

DATA CONSOLIDATION & REPORTING



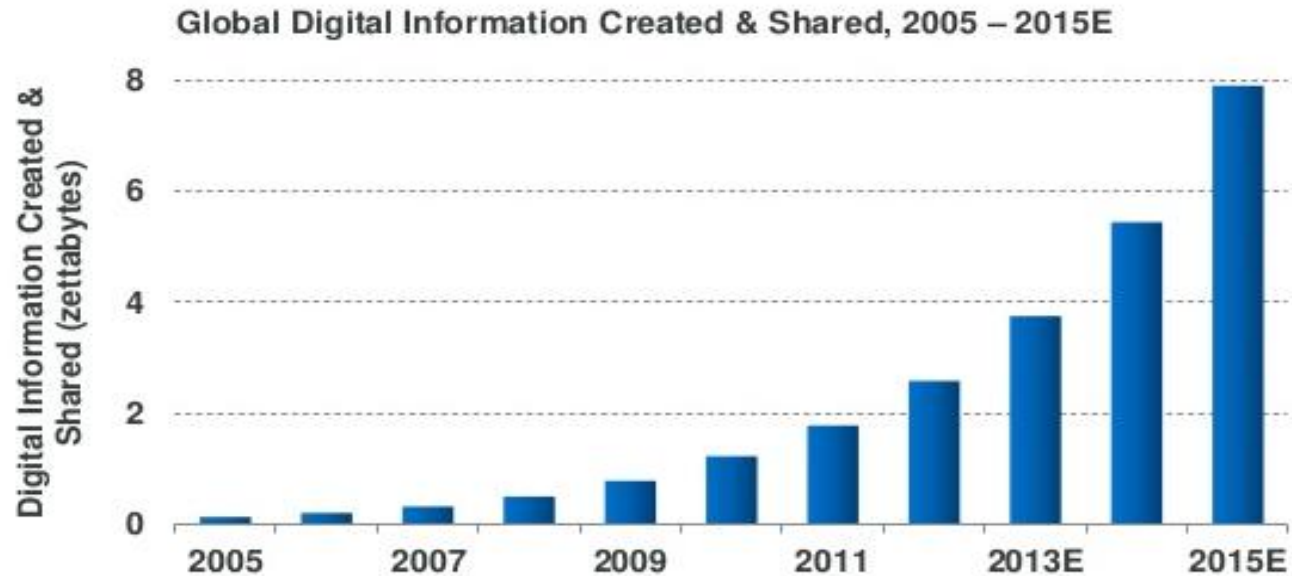
Kenny Doerksen
Director of Operations

www.transtrack.net

BETTER DATA. BETTER DECISIONS.

