

Effectively Capturing Business Intelligence Data

Michael Armstrong, Director of IT, City of Corpus Christi, TX
Adam Rujan, Partner-Government Services, Plante Moran



Agenda

- What is Business Intelligence (BI)?
- How is BI being used?
- Adoption rates for BI?
- Barriers for BI in state and local government?
- Case study: Corpus Christi, Texas
- Major BI providers
- Plante Moran

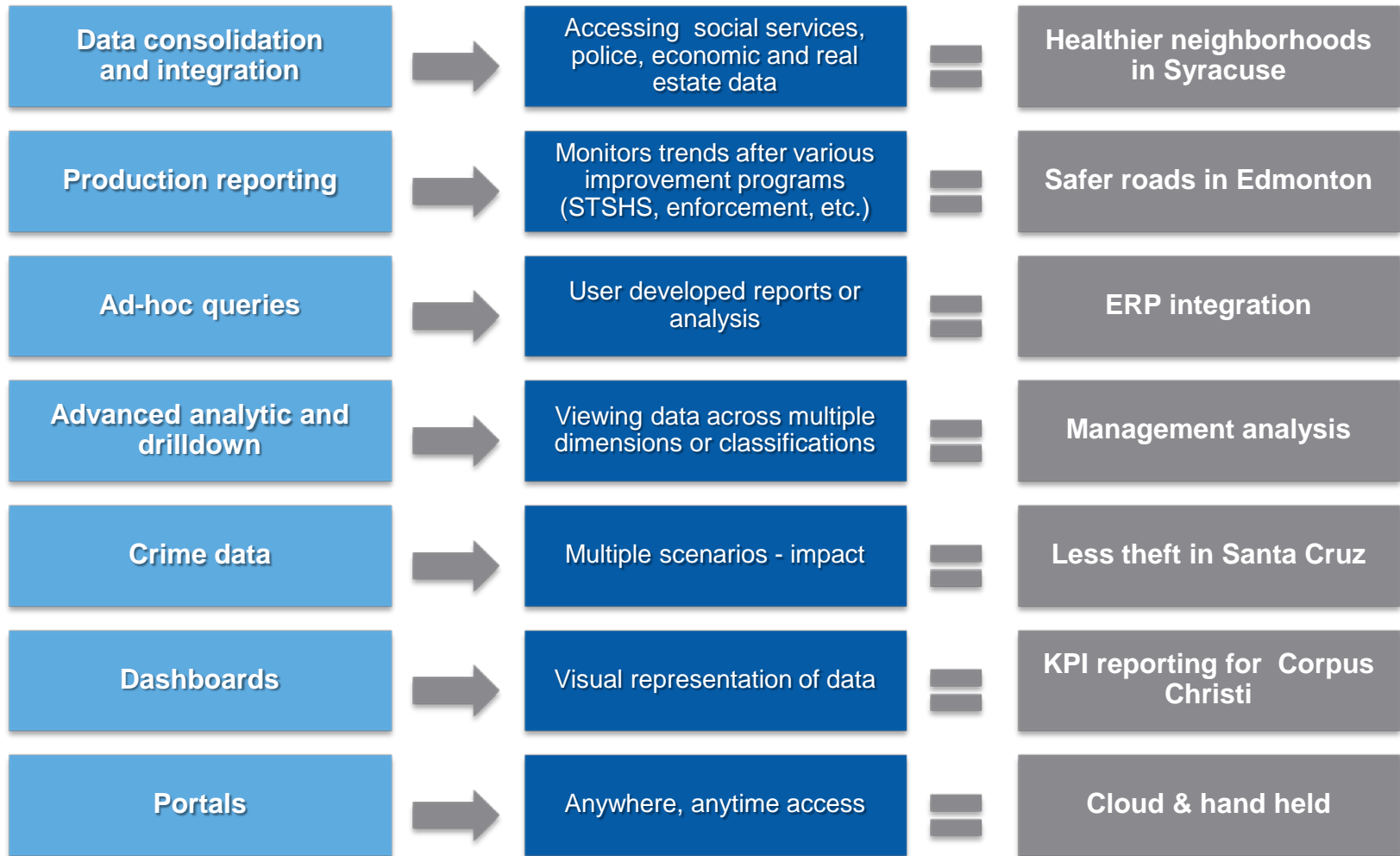
What is BI?

