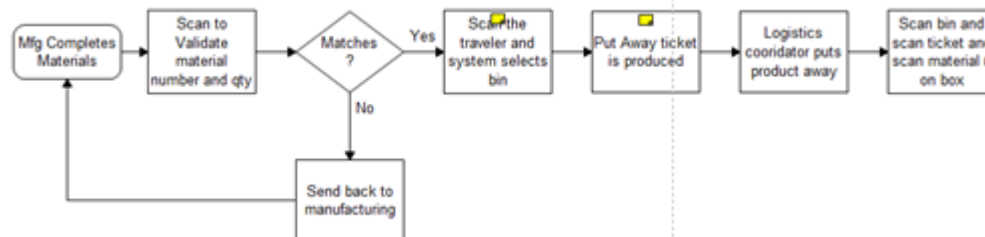
Accomplishments

New and Improved PROCEDURES

Current Process



Future Process



Accomplishments

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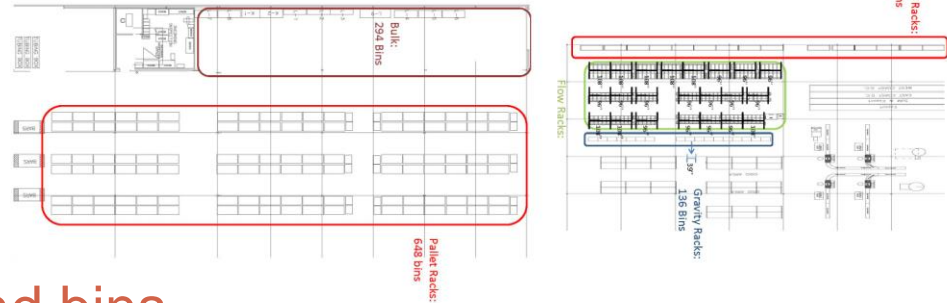
Warehouse ORGANIZATION



Additional Accomplishments

• Definition and quantification of BIN LOCATIONS

- BULK 294 Bins
- PALLET RACK 719 Bins
- FLOW RACK 172 Bins
- GRAVITY RACKS 136 Bins



• Identification of products and bins



• DEMO development, testing and instruction material

Whse number WMD Warehouse management demo

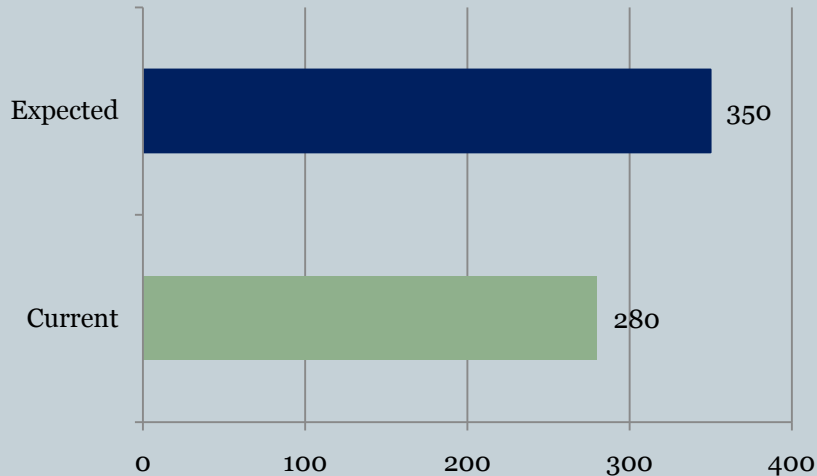
Quant Information:
 InventoryProposal 1
 Later / block 8
 Bin Information: 829
 Empty bins 814
 Inventory active 2

Type	Storage Bin	Material	Description	Old PI Date	New PI Date
002	DH-02-02	0301134	overdue / blocked		11/18/2009
002	DH-03-02	0318031	overdue / blocked		11/18/2009
005	DA-28-02	3010000	overdue / blocked		11/18/2009
005	DA-21-01	3010000	overdue / blocked		11/18/2009
005	DA-95-01	3010100	overdue		11/18/2009

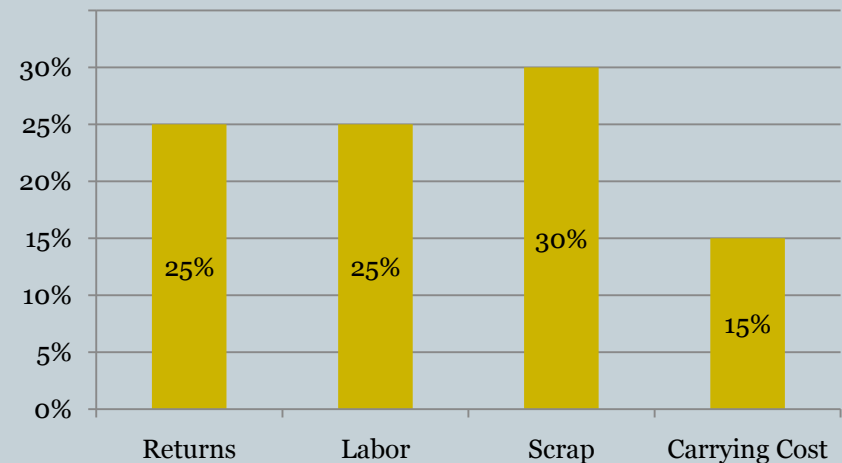
Expected Implementation Results

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Picking Productivity Improvement