GROWTH OF AVAILABLE INFORMATION

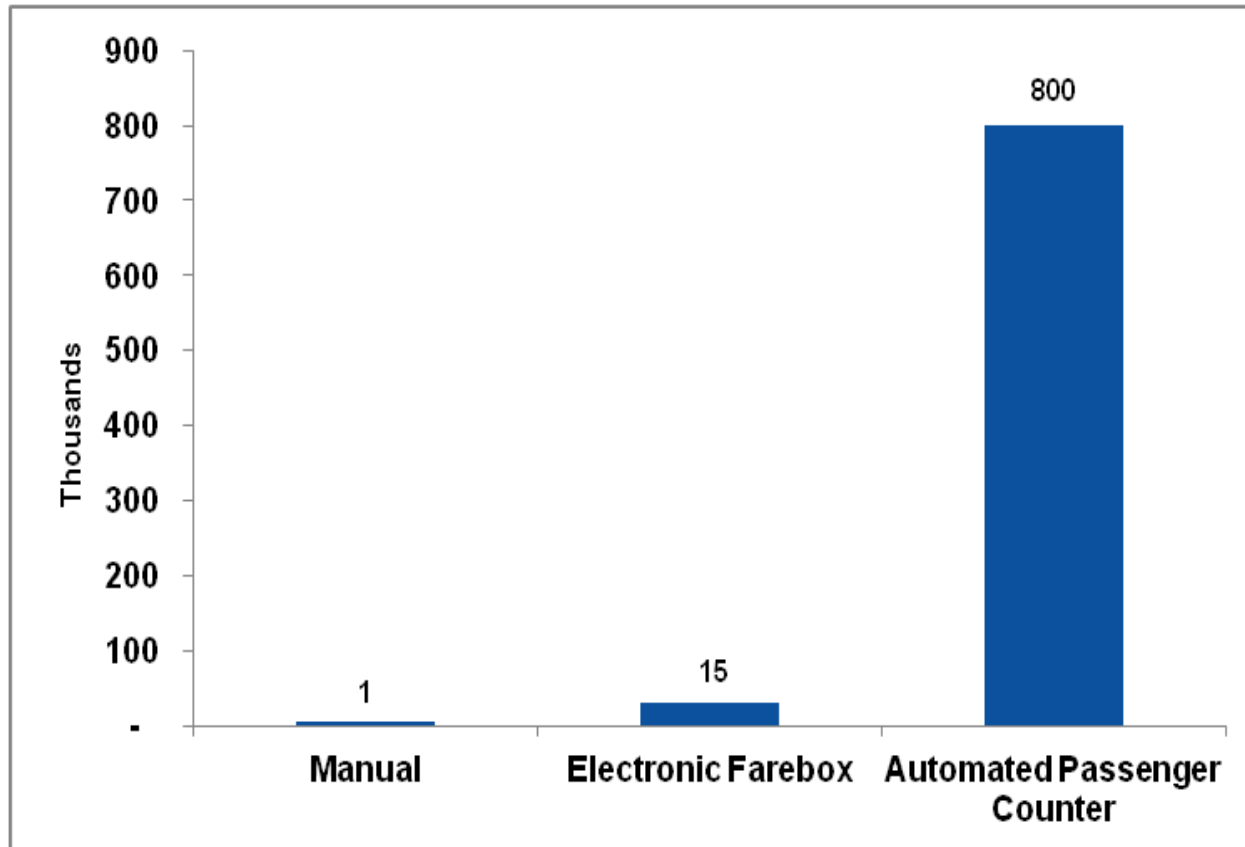
*Amount of global digital information created & shared
– from documents to pictures to tweets –
grew 9x in five years to nearly 2 zettabytes* in 2011, per IDC.*



KPCB

Note: * 1 zettabyte = 1 trillion gigabytes. Source: IDC report "Extracting Value from Chaos" 6/11. 11

