



5 Key Components Needed for an Effective Data Analytics Program

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What is Analytics and Why Should You Care?

- › Big Data is everywhere, and if you are not using it for your benefit, you are falling behind
- › *“From the dawn of civilization until 2003, humankind generated five exabytes of data. Now we produce five exabytes every two days...and the pace is accelerating.”* - Eric Schmidt, Executive Chairman, Google
- › How you harness this data and develop actionable business decisions is what will set you apart in your industry



The Four Types of Analytics

Predictive
What will
happen?

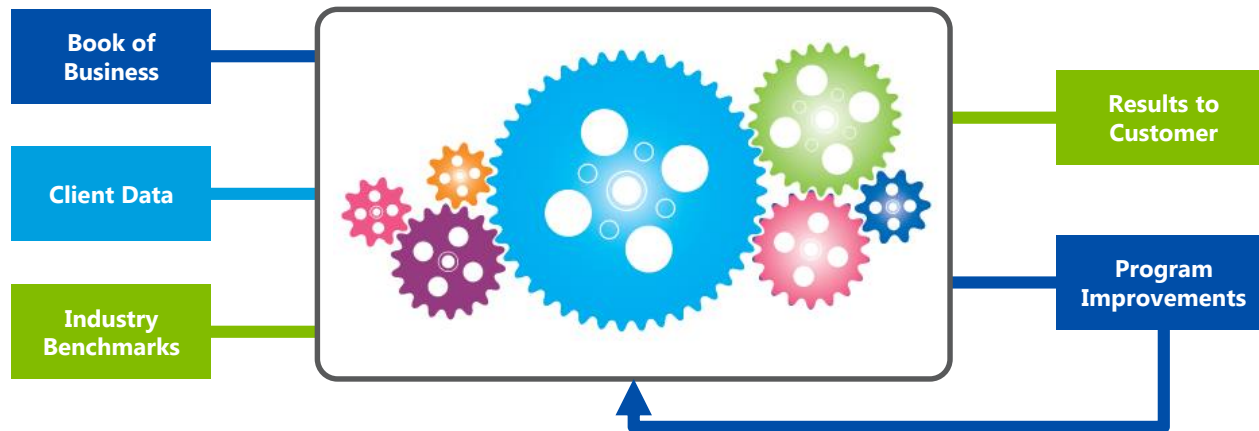
Prescriptive
How can we
make it happen?

Descriptive
What
happened?

Diagnostic
Why did it
happen?

How Analytics Should Work

- › By taking advantage of all of the data available to you, you should be able to provide meaningful results to your customers and identify actionable enhancement opportunities to their programs



1. Corporate Commitment



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- › Data must be viewed as a corporate asset
- › Analytics is not a one-time project, but rather an ongoing and expanding initiative
- › Investment must be made in an analytical infrastructure
- › Centralized data – information must be accessible and not maintained in silos
- › Investment must be made in the right people



2. Data Integrity



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- › Users must change the manner in which they approach and capture data
- › An old but true cliché, bad data in = bad data out
- › Create data ownership with the users
 - Show them the results – how their inputs are used for the big picture
- › Data validation must be inherent in systems to ensure accuracy



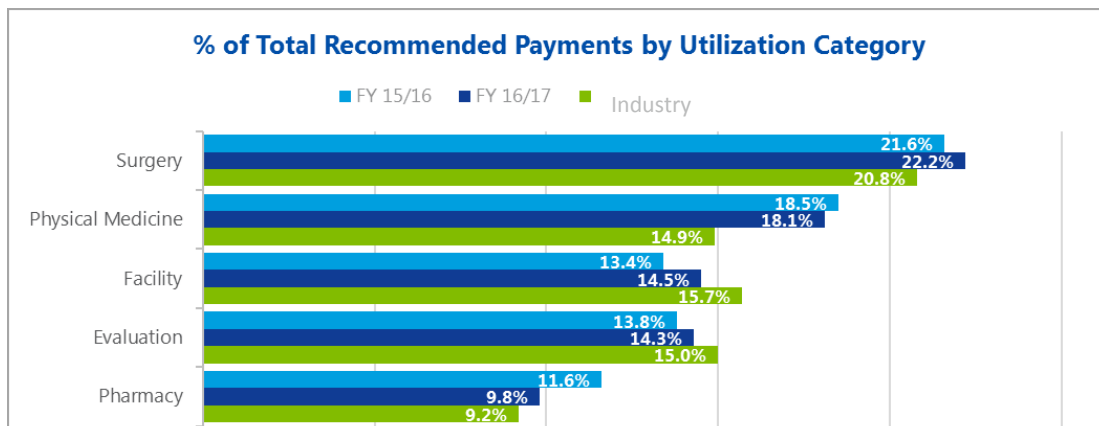
Source: RightPatient.com

3. Meaningful Customer-Focused Outcomes



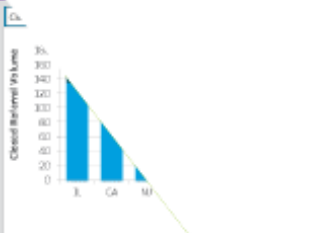
3. Meaningful Customer-Focused Outcomes

- › Simple widget counting is no longer enough
- › Results must be *valuable* and *actionable* to your customers
- › Poor results = opportunity for improvement; don't be afraid of them
- › Analytics should be used for both your internal and external customers