“Extensive use of data, statistics and modeling to better understand past events and—more importantly—predict future events.”

Other Related terms

- Data analytics
- Decision support
- Predictive analytics
- Data visualization
- Data mining
- Forecasting

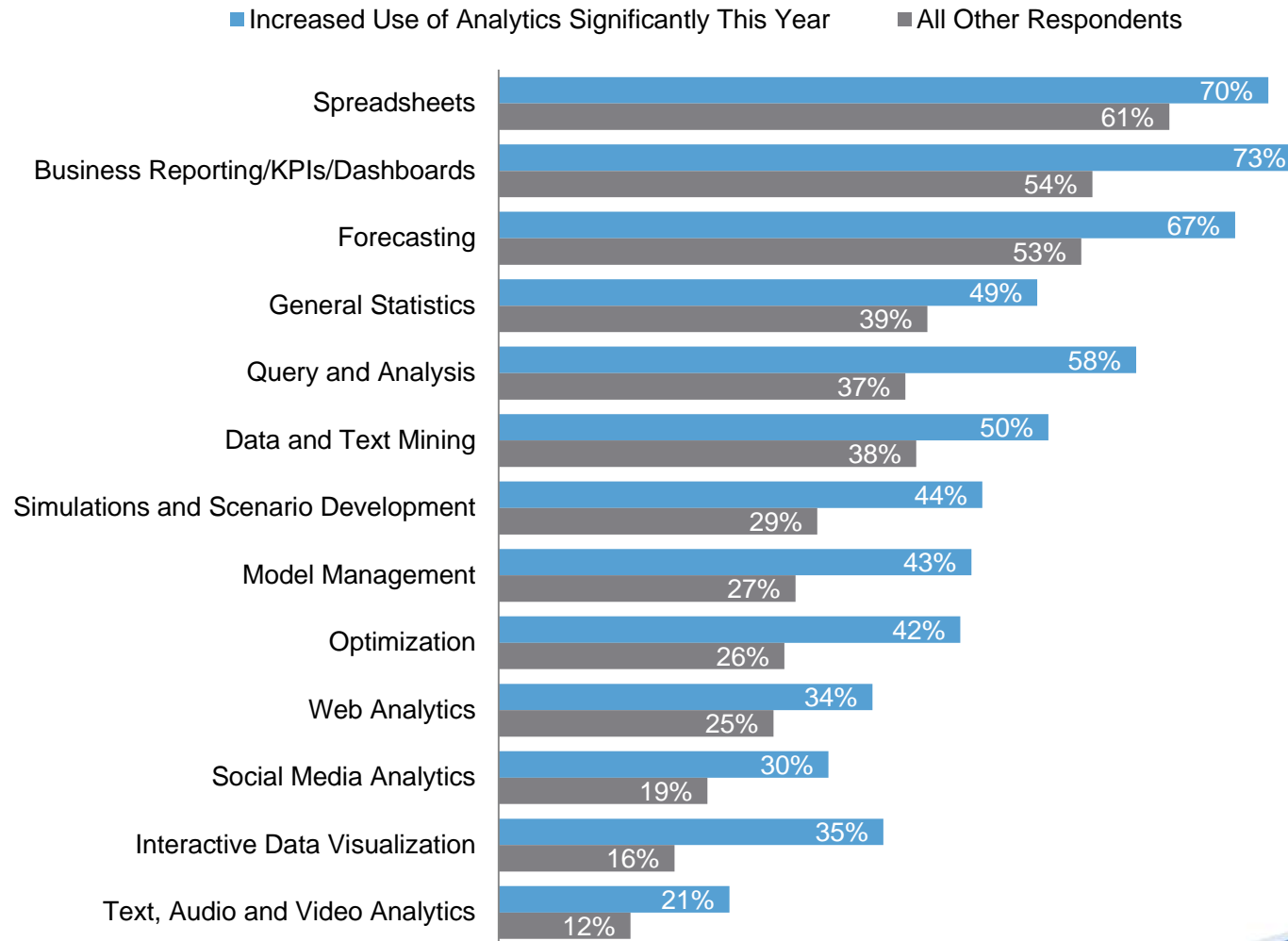
What is BI?