Growth Of Monthly Passenger Records



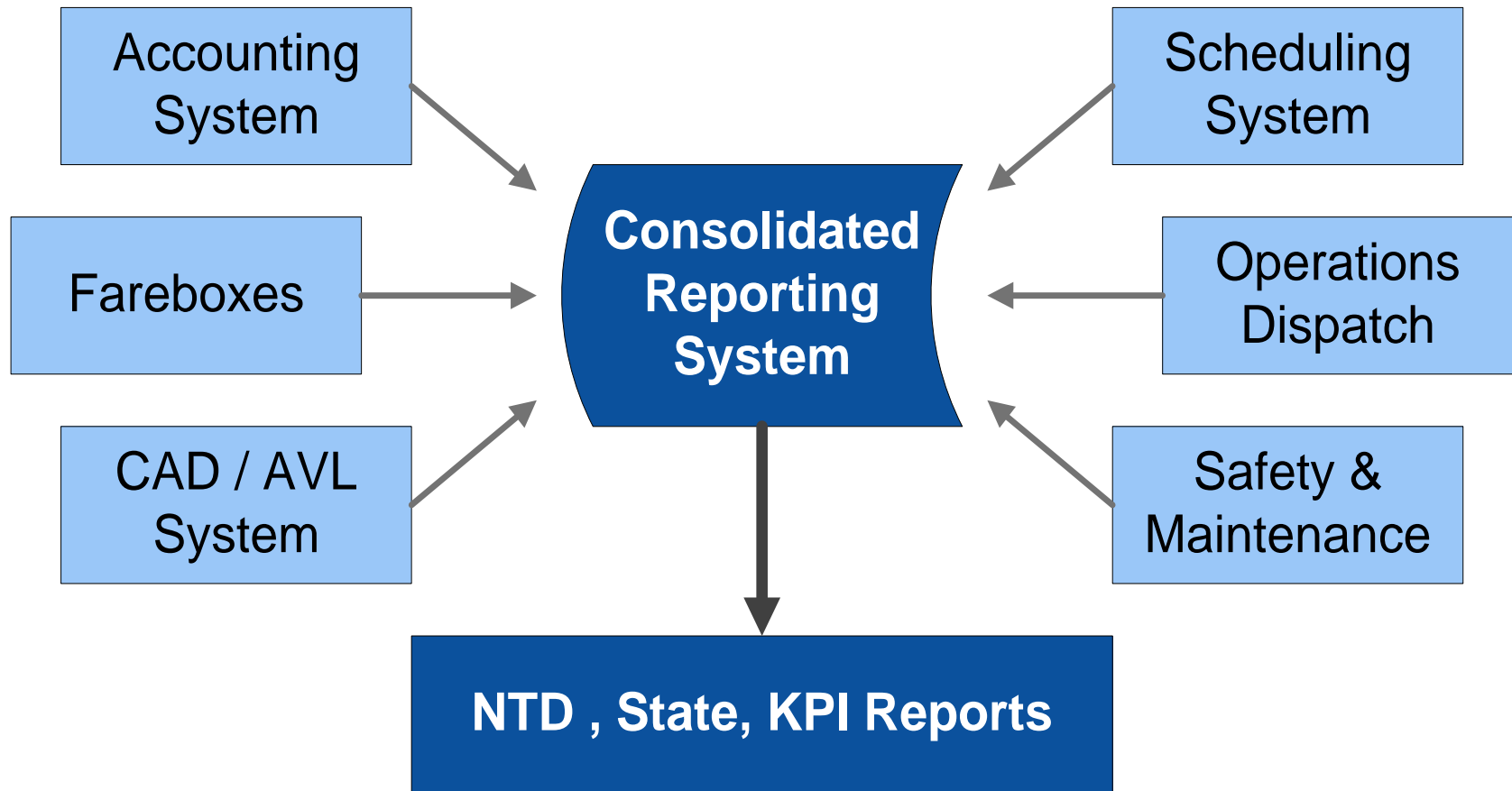
Key Objectives For Data Consolidation

- Reduce Ongoing Operating Costs
 - Simplify and Automate Processes
 - Reduce Time Spent Preparing NTD and Management Reporting

