# Putting the 'Business' into Business Analytics

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24 HOURS OF PASS

*Global Sponsor:* Microsoft

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**Sr. BI/DW Architect**



**SQL Server MVP**
**2008-present**



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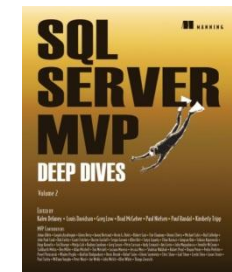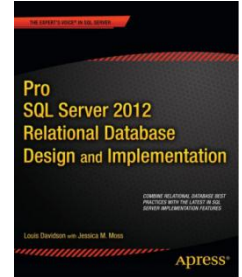


**Co-author: 5**
**technical books**

# What is Business Analytics?

"The skills, technologies, applications and practices for continuous iterative exploration and investigation of past business performance to gain insight and drive business planning" - Wikipedia
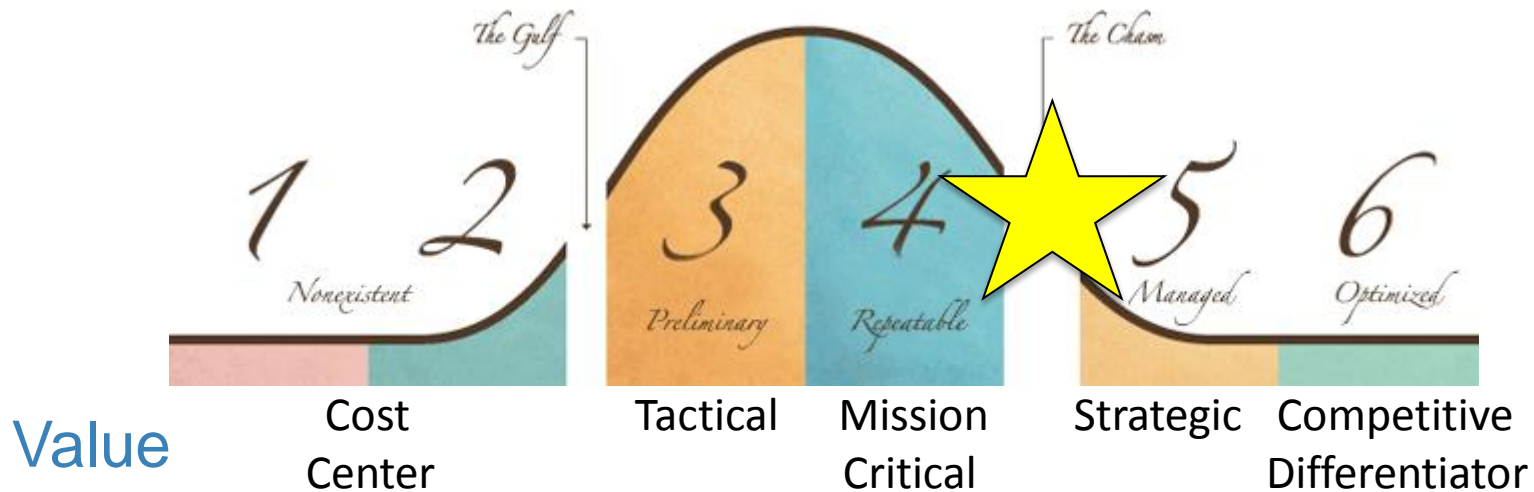
# Are you ready for Business Analytics?

## The Data Warehouse Institute (TDWI) Maturity Model

- Benchmark to compare organizations' data warehousing and business intelligence solutions

