Key Performance Indicators

What is a "Key Performance Indicator"

?

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It's Easier to Ask "What isn't a KPI?"

- It's not a piece of data we like to know just because we MAY need to refer to it.
- It's not something we display just because that's what everyone else monitors.
- It's not a measure of something we cannot control or we cannot use to make decisions.

So What's Left?

- A KPI is a measure that informs us as to how we are doing in one or more aspects of our overall operation. It should be KEY, meaning it's critical to the success of the University. As much as possible, it should be a LEADING INDICATOR of our performance so we have time to fix problems.

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Purists Will Say…

- The KPI needs to be measured daily, if not 24/7.
- The KPI will only measure Critical Success Factors.
- The KPI can only be a leading indicator.
- If the KPI has a “$” in front of it, then it’s too late. They say..

“The business operation should have been measured BEFORE costs and revenues are attached to it.”

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At Marshall University

- With a handful of exceptions, our time-scale is on the order of semesters and years, not days.
- Post-measures, or *Results Indicators*, such as the Composite Financial Index (CFI), enrollment, retention rate, ratios of costs or revenue to enrollment, etc. are all useful in monitoring and correcting strategic problems.

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At Marshall University (cont.)

- We do not plan on being strict regarding KPIs.
- The Senior Management Team will use a variety of performance metrics from several broad categories to gauge performance. Some of these will update only annually. And some of them will actually have a “$” in front of a number.

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Performance Metrics

Any indicator used by management to measure, report, and improve performance.

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Three Groups of Metrics

1. Senior Management Team Metrics
2. Metrics to Assess Success of the 20/20 Goals
3. Board Metrics

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Senior Management Team Metrics

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Senior Management Team Metrics

- About 10 broad categories.
- Metrics selected to allow easy measurement of progress toward expectations and goals.
- Able to drill down for more detailed data.
- These were actually offered up in a SMT meeting as items we might measure. Not metrics for specific goals

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Example SMT Performance Metrics

- Enrollment
  - Headcount
  - FTE (Full-Time Equivalent)
  - FTTE (Full-Time Tuition Equivalent)
  - Housing occupancy rates
  - INTO Marshall enrollment

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Ex. SMT Performance Metrics (cont.)

- Recruitment
  - Number of actionable applications
  - Yield
  - Number of new freshmen
  - Number of new transfers
  - Freshmen financial aid composition (including merit vs need, funded vs unfunded, etc.

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Ex. SMT Performance Metrics (cont.)

- Student Success
  - Retention rates of freshmen cohort
  - 4-year graduation rate
  - 6-year graduation rate
  - Degrees awarded
  - Mortality rate (% of Ds, Fs, and Ws)
  - Credits-completed/Credits-attempted ratio

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Ex. SMT Performance Metrics (cont.)

- Teaching, Learning, and Academic Quality
  - Collegiate Learning Assessment
  - National Survey of Student Engagement
  - Average class size
  - Student-Faculty ratio
  - Number of under-enrolled sections
  - FTE of reassigned faculty

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Ex. SMT Performance Metrics (cont.)

- Research
  - Number of grant submittals
  - Number of funded grants
  - Total funding
  - Total Finance and Admin funding
  - Average F & A Percentage
  - Funding from federal government

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Ex. SMT Performance Metrics (cont.)

- Financial Stability
  - Composite Financial Index
  - Days of cash on hand
  - Appropriations per WV student
  - Net tuition revenue per student
  - Tuition discount rate
  - $ Expenditures per Student (Instruction, Core Exp., etc.)

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Ex. SMT Performance Metrics (cont.)

- Risk
  - Bond rating
  - Student loan borrowing rate (freshmen, others)
  - Student loan default rate

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Ex. SMT Performance Metrics (cont.)

- Infrastructure
  - Average building age
  - Total deferred maintenance
  - Sq. ft. utilization
  - Classroom utilization
  - WiFi coverage/capacity

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Ex. SMT Performance Metrics (cont.)

- Athletics
  - Academic integrity
  - Adherence to NCAA rules
  - Competitiveness of sports
  - Diversity and gender equity
  - Fiscal integrity
  - Student athlete welfare

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Senior Management Team Metrics

- Actual process is to utilize the goals and expectations of the University and set metrics that allow us to measure progress toward meeting them.
- For each metric, acceptable variances from expectations/goals are set, as well as possible actions when variance thresholds are exceeded.

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Metrics to Assess 20/20 Goals

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Metrics to Assess 20/20 Goals

- Academic and service portfolio review process teams and other 20/20 teams will suggest metrics to measure success of individual projects.