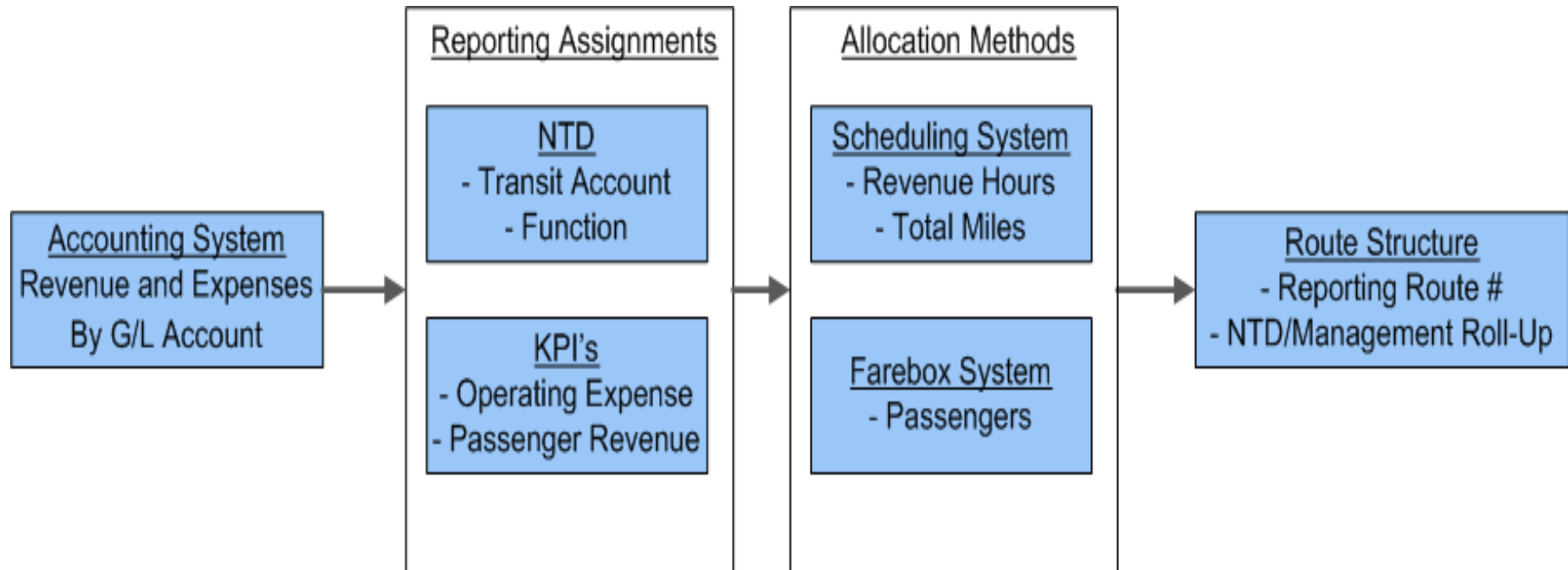
- Improve Visibility to Key Performance Metrics
 - Improve Timeliness and Accuracy
 - Improve Analytical Capabilities



Data Consolidation Model



Objective: Reduce the Cost of Reporting



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FY 2013 -- Operating Expenses (F-30)