- Ranks organizations on: scope, sponsorship, funding, value, architecture, data, development, and delivery
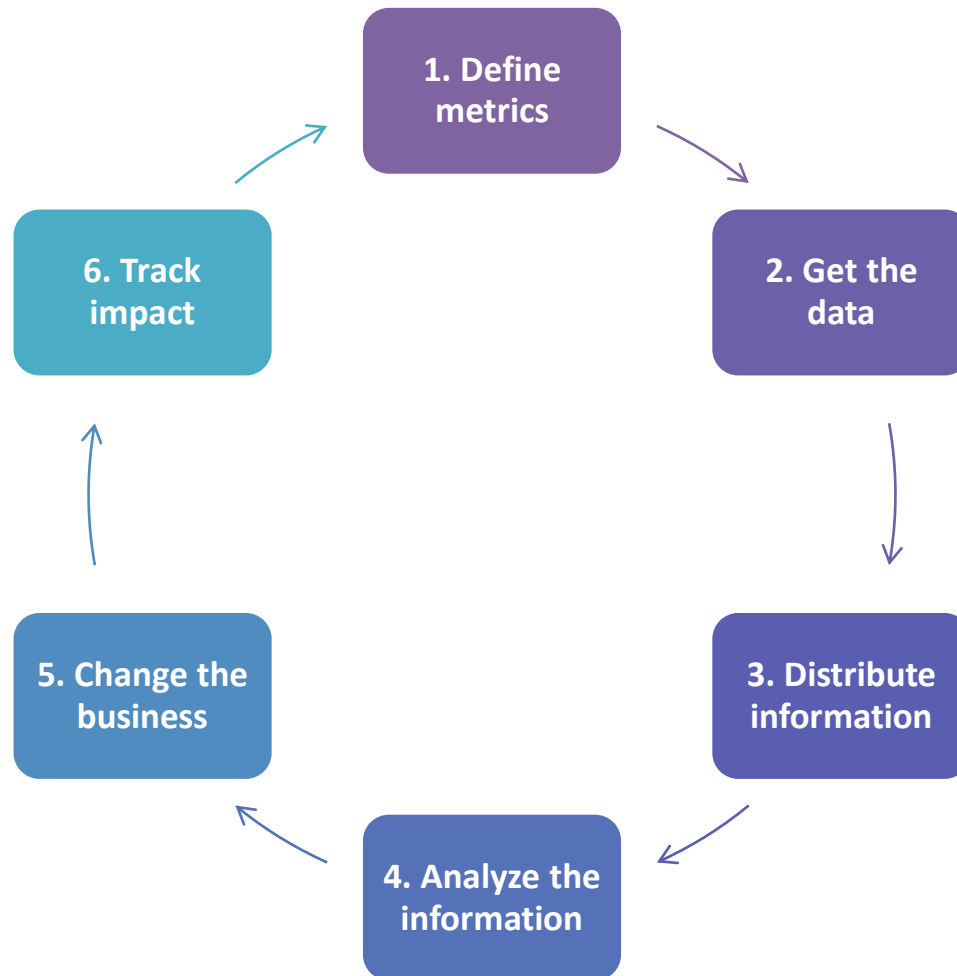
# Are you ready for Business Analytics?

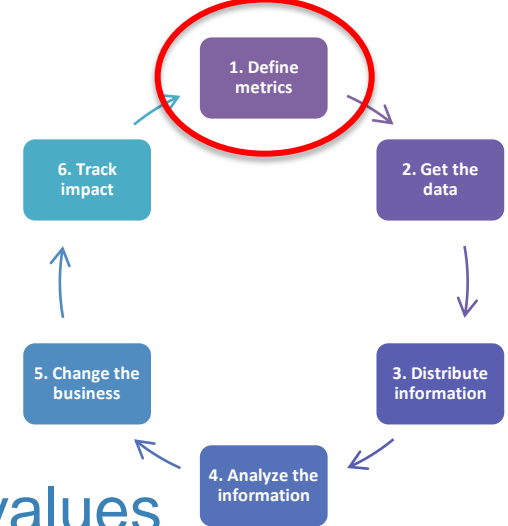Value addresses how effectively the solution meets business needs and expectations



Value | Cost Center | Tactical | Mission Critical | Strategic | Competitive Differentiator

# Business Analytics Process

# 1. Define Metrics



Data is plentiful, analysis is hard

Create a baseline value to compare future values

Questions:

- What are you interested in monitoring?
- Where can you make a difference?