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Metrics to Assess 20/20 Goals

- Example: The Facilities and Leases team may determine a goal for the number of light fixtures to be converted to T5 or LED lighting each year. The metric could be the number of fixtures converted to date.
- Alternatively, the goal may be an annual number of KWh saved, and the metric would be the total based on expected savings of each type of fixture and hours in use.
- Measuring progress toward goal will be relatively simple

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Board Metrics

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Board Metrics

- The Marshall University Board of Governors has a primary oversight role, so…

What is important enough to have the Board's attention and focus?

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Board Metrics

Should be…

- Strategic in Nature
- Results rather than inputs
- Broadly-based

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Examples of Board Metrics

- Headcount enrollment
- Full-Time Tuition Equivalent enrollment
- Graduation and retention rates
- Net tuition revenue per student
- Composite Financial Index

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Performance Metrics

- Assessing Goals
  - What are we doing and where are we going?
  - How will we know when we get there?
  - How will we know if we're making good progress?

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How Do We Communicate Performance Metrics?

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Dashboards

- Deciding how to present the metrics is almost as difficult as selecting the right metrics.
- Two schools of thought:
  - Large graphic gauges/meters for “Glance and Go” reviewing; OR
  - Densely packed numbers and small graphics to provide context

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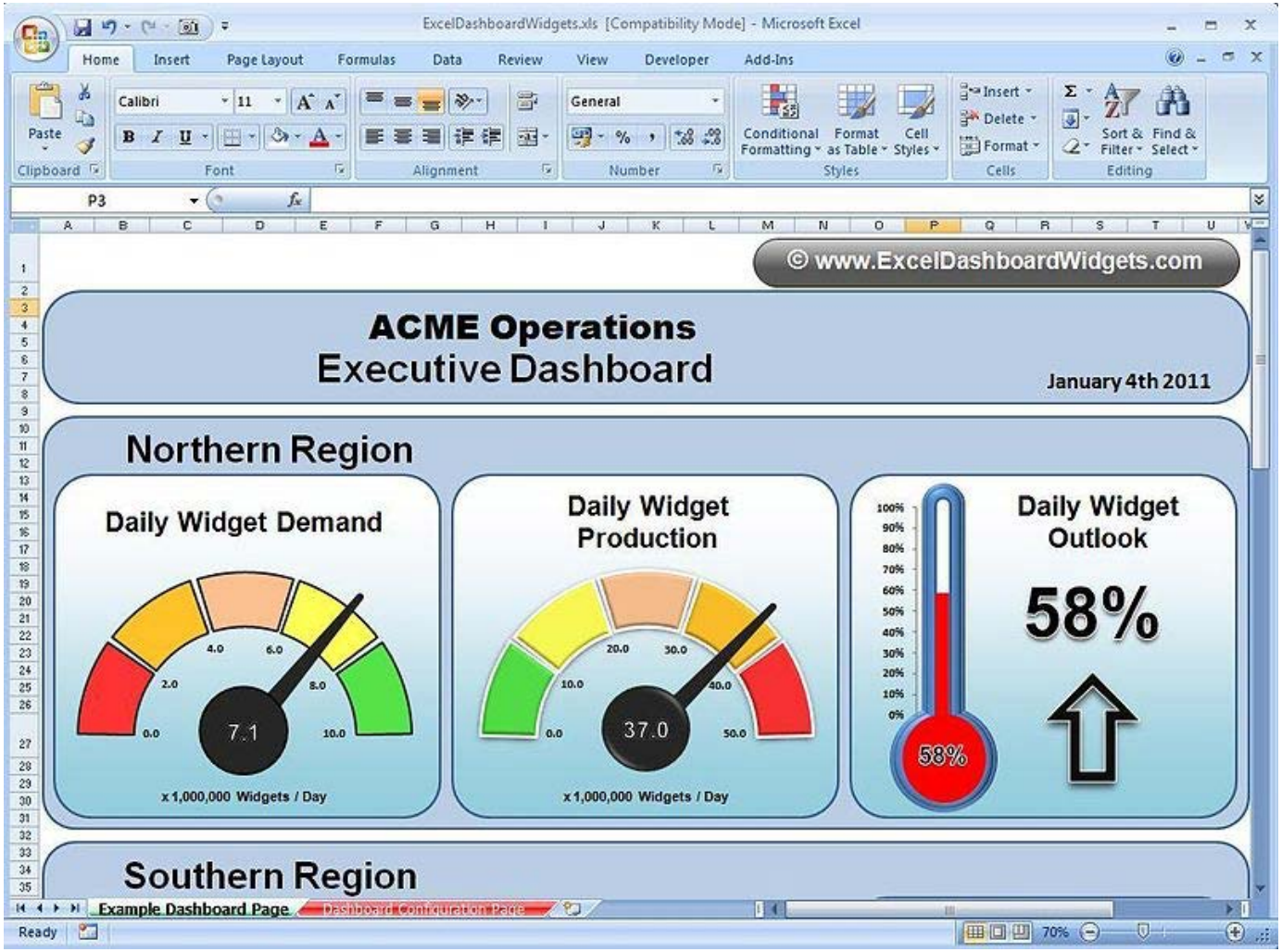
ExcelDashboardWidgets.xls [Compatibility Mode] - Microsoft Excel
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Executive Dashboard
January 4th 2011
Northern Region
Daily Widget Demand
7.1
x 1,000,000 Widgets / Day
Daily Widget Production
37.0
x 1,000,000 Widgets / Day
Daily Widget Outlook
58%
58%
Southern Region
Example Dashboard Page
Dashboard Configuration Page
Ready