How is BI being used?



How is BI being used?



BI adoption rates

Private Sector

CIO's rank analytics and BI as the #1 priority in three of the last five years.”

Sources: Gartner and Forrester Research Surveys

Public Sector

79% of state and local IT professionals are “somewhat of not very familiar with BI,” and only **2%** say they have a Big Data strategy.

Source: MeriTalk/NetApp survey, 2013

Barriers to BI at state & local government

57% ...say enterprise architecture will not support

46% ...say data storage limitations

42% ...say computational power limitations

35% ...say personnel limitations

Governance Issues

47% Believe IT owns the data

31% Believe the generating department owns the data

Source: MeriTalk/NetApp survey, 2013

Case Study: Corpus Christi

Search these tasks



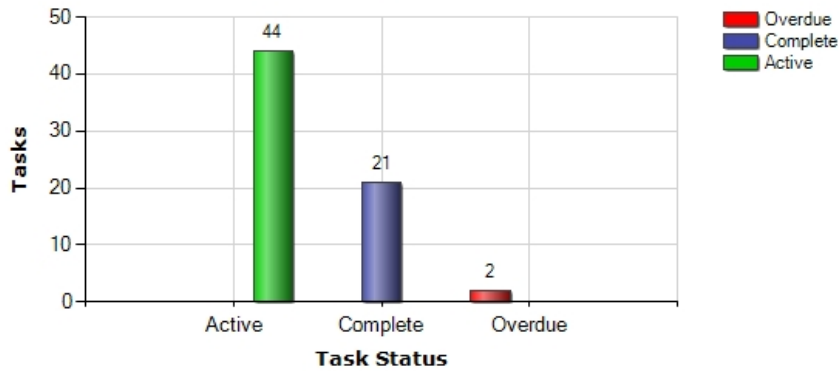
Dept.
MIS

82 Tasks

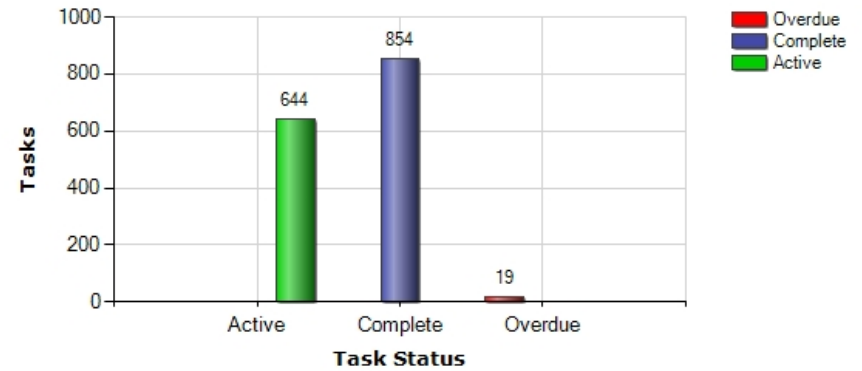
Dept. is 'MIS'

	Dept.	ACM	Mission Element Number	Strategy ID	Strategy	Task Number	Task Name	I00D	CP	Due Date	Complete Date	Task Status	Task Owner	Suspended	Comments	Subtasks	Add Subtask
	MIS	Rose, Margie	1	1	Maintain and support Data Center Develop File Management System	1	1) Produce an FMS plan document			11-30-2012	12-10-2012	Complete	Sam Bhakta		Forward FMS plan to MIS management for approval.	Subtasks	<input type="button" value="Add Subtask"/>
	MIS	Rose, Margie	1	1	Maintain and support Data Center Develop File Management System	2	2) Obtain plan approvals			02-28-2013	02-22-2013	Complete	Sam Bhakta			Subtasks	<input type="button" value="Add Subtask"/>
	MIS	Rose, Margie	1	1	Maintain and support Data Center Develop File Management System	3	3) Implement plan			05-31-2013	05-09-2013	Complete	Sam Bhakta and Francisco Franco			Subtasks	<input type="button" value="Add Subtask"/>
	MIS	Rose, Margie	1	2	Maintain and support Data Center Develop Message Archiving Strategy	1	1) Develop Archiving Requirements			08-01-2012	09-12-2012	Complete	Debra Hamaker			Subtasks	<input type="button" value="Add Subtask"/>
	MIS	Rose, Margie	1	2	Maintain and support Data Center Develop Message Archiving Strategy	2	2) Identify City Message Retention Requirements or Use Application Defaults			08-01-2012	09-12-2012	Complete	Debra Hamaker			Subtasks	<input type="button" value="Add Subtask"/>