# 1. Define Metrics

6. Track impact → 1. Define metrics → 2. Get the data → 3. Distribute information → 4. Analyze the information → 5. Change the business

Bad metric:

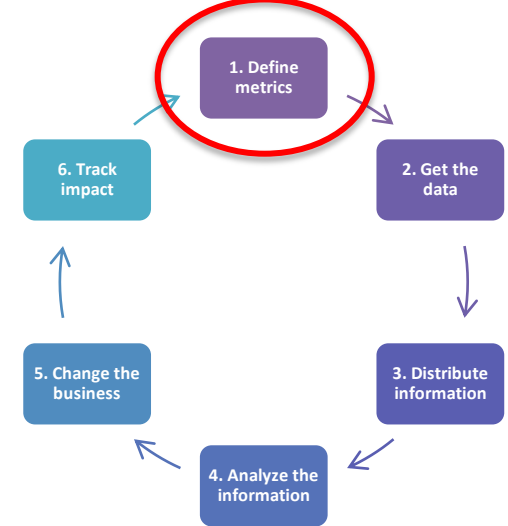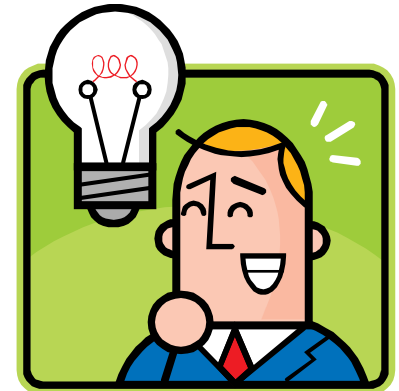Sales, want more.

Good metrics:

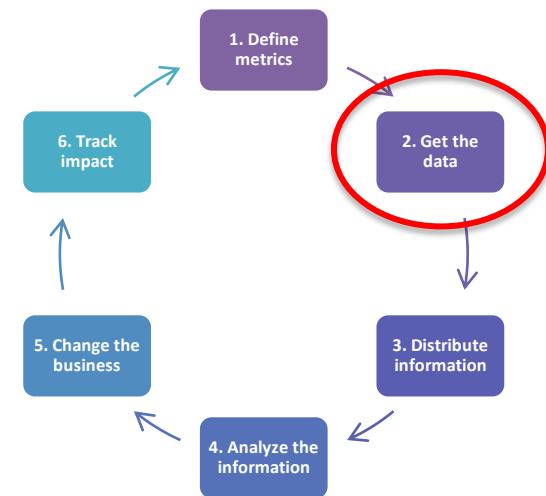Increase retail sales in the southern hemisphere, which are at $50k with a typical annual increase of 2%.
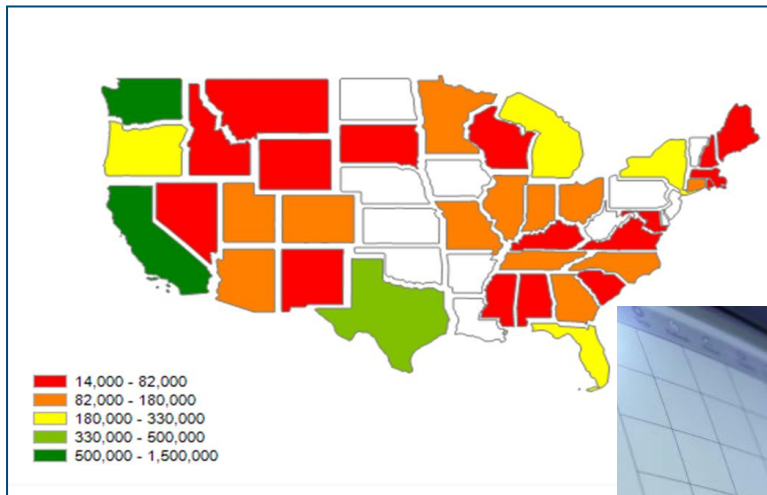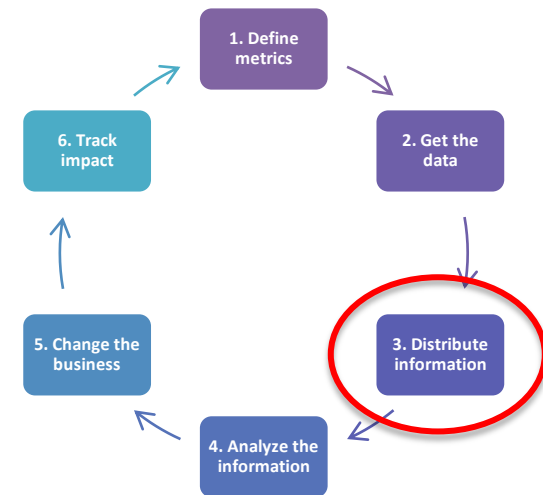
# 2. Get the Data

