



## Predictive Analytics World 2018

# Delivering the Business Value of Analytics



James Taylor, CEO

# Delivering Value

## Business Value



.Cheaper



.Better

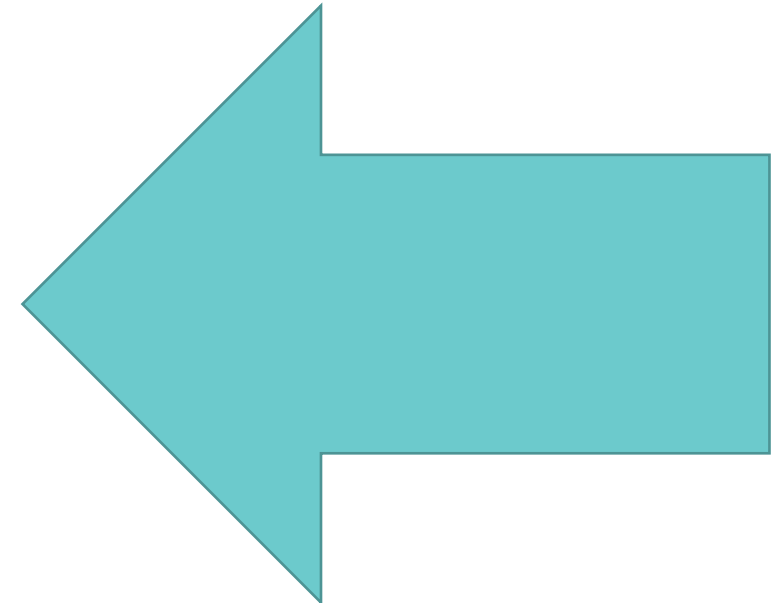


Sooner



More Satisfying

## Analytic Value



Business value is added by delivering a product or service more cheaply, improving its quality to make it better value, delivering that value sooner or by making it more satisfying to the customer. Analytics deliver value in exactly the same way.

# Barriers to Business Value In Analytics

Not  
Actionable

Not  
Integrated

Not  
Believed

Not  
Used

Solves  
wrong  
problem

Too hard  
to use

Too  
expensive  
to use

Not Actioned



# These Barriers are Widespread

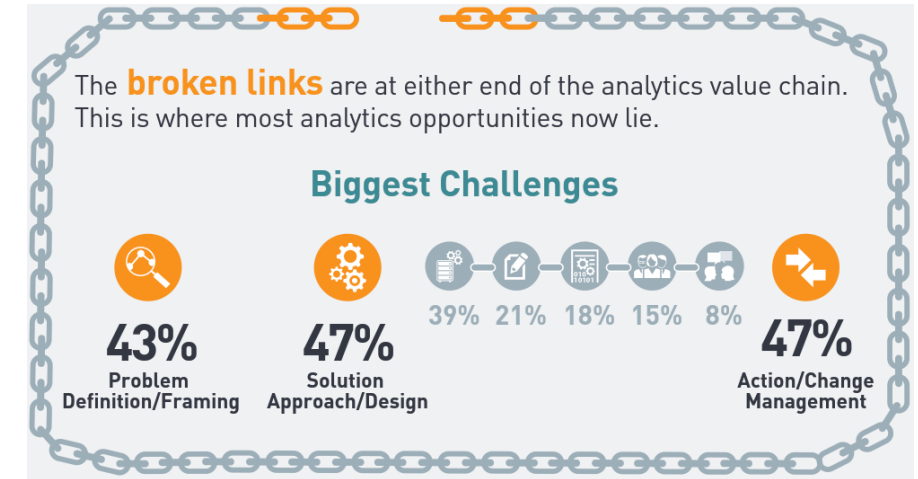
Analytics efforts very  
or extremely important

Analytic efforts have had  
a broad positive impact

High  
impact

NOT High Impact

- Studies show that this is a common problem.
  - 70% of organizations say analytics is really important but only 2% have delivered on the promise.
  - There are far more companies failing to deliver high impact (80%) than succeeding in generating impact.
- Broken links: Why analytics investments have yet to pay out” ZS and the Economist Information Unit, Ltd. June 2018 and “Raising returns on analytics investments in insurance” by McKinsey



*Broken links: Why analytics investments have yet to pay out”  
ZS and the Economist Information Unit, Ltd. June 2018*

Failure mode		Description
Limited adoption or integration	38	Inability to integrate analytics solutions into work flows Limited frontline adoption
Lack of strategic alignment and direction	26	Lack of stakeholder alignment or support Lack of clear road map
Poor data quality	17	Missing or incomplete data Data quality or accuracy issues Data fragmentation
Other	19	Missing team skills or capabilities Unclear use case scope Inability to articulate value
Total	100	

Source: McKinsey - “Raising returns on analytics investments in insurance”

# A Definition

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- ▶ **valuable analytic**
- ▶ Adjective-Noun Pair: an analytic model of any type (regression, classification, ensemble, machine learning, neural network etc.) that has caused the organization that paid for its development to change its behavior in a way that adds business value to that organization.