100-day Task Status



Task Status



Mission, Goals and Measures

Full Report | Grid Edit | Email | More | I-200 of 201 Measures

Mission Element #	Dept.	Mission Element	Goal ID	Goal	Measure	Target
1	AIR	Maintain all City owned facilities on airport property	1	To cost effectively maintain City owned facilities	Maximo Work Order System	70%
1	AIR	Maintain all City owned facilities on airport property	3	Cost effectively maintain all pavement surfaces on the airport	Maximo Work Order System	75%
2	AIR	Manage all airport operations	1	Provide a safe and secure airfield environment in order to conduct air carrier, military, general aviation, and air cargo operations	Review daily airfield inspection reports for discrepancies	5%
3	AIR	Manage all leased property within the airport perimeter	1	Ensure compliance with local, state and federal requirements for leasing and tenancy of property and facilities on the airport	Percentage of leasable airside/landside space	20%
4	AIR	Plan and develop expansion of the airport	1	Utilizing the principals of smart growth to develop and execute Capital Improvement Plan (CIP) and Business Development Plan that is fiscally responsible and achievable.	Percentage of project completion	100%
1	ANI	Administer animal code compliance	1	Build a high performance work force to focus on and enforce municipal codes relating to animal ownership through education and citations	Number of citations issued	600
2	ANI	Pick-up stray animals	1	Perform timely, courteous, and professional responses to all services provided	% responses to customer complaints referencing stray dogs in a 24 hour period	95%



City Performance Reporting

DRAFT

Health
 Monthly | Apr | 2013 | Print

Baseline Information

	FY 12-13	FY 11-12	FY 10-11	FY 09-10
Full-time employees		106	112	112
Total expenditures-County	\$1.1 M	\$1.0 M	\$1.4 M	
# Birth & death certificates issued	27,053	33,315	36,278	
# Immunizations provided	13,272	16,723	42,283	
#STD & HIV patients served	3,738	4,000	3,194	
# Tuberculosis screenings	20,214	15,024	12,250	
Avg food service score	95%	95%	92%	
Total expenditures-City	\$2.5 M	\$2.5 M	\$2.8 M	
# new food establishments permitted	287	273	321	
# food service establishments	2,314	2,292	2,296	

Operational Profile

# of clinics	7
# of Satellite clinics	2
Operates as City-County Health District	

DEPARTMENT MISSION: Assure the general health and physical wellbeing of the community

Mission Element	Goal	Measure	Target	Actual	Previous
Enforce health and safety code compliance	To ensure food establishments are in compliance with TFER & City Ordinances	Number of routine inspections for fixed food establishments	>= 350.00	131.00	171.00
	To ensure food establishments are in compliance with TFER & City Ordinances	Percentage of restaurant sanitation complaints responded to in less than 1 business day	>= 95.00	62.86	78.95
Provide and manage medical clinics	To ensure family planning, breast and/or cervical screenings, and diagnostic screenings are made available to eligible low income women of Nueces County	Number of patient visits scheduled to WHS	>= 166.67	100.00	131.00
Provide immunizations, disease prevention and health surveillance	To operate an immunization program for children, adolescents and adults with an emphasis on accelerating intervention to improve immunization coverage	Education encounters through out-reach clinics and health fairs	>= 4.17	3.00	0.00
	To operate an immunization program for children, adolescents and adults with an emphasis on accelerating intervention to improve immunization coverage	Number of client visits for adults ages 19 and over	>= 291.67	155.00	127.00
	To operate an immunization program for children, adolescents and adults with an emphasis on accelerating intervention to improve immunization coverage	Number of client visits for children 0-18 years of age	>= 250.00	221.00	122.00
Deliver services for family planning, women, and children	To make WIC services available to all potential WIC eligible families in Nueces County	Percentage of born to WIC infants breastfed at certification	>= 5.83	77.06	76.71
	To make WIC services available to all potential WIC eligible families in Nueces County	Percentage of families receiving nutrition education/counseling services at the time of EBT issuance	>= 7.92	99.10	98.90
Deliver environmental health services	Plan for and develop plans to respond to disease outbreaks and natural disasters	Number of emergency bioterrorism drills conducted	>= 0.50	0.00	1.00
Conduct health education	Provide Health Education services to residents	Number of health promotions and education encounters in the area of chronic disease prevention	>= 833.33	1053.00	446.00
Provide laboratory services	To mitigate disease by expeditiously detecting and identifying possible pathogens while maintaining compliance with regulatory agencies	Number of analytical tests on clinical and environmental samples	>= 2000.00	2318.00	2097.00