## Many approaches:

- Data warehousing
- Self-service business intelligence
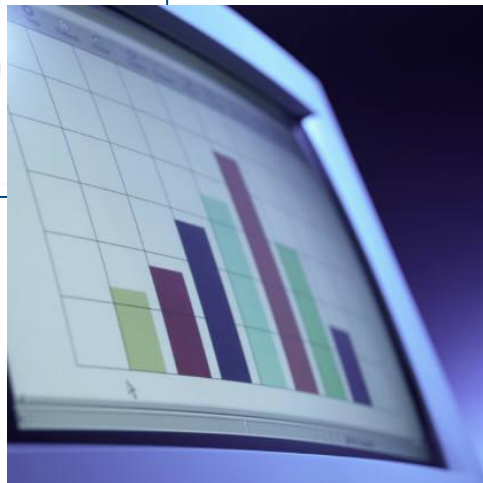- Application reporting
- From your desktop



The diagram shows a cycle: 1. Define metrics → 2. Get the data (circled in red) → 3. Distribute information → 4. Analyze the information → 5. Change the business → 6. Track impact → back to 1. Define metrics.

# 3. Distribute information

## Reports



6. Track impact

1. Define metrics

2. Get the data

3. Distribute information

4. Analyze the information

5. Change the business

### Sales By State

## Sales Orders

| Order Num | Date | Name | City | State | Cam |
|-----------|------|------|------|-------|-----|
| ⊞ 11021 | 3/30/2010 | Richard Howard | Arlington | TX | Newsv |
| ⊞ 4243 | 7/1/2009 | Jeremy Perez | Arlington | TX | No Ca |
| ⊞ 12270 | 5/21/2010 | Faith Bryant | Arlington | TX | Park E |
| ⊟ 13128 | 6/22/2010 | Samuel Winston | Arlington | TX | Prime Comm |

| | Line Num | Class | Prod |
|---|----------|-------|------|
| | 1 | DVDs | Aroun 80 Day |
| | 2 | Books | Shriek British 1960 |
| 4/2009 | Jose Jenkins | Arlington | TX | Local Comm |

14,000 - 82,000
82,000 - 180,000
180,000 - 330,000
330,000 - 500,000
500,000 - 1,500,000