# Build Valuable Analytics: Use Actionable Analytics in the Front Line

- ▶ Build an analytic
  - ▶ That addresses an operational problem or opportunity
    - ▶ In a way that can be used in operations
      - ▶ That is believed by the people who run operations
        - ▶ And embed it in the systems/processes that support operations

if analytics does not lead to more informed decisions  
and more effective actions, then why do it at all?

*Mike Gualtieri, VP, Principal Analyst Serving Application Development & Delivery Professionals*

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# Three Critical Success Factors

1

Adopt a  
decision-centric  
approach

2

Change how you  
define business  
understanding

3

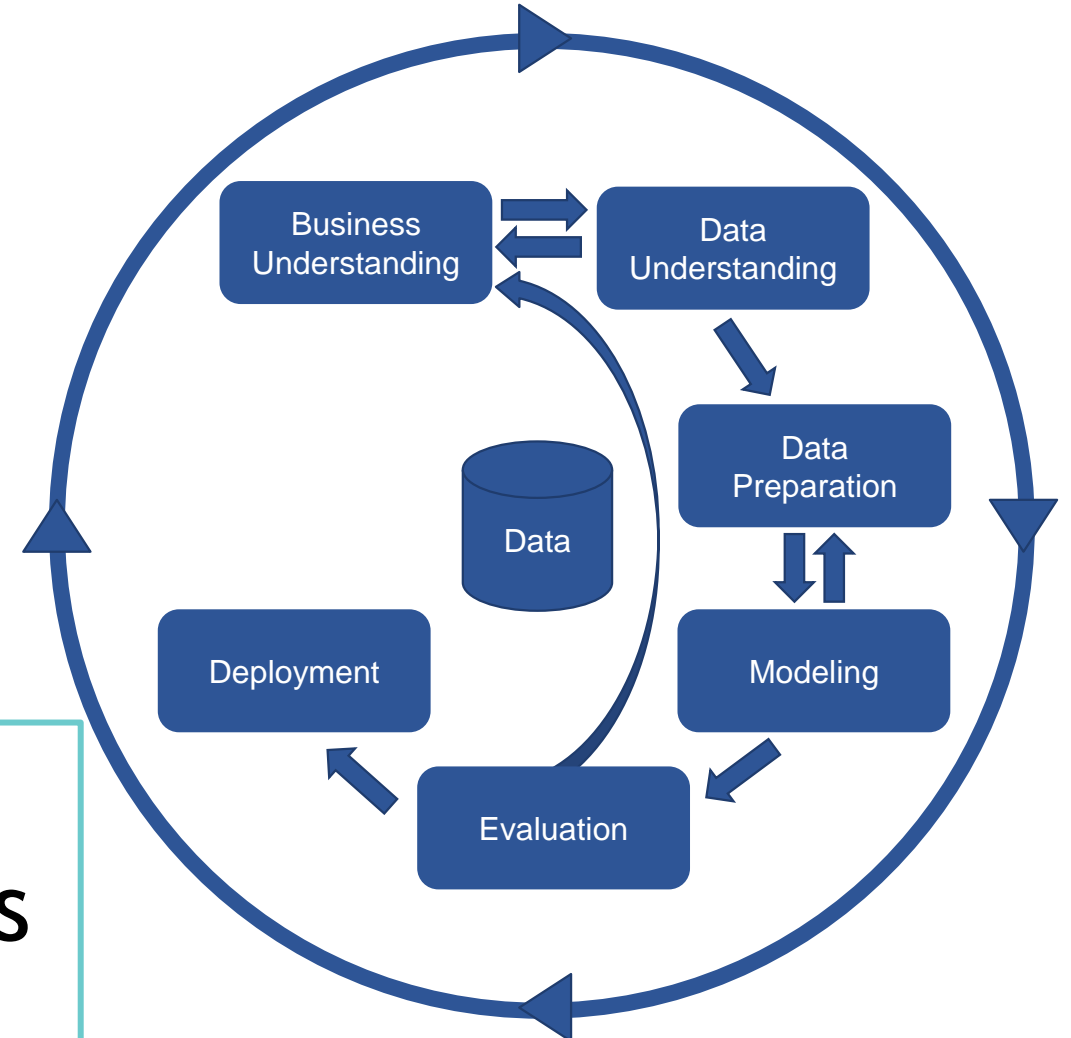
Consider  
decision-making  
technologies as  
a set

- Adopt a business decision-centric approach to analytics - one that puts business decisions first.
- Change how you define analytic requirements and business understanding to bring more business knowledge into your analytic projects.
- Consider advanced analytics as one of a set of decision-making technologies not a standalone technology stack.

# Adopt A Business-Centric Approach To Analytics

- ▶ Put **Business Understanding** First
  - ▶ Then understand your data
  - ▶ Prepare your data
  - ▶ And build your analytic models
- ▶ Evaluate for **Business Impact**
- ▶ **Deploy** the results
- ▶ Repeat

**C**Ross Industry  
Standard **P**rocess  
for **D**ata **M**ining





# Put Decisions First For Business Understanding

- ▶ What (business) measures?
  - ▶ Customer satisfaction
- ▶ What (business) decisions have an impact?
  - ▶ Pricing, claims handling, renewal
- ▶ Which decision should we improve?
  - ▶ Claims handling
- ▶ What does improve mean?
  - ▶ Increase STP rate without more fraud or waste