http://www.cbasc.cc/scorecard/cpr_main.cfm

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City of Corpus Christi Performance Reporting



City Performance Reporting

DRAFT

Municipal Information Systems

Monthly Apr 2013 Print

Baseline Information

	FY 12-13	FY 11-12	FY 10-11	FY 09-10
Full-time employees MIS		94	98	98
Total MIS expenditures		\$14.3M	\$15.3M	\$16.2M
% of City's operating expenditures on MIS		3.2%	3.3%	3.5%
MIS total expenditures/City staff		\$4,930	\$4,958	\$5,057
MIS total expenditures per citizen		\$46.90	\$50.05	\$53.29
# Help Desk requests received		16,216	13,305	13,992
# Citizen calls received by 1-Call Center		415,549	440,000	405,592
# visits to City's web site (cctexas.com)		101 M	111 M	120 M
Staff retention rate		92.00%	88.06%	92.98%

Operational Profile

# Computing devices (all depts)	2,500
# Servers (all supported systems)	243
Miles of fiber	100.92

DEPARTMENT MISSION: Assist City departments in meeting their computer and technology requirements

Mission Element	Goal	Measure	Target	Actual	Previous
Provide and support technology infrastructure	Improve use of WiFi network	% of successful DCU reads	>= 95.00	97.00	96.04
	Increase use of WiFi network	# of WiFi Users (Government & Public)	>= 1200.00	5806.00	
	Provide reliable, secure and effective networks	Availability of core network equipment	>= 95.00	97.08	100.00
Provide software applications support	Upgrade applications and databases as required	% of users running end of life applications (version being used is either no longer or will lose support within the next six months)	<= 5.00	6.95	6.95
Manage the Help Desk	Maintain and improve support for desktop technology	Average call wait time (seconds)	<= 90.00	1.54	1.44
	Maintain and improve support for desktop technology	Percentage of issues resolved at time of initial contact	>= 50.00	72.30	66.80
Manage the City's Call Center	Manage and improve multi-channel citizen-facing communications	Percentage increase in transactions moved to on-line or mobile channels	>= 10.00	3.70	26.00
	Process customer calls efficiently	% of handled calls	>= 95.00	94.27	93.36
	Respond to customer calls in a timely manner	Average call wait time (seconds)	<= 90.00	72.00	70.00
Provide IT standards, infrastructure security, and disaster recovery	Improve MIS operations	Percentage of successful changes made to systems	>= 95.00	100.00	100.00
	Improve the City's security posture	Average patch latency (days)	<= 30.00	799.00	789.00



City Performance Reporting

DRAFT

Solid Waste Collection
 Monthly Apr 2013 Print

Baseline Information

	FY 12-13	FY 11-12	FY 10-11	FY 09-10
# residential customers	82,928	81,897	81,708	81,708
Recycling net tons	12,387	7,468	2,963	
Monthly residential service charge	\$18.84	\$18.84	\$16.91	
% households participating in recycling	68%	59%	16%	
Waste diversion rate	29%	22%	15%	
# collection complaints	5,905	7,024	4,455	
# graffiti sites cleaned	3,955	3,950	3,668	
Tons of solid waste collected	90,429	95,328	112,851	
Total full-time employees	141	178	183	
Total expenditures	\$24.3M	\$24.9M	\$22.3M	