PASS

# 3. Distribute information
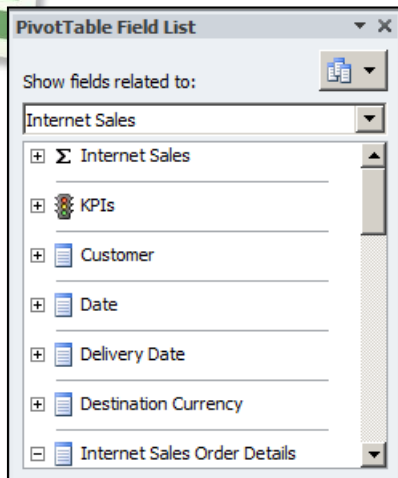
## Balanced Scorecard

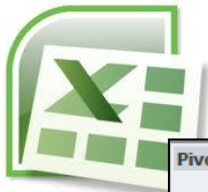# 3. Distribute information

## Dashboard
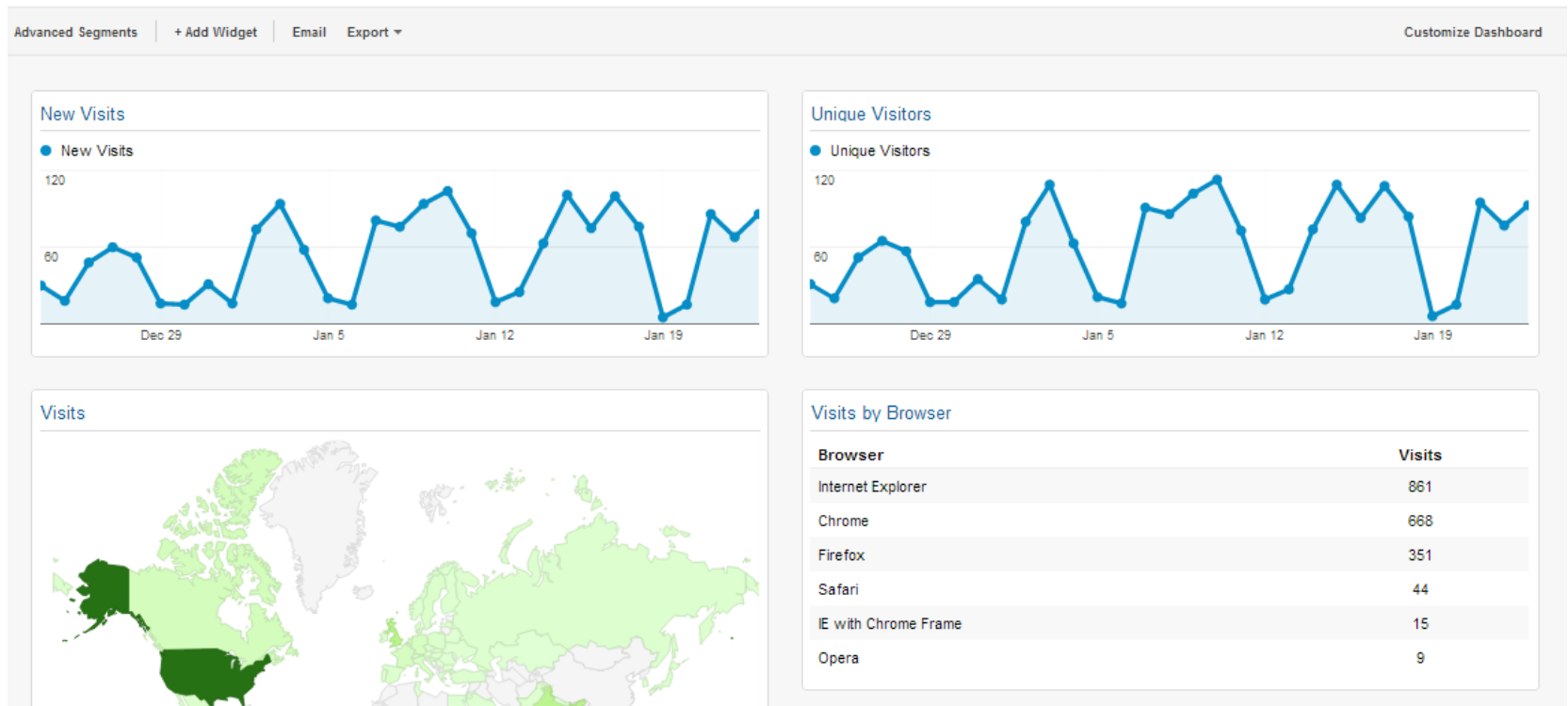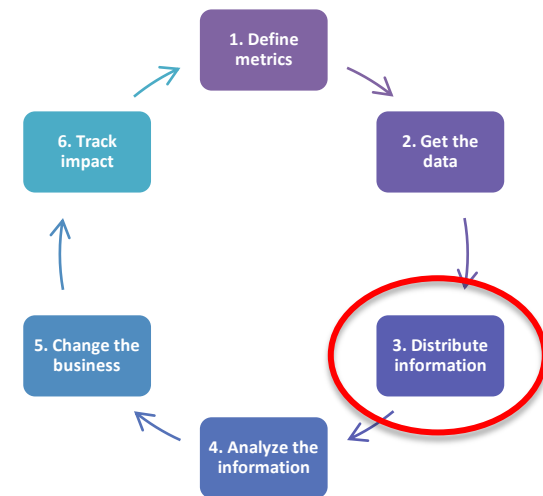
# 3. Distribute information
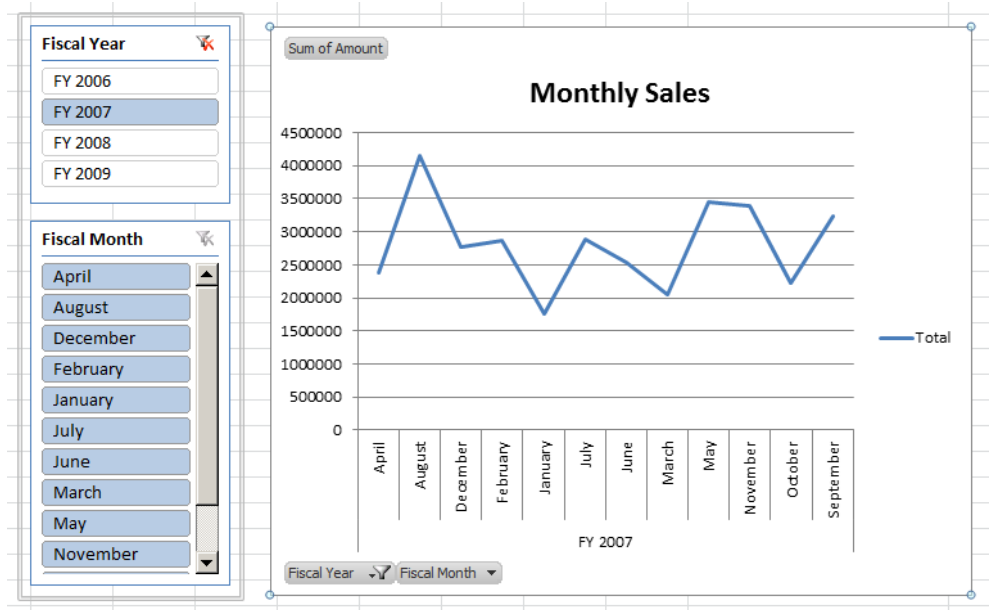
## Self-service business intelligence
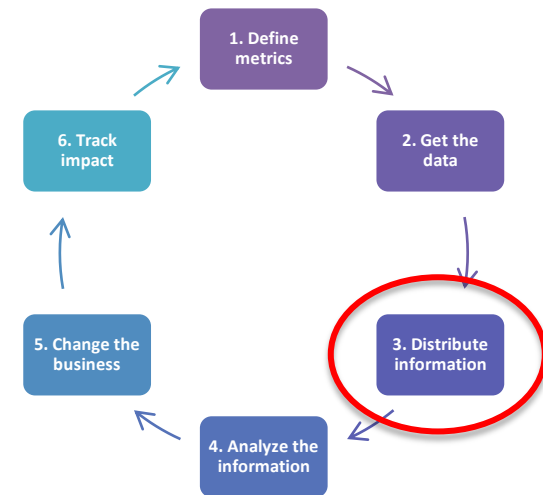