- Top 10 States
- Middle 30 States
- Bottom 10 States

- Performance improving
- Performance staying about the same
- Performance declining

Economic Strength

	Prior	Current	Rank	Progress
Unemployment	10.5%	10.9%		
Gross Domestic Product (GDP)	(3.2)%	2.9%		
Percent of structurally deficient bridges	13.5%	13.2%		
Real personal income per capita	$28,250	$27,558		
Children living in poverty	19%	23%		

Health and Education

	Prior	Current	Rank	Progress
Infant mortality (Per 1,000 births)	7.6	7.7		
Obesity in the population	30.3%	31.7%		
3rd graders reading at grade level	90%	87%		
ACT college readiness benchmarks	16.0%	17.3%		
Population with bachelor's degree or higher (25+ years old)	24.7 %	24.6%		

Value for Money Government

	Prior	Current	Rank	Progress
Bond rating (Standard & Poor's)	AA-	AA-		
Government debt burden per capita	$748	$762		
State government operating cost as a percent of GDP	11.9%	12.5%		
State and local government operating cost as a percent of GDP	20.9%	21.9%		
Access to state government – number of online services	325	357		

Quality of Life

	Prior	Current	Rank	Progress
State park popularity – annual visits per citizen	2.1	2.1		
Population growth (Ages 25 – 34)	(1.9) %	(1.6)%		
Clean and safe water resources – water quality index	83	88		

Public Safety

	Prior	Current	Rank	Progress
Violent crimes per 100,000	502	497		
Property crimes per 100,000	2,935	2,838		
Individuals fatally or seriously injured in traffic accidents	7,382	6,917		

www.michigan.gov/MiDashboard

Revision 8/19/2011

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SaaS KPI Online
POWERED BY BSAM

My Dashboard

Live Support ONLINE

Home | Revenue | Inventory | Expenses | Accounts Receivable | Accounts Payable | Help Center | Tools

Aug 2010

Trend Analysis

Profit and Loss

	Aug 2010	Var PP	Var PY	YTD	Var
Revenue	7,173,209	-24 %	-8 %	48,095,274	-8 %
Cost of sale	6,617,468	-20 %	-8 %	38,539,341	-8 %
Gross Profit	555,740	-51 %	-4 %	9,555,933	-5 %
Expense	2,038,251	-11 %	-51 %	18,342,613	-100 %
Profit	-1,482,511	29 %	-59 %	-8,786,680	-187 %
Gross Margin	8 %	-36 %	4 %	20 %	0 %
Net Margin	-21 %	69 %	-55 %	-18 %	-194 %
Avg Price	2,347	-27 %	-1 %	2,277	-0 %

Statistical Trend Analysis

Main Metrics

Accounts Receivable	AR Balance	10,455,574	
	AR Overdue	10,455,574	100 %
	Collection	5,190,493	50 %
	AR Days	66	
Accounts Payable	AP Balance	2,676,816	
	AP Overdue	2,676,816	100 %
	Payments	1,638,313	61 %
	AP Days	49	
Inventory	Inventory	21,178,016	
	Inventory Days	93	

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Good Dashboard Design

- Allows access to data.
- Is easy to understand
- Lets the viewer use the dashboard to

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- Monitor
- Analyze
- Decide

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- Monitor
- Analyze
- Drill to Detail
- Deliberate
- Decide

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Dashboards and Performance Metrics at Marshall

The plan…

- Don’t try to do it overnight.
- Don’t lose control of the project.
- Do include stakeholders.
- Do make sure the system is useful and is used.

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Cost

- Rohm and Hass, a $9 billion specialty chemical business implemented dashboarding of KPIs associated with their chemical business.
- First dashboard cost $500K and took six months to deploy. Each one after that cost $100K and took one month to develop. These dashboards were a bit more involved than what we are planning.

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Cost

- Those costs are in people time (often people dedicated solely to the project) and software.
- We will not use dedicated people, but it will take longer as a result.
- We will use existing software and tools, even though specialty *Business Intelligence* software will provide much better features for navigation.

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Dashboards Timeline

- Goal is to finalize the first set of performance metrics and have a display dashboard for them available by the end of the academic year.

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Questions

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Marshall 20/20