Operational Profile

Residential collection: weekly
 Recycling collection: bi-weekly
 % landfill life remaining: 95%
 Brush and bulky collection: 5 times year
 Miles of collection routes: 1,710 miles

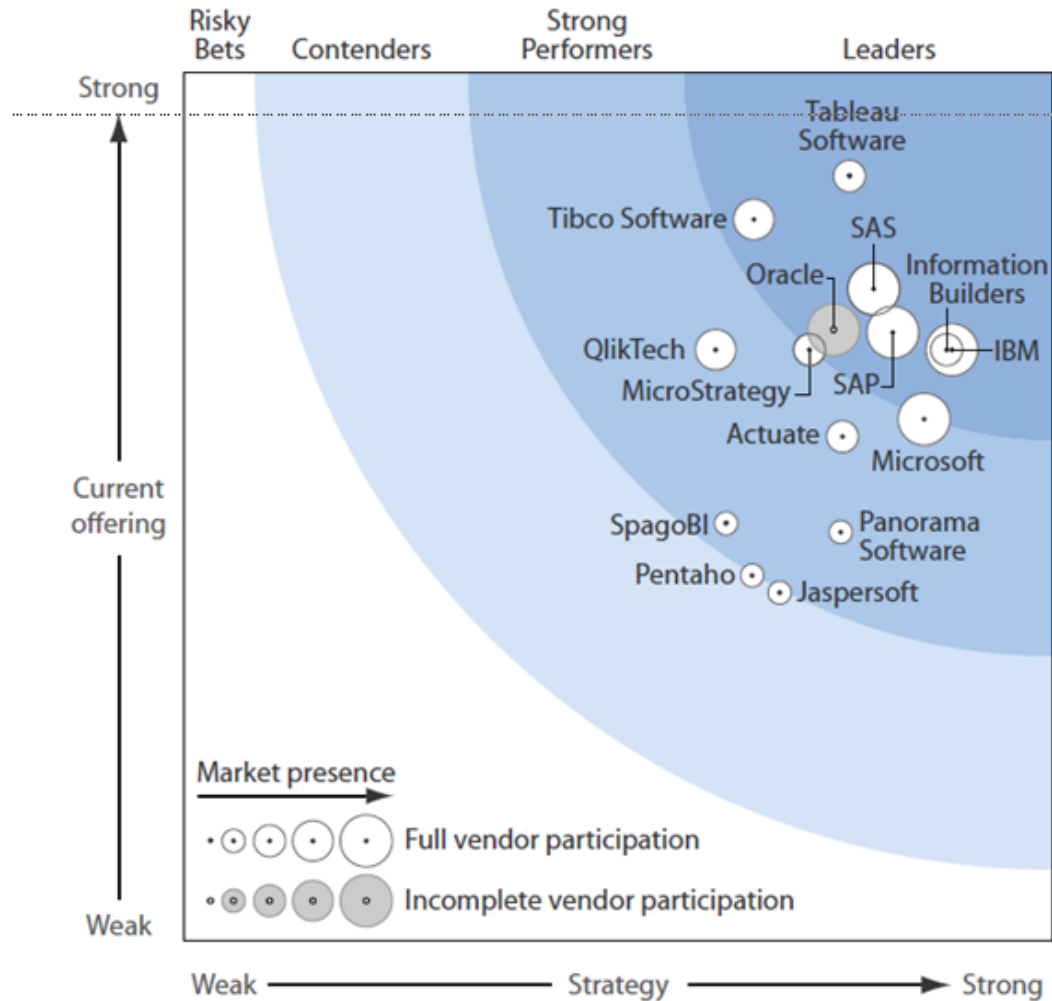
DEPARTMENT MISSION: Collect and dispose of solid waste