Excel and PivotTables

PowerPivot/Power View

# 4. Analyze the information

Look to see what is going on with your data



The flow diagram in the top-right shows a cycle:
1. Define metrics → 2. Get the data → 3. Distribute information → 4. Analyze the information (circled in red) → 5. Change the business → 6. Track impact → back to 1. Define metrics
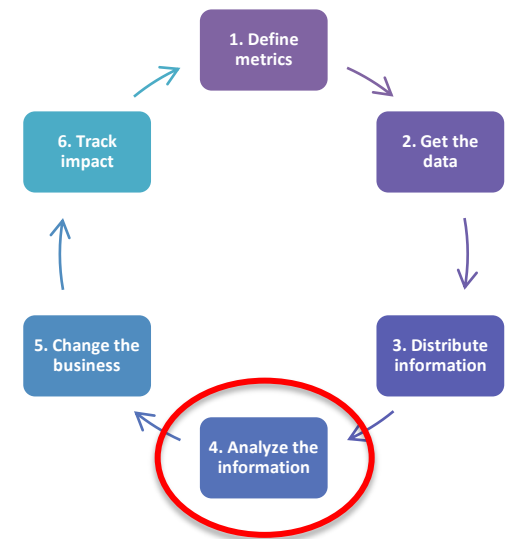
# 5. Change the business