Mode & Service Type: Bus (Motorbus) / Purchased Transportation

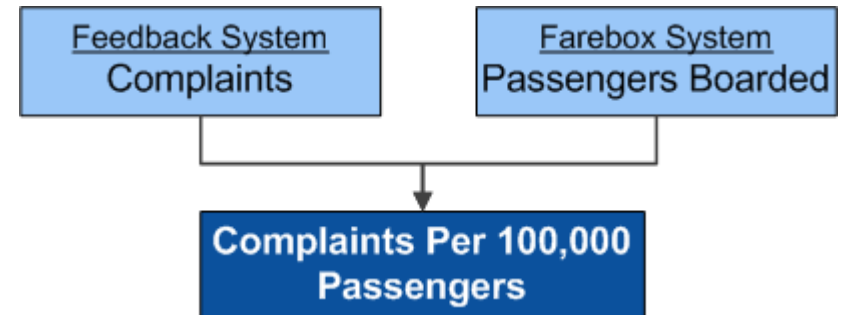
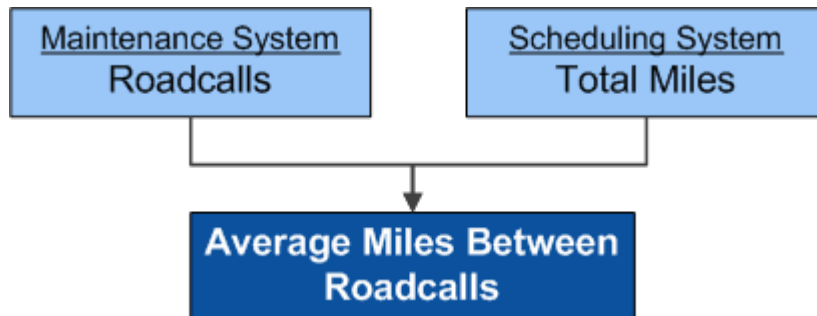
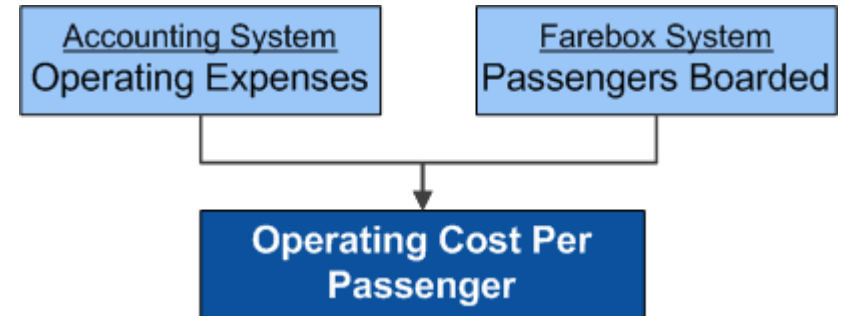
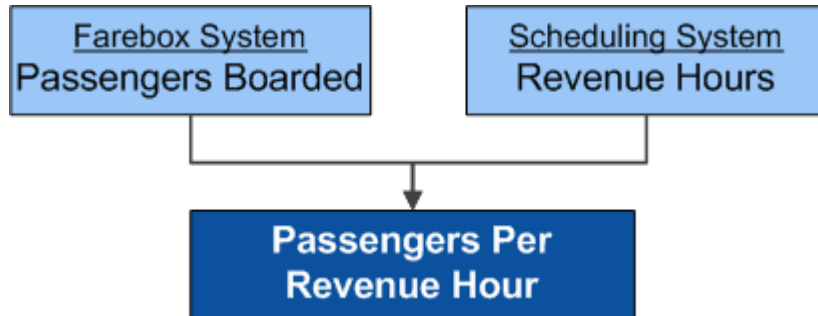
Expense Object Class	a Vehicle Operations 010	b Vehicle Maintenance 041	c Non-Vehicle Maintenance 042	d General Administration 160	e Total Modal Expenses
Labor (501)					
01 Operators' salaries and wages (01)	-	-	-	-	-
02 Other salaries and wages (02)	\$12,221	-	\$85,028	\$278,949	\$376,198
03 Fringe Benefits (502)	\$10,410	-	\$71,797	\$199,702	\$281,909
04 Services (503)	\$4,209	-	\$34,338	\$211,580	\$250,126
Materials and Supplies (504)					
05 Fuel and lubricants (01)	\$547,031	\$348			\$547,378
06 Tires and tubes (02)	-	-			-
07 Other materials and supplies (99)	\$197	\$232,655	\$13,191	\$17,158	\$263,201
08 Utilities (505)	-			\$121,438	\$121,438
09 Casualty and Liability Costs (506)		-	-	-	-
10 Taxes (507)	-	-	-	\$5,797	\$5,797
Purchased Transportation (508)					
11 In report (01)	\$1,950,766	\$848,039	-	\$738,107	\$3,536,912
12 Filing separate report (02)	-	-	-	-	-
13 Miscellaneous Expenses (509)	\$1,521	-	\$2	\$64,515	\$66,038
14 Expense Transfers (510)	-	-	-	-	-
15 Total Modal Expenses	\$2,526,354	\$1,081,041	\$204,356	\$1,637,245	\$5,448,997

Objective: Reduce the Cost of Reporting

Expense Object Class	Prior FY 2012	Current FY 2013	Difference	Percent Difference
Labor (501)				
01 Operators' salaries and wages (01)	\$0	\$0	\$0	0.00%
02 Other salaries and wages (02)	\$146,728	\$147,055	\$327	0.22%
03 Fringe Benefits (502)	\$63,262	\$55,049	(\$8,213)	-12.98%
04 Services (503)	\$117,836	\$123,342	\$5,506	4.67%
Materials and Supplies (504)				
05 Fuel and lubricants (01)	\$428,155	\$464,204	\$36,049	8.42%