Mission Element	Goal	Measure	Target	Actual	Previous
Collect brush and bulky waste on schedule	Collect brush and bulky waste materials on schedule	% brush and bulky routes collected on schedule	= 100.00	93.75	100.00
	Collect brush and bulky waste materials on schedule	% of complaints of heavy brush collection missed resolved < 50 hrs	>= 98.00	96.15	100.00
Efficiently collect garbage and recycling materials	Collect garbage and recycling materials on schedule	% garbage and recycling routes collected on schedule	= 100.00	100.00	100.00
	Collect garbage and recycling materials on schedule	% of complaints of garbage collection missed resolved in < 30hrs	>= 98.00	98.57	100.00
	Collect garbage and recycling materials on schedule	% routes collected within a 7-8 hr period	>= 95.00		100.00
Manage disposal, transfer station, and landfill facilities	Divert (from Cefe Landfill) 90% of clean brush from mixed loads of brush and bulky items	% diversion of clean brush from mixed loads of brush and bulky items	>= 7.50	100.00	100.00
	Increase the proportion of materials delivered by the City to the transfer station rather than the landfill	% increase garbage delivered to transfer station by Solid Waste collection fleet	>= 2.08	49.36	51.59
Conduct recycling, litter abatement and litter reduction programs	Reduce plastic bag litter				
Plan and develop expansion of solid waste enterprise	Increase diversion of waste from landfill	Percent diversion of waste from landfill	>= 5.00		26.69

Major BI solution providers

Vendor	Product Name	Version	Release Date
Actuate	ActuateOne	11 SP4	Q2 2012
IBM	IBM Cognos Business Intelligence	V10.1	October 2010
Information Builders	WebFOCUS	7.703	November 2011
Jaspersoft	Jaspersoft BI Enterprise	4.5	December 2011
Microsoft	Excel 2010 (includes PPT), MS Office 2010, SharePoint 2010, SharePoint Server 2010, SQL Server 2012 (includes SSRS, SSAS, and Power View)	NA	April 2012
MicroStrategy	MicroStrategy		
Oracle	Oracle Business Intelligence Suite Enterprise Edition	11g	Q4 2011
Panorama Software	Panorama Necto	11	May 2011
Pentaho	Pentaho Business Analytics	4.5	April 2012
QlikTech	QlikView	11	November 2011
SAP	SAP Business Objects	4.0 Feature Pack 3	April 2012
SAS	SAS Business Enterprise Intelligence	4.31	July 2011
SpagoBI	SpagoBI	3.2	November 2012
Tableau Software	Tableau Desktop, Tableau Server	7	January 2012
Tibco	Tibco Spotfire Analytics	V4.0	November 2011

Major BI solution providers



How to implement BI?

Baseline

- Assess current analytical capabilities
 - Assess current/future needs
 - Institute KPI's and dashboards
 - Implement pilot project
-

Advanced

- Measure and benchmark TCO
 - Develop enterprise deployment plan
 - Fortify backend data infrastructure
 - Assign data manager
 - Create “starter” views and dashboards
-

Best in Class

- Focus on “right time” delivery of insight
 - Develop ROI methodology for BI
 - Expand BI usage beyond traditional functions
-

About Plante Moran

STABILITY

- Founded in 1924
- Recognized by *Fortune* magazine as one of the “100 Best Companies to Work For” for the last fifteen years
- 11th largest certified public accounting and management consulting firm in the nation

INDUSTRY EXPERTISE

- Nearly 70 years of involvement in serving public sector clients
- Significant municipal IT Strategic Planning experience

DEPTH

- Approximately 2,000 staff members, including over 250 partners and directors
- Over 75 technology consulting professionals
- Significant investment in professional education/training

VENDOR INDEPENDENCE

- Independent from software and hardware vendors for our public sector clients
- 97% of clients say Plante Moran puts their interests first

About Plante Moran

DISTINCTIONS

- Workplace Dynamics' list of "America's Top 10 Workplaces"
- International Accounting Bulletin's 2012 "Employer of the Year"
- Vault Guide's list of the "Best Accounting Firms to Work For" and ranked #1 in firm culture
- One of the "Best Accounting Firms for Women," American Society of Women Accountants and the American Women's Society of Certified Public Accountants
- Crain's "Best Places to Work" in Chicago
- Crain's "Best Places for Women to Work" in Chicago

Questions/Comments?

Additional Information...



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September 22-25, 2013