This is where the process often falls short

Once we know what has happened, we need

    to do something about it
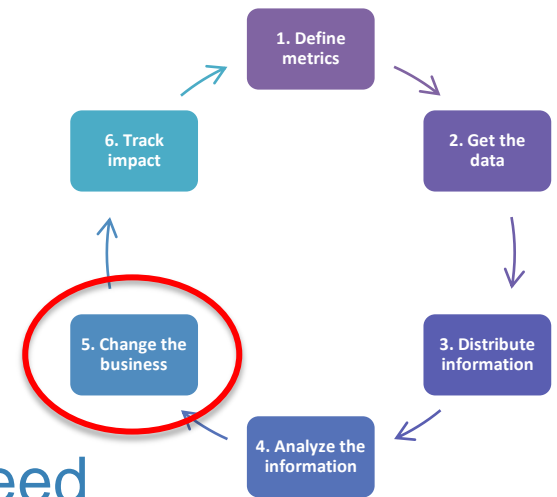
Examples include:

- Adjust production outputs in a particular area
- Direct a marketing campaign to different customer segment

# 6. Track Impact

Did we make a difference?

If so, great! Now start over with new metrics, baselines, etc.
If not, start over with new metrics, baselines, etc.

This is a continuous, iterative process.

# Case Study: Retail Web

# Macys.com

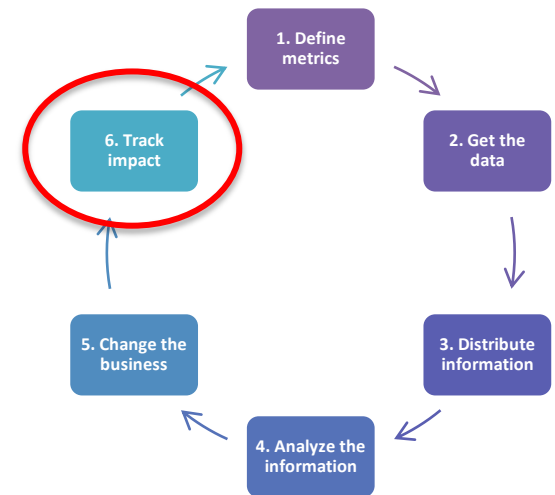**Business goal:** Enhance customer shopping experience and increase profitability

**Metrics:** Unique visitors, page views, events, conversion rate

**Data distribution:** Information provided to marketing analysts

**Data analysis method:** Customer Lifetime Value analysis

**Business change:** Sent fewer, more specific emails to customers

**Results:** Reduced subscription churn rate by 20%

Information from *Win with Advanced Business Analytics: Creating Business Value from Your Data* by Jean-Paul Isson and Jesse Harriot

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# Case Study: Medical Research

PASS

# Palo Alto Medical Foundation

**Business goal:** Use medical data from local people to analyze and determine ethnic group disease trends

**Metrics:** Has different diseases: diabetes, stroke, heart disease, nutrition information, lifestyle, additional risk factors

**Data retrieval:** Information provided from administration, registrations, and billing systems; State and national surveys

**Insight achieved:** Disease trends differ based on ethnic subgroups

**Business change:** Internal hospital policies are modified to reflect analysis and provide better patient care

Information from *Win with Advanced Business Analytics: Creating Business Value from Your Data* by Jean-Paul Isson and Jesse Harriott

# Case Study: Telecommunications

# Rogers Wireless

**Business goal:** Increase customer market share and serve customers based on their profitability

**Metrics:** Transactional data, Usage, Service, Plan, Demographic information

**Data distribution:** PowerPoint presentations, Web application POS information

**Data analysis method:** Likelihood to churn model, Customer Lifetime Value analysis

**Business change:** Send emails to the most valuable customers to retain their business

Information from *Win with Advanced Business Analytics: Creating Business Value from Your Data* by Jean-Paul Isson and Jesse Harriot

# Questions?

# Thank You for Attending