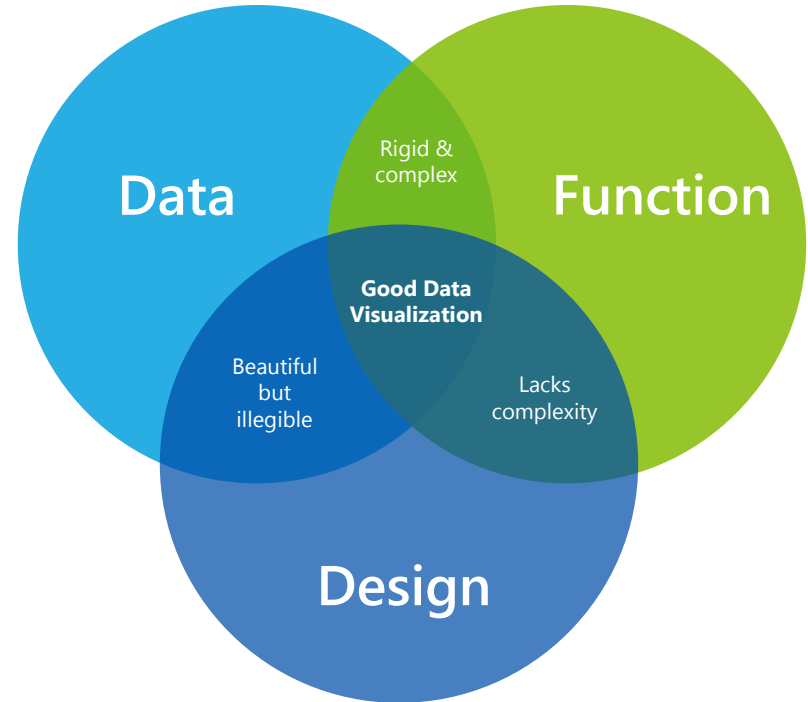
4. Data Visualization

Category	Value
OTL	1.0
Average Days	33
Average Days Given	4.4
Total Savings	\$199,099
OTL/AVG Impact %	100%



4. Data Visualization

- › Old cliché # 2 - a picture is worth a thousand words
- › Use visual tools to make the results digestible
- › Tools should be *easy* and *interactive*, with drill-down features
- › Visualize trending and outliers to stimulate decisions and action



Infographic courtesy: Venngage.com

5. Predictive & Prescriptive Analytics



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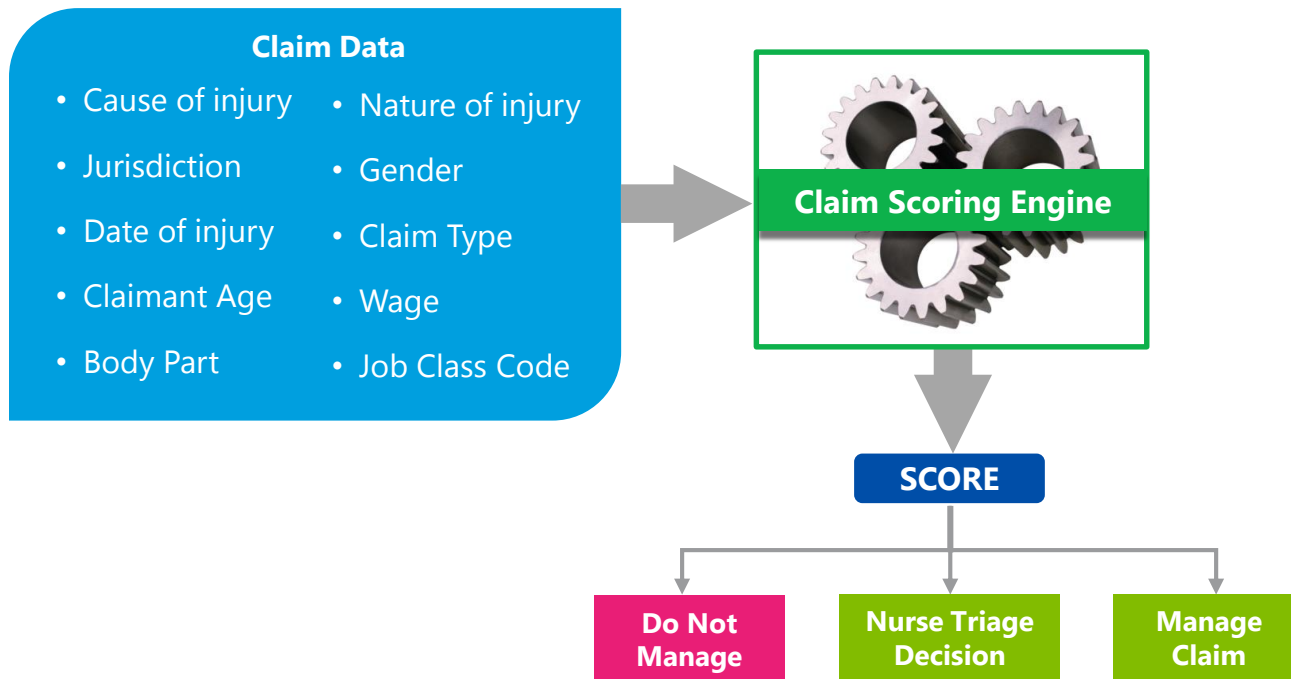
- › This is the future of analytics using Machine Learning and Artificial Intelligence
- › Predictive analytics is the practice of extracting information and learning from it to recognize trends and predict future outcomes
- › Big data is the fuel and predictive analytics is the engine to identify patterns and benefit from that knowledge
- › Stay up to date on analytics as a science or fall behind



Where is Predictive Modeling Used?

RETAIL MARKETING	Past purchases predict future sales
LAW ENFORCEMENT	Past crimes predict future patrols
CREDIT SCORING	Past payments predict future loans
P&C INSURANCE	Past behavior predicts future losses

Early Claim Predictive Risk Modeling



5 Things Needed for an Effective Data Analytics Program

- Corporate commitment
- Data integrity
- Customer-focused outcomes
- Data visualization tools
- Predictive analytics



Questions?

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