Savings



- Increased Inventory Control
- Better Information Accuracy and Visibility
- More Efficiently Managed Workforce

Recommendations

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- Radio Frequency technology is required to maintain accuracy level and achieve expected results
- Move the demo site to a fully configured warehouse management module in the testing system
- A comprehensive implementation project plan needs to be developed
- Further enhancement to Unit and Integration test scripts

Conclusion

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IPRO 306 Takeaways

- Common, Real World Issues
- Collaboration, Working “With”, Not “For”
- Impact! Both Short and Long Term

Questions?

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Thank You for Your Time and Attention!
Questions?

Change Info Record: General Data

Purch. Org. Data 1 Conditions Texts

Info Record: 5300025630
 Vendor: 600495 WARD MANUFACTURING CO
 Material: 0318009 HY8 BUTTON INSERT
 Material Group: 110 Do Not Use

Vendor Data

1st Rem./Exped. Days
 2nd Rem./Exped. Days
 3rd Rem./Exped. Days

Origin Data

Certif. Cat.
 Certificate

Change Info Record: Purch. Organization Data 1

General Data Conditions Texts

Info Record: 23 5300025630
 Vendor: 600495 WARD MANUFACTURING CO
 Material: 0318009 HY8 BUTTON INSERT
 Material Group: 110 Do Not Use
 Purchasing Org.: 1 Plant: FKP Standard

	A	B	C	D	E	F	G	H	I	J	K	L
1	Info Rec.	Plnt	Info category	Tx	Standard Qty	minimum Qty	Ctry of Origin	Region	lead time	Price Per	Net price	Valid from
2	(Actual)			(Actual)	(1)	(Blank)	(Blank)	(Blank)	(pl. deliv. Time)	(each or 1000)		
3												
4												

Vendor: 600495
 Purch. Material: 0318009
 Order Purchasing Org.: 1
 Conversion Plant: FKP
 Info Record:

Info category

- Standard
- Subcontracting
- Pipeline
- Consignment

Conditions

Net Price
 Effective Price
 Qty Conv.
 Pr. Date Cat.
 Incoterms

Validity periods

Valid From	Valid to
11/03/2009	12/31/9999

Choose
 New validity period
 New with reference

Not active

Material 0318009 HY8 BUTTON INSERT
 Plant FKP FRANKLIN PARK PLANT

Foreign trade data
 Comm.imp. code no. 8481.90.7000(7) Parts Un
 Export/import group 0001 G0001
 CAS number (pharm.)
 PRODCOM no.
 Control code

Origin /
 Count
 CAP p
 CAP p
 Legal c

0318009 HY8 BUTTON INSERT
 FKP FRANKLIN PARK PLANT

type F Batch entry
 rement 39 Prod. stor. location FAS
 age Default supply area

Material 0318009 HY8 BUTTON INSERT
 Plant FKP FRANKLIN PARK PLANT

	A	B	C	D	E	F	G	H
1	Material	Plant	Lot Size	Minimum Lot Size	Planned Deliv. Time	Country of Origin	Rounding value	Material Group
2	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)	(Actual)		
3								

MRP procedure
 MRP Type PD MRP
 Reorder Point 0 Planning time fence 0
 Planning cycle MRP Controller PP2

Lot size data
 Lot size EX Lot-for-lot order quantity
 Minimum Lot Size 200 Maximum Lot Size 0
 Maximum stock level 0
 Assembly scrap (%) 0.00 Takt time 0
 Rounding Profile Rounding value 0
 Unit of Measure Grp

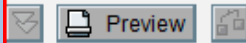
MRP areas
 MRP area exists MRP areas

0 days Underdel. Tolerance 5.0 percent
 ed. 0 days Overdeliv. Tolerance 5.0 percent
 d. 0 days Min. Del. Qty in % 0.0 percent
 var 0 days Unltd Overdelivery Acknowledgment Reqd

Manufacturer data
 ne 1 days Critical Part
 Source list JIT Sched. Indicator
 Mfr Part Profile
 Manufact.



Display Vendor: Initial Screen



Vendor WARD
 PurchasingOrganization Main Purchasing Org

Name
 Title
 Name
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Search Terms
 Search term 1/2

Street Address

General data

- Address
- Control

Purchasing

- Purchase
- Partner

	A	B	C	D	E	F	G	H	I	J	K
1	Vendor Name	Sales Person	Street	City	State	Zip	Country	Telephone	Fax	E-Mail	
2			(not in Vendor Master)								
3											

FAX	Fax
INT	E-Mail
PAG	Pager Services
PRT	Printer
RML	Remote Mail
SSF	Secure Store & Forw.
TEL	Telephone
TLX	Telex
TTX	Teletex
URI	URL (Homepage)
X40	X.400

Company Postal Code

Communication
 Language
 Telephone Extension
 Fax Extension
 E-Mail
 Standard Comm.Method
 Data line
 Telebox
 Comments