Service Statistics & Cost Efficiency Performance Measures				
Total Actual Vehicle Miles	857,206.0	941,888.9	84,682.9	9.88%
Total Actual Vehicle Revenue Miles	675,169.0	751,442.0	76,273.0	11.30%
Total Actual Vehicle Hours	50,291.9	54,389.8	4,097.9	8.15%
Total Actual Vehicle Revenue Hours	40,757.3	44,839.8	4,082.5	10.02%
Total Modal Costs Per Vehicle Mile	3.75	3.77	0.02	0.61%
Total Modal Costs Per Revenue Mile	4.76	4.73	(0.03)	-0.67%
Total Modal Costs Per Vehicle Hour	63.92	65.34	1.42	2.22%
Total Modal Costs Per Revenue Hour	78.87	79.25	0.38	0.48%

Objective: Improve Visibility to KPI's



Assessing the Cost

- Technology Is Only Part of the Equation
- Knowledgeable Data Managers
 - Away From Managing Spreadsheets
 - Toward Trends and Analysis
- Ongoing Focus Required
 - Maintain Accurate Data Mapping
 - Verify Completeness/Accuracy of Data Sets
 - Resolve Issues Impacting Reporting Accuracy

Cost of Maintaining Reliable Data

- Maintain Source ID Mapping

- Route ID #'s

Source ID	Source Label	Route #
14	14	14
142	142	
19	19	19
1904	1904	
2	2	2
22	22	22
23	23	23
24	24	24
337	337	
338	338	
3390	3390	
34	34	
340	340	340

Cost of Maintaining Reliable Data

- Maintain Source ID Mapping
 - DR System Run #'s

Source ID	Source Label	Reporting Route #
126-2	126-2	SUB
126-3	126-3	ADA
127	127	ADA
127-1	127-1	SUB
127-2	127-2	ADA
127-3	127-3	SUB
39-3	39-3	ADA
4001	4001	40
4001-1	4001-1	40

Cost of Maintaining Reliable Data

- Maintain Source ID Mapping
 - GL Account #'s

GL Account #	Function	Allocation Pool	Route Allocation Basis
01-000-508010	Non-Vehicle Maintenance (042)	Community Transit	Revenue Hours
01-000-508011	Unassigned		
01-000-509992	Unassigned		
01-010-503070	Vehicle Operations (010)	All Programs	Total Hours

Cost of Maintaining Reliable Data

- Verify Data Completeness
 - Failed Imports
 - Server Offline
 - Version Update on Source Database
 - Network Security Changes
 - Data Outside of Import Criteria
 - Source Data Changed After Import Window
 - Timing of Farebox Polling
 - Reporting Details Missing in Source Data

Cost of Maintaining Reliable Data

- Resolve Data Issues
 - DR Trip Sheet Discrepancies

Vehicle #	Leave Base/ Pull-Out Time	First Stop Time	Last Stop Time	Return Base/ Pull-In Time	Leave Base/ Pull-Out Odometer	First Stop Odometer	Last Stop Odometer	Return Base/ Pull-In Odometer
174	6:43:00	6:52:00	10:46:00	10:53:00	36,708	36,710	136,785	136,787

Cost of Maintaining Reliable Data

- Resolve Data Issues
 - No Service Data

Fiscal Year	Month	Route #	Date	Day of Week	Indicator	Issue	Impact
FY 2014	Sep	44	9/8/2013	Sunday	Total Fare Counts	Passenger data is assigned to a No-Service date.	13
FY 2014	Aug	12	8/18/2013	Sunday	Farebox Revenue	Farebox Revenues have been assigned to a No-Service date.	\$500.00

Conclusion

- Data availability is growing exponentially
- Technology can help drive efficiency and inform decisions
- Important up-front considerations
 - Clearly defined objectives and KPI's
 - Establish the right detail-level for data interfaces
 - Commitment at all levels of the organization
 - Plan for the transition and set milestones
 - Knowledgeable data managers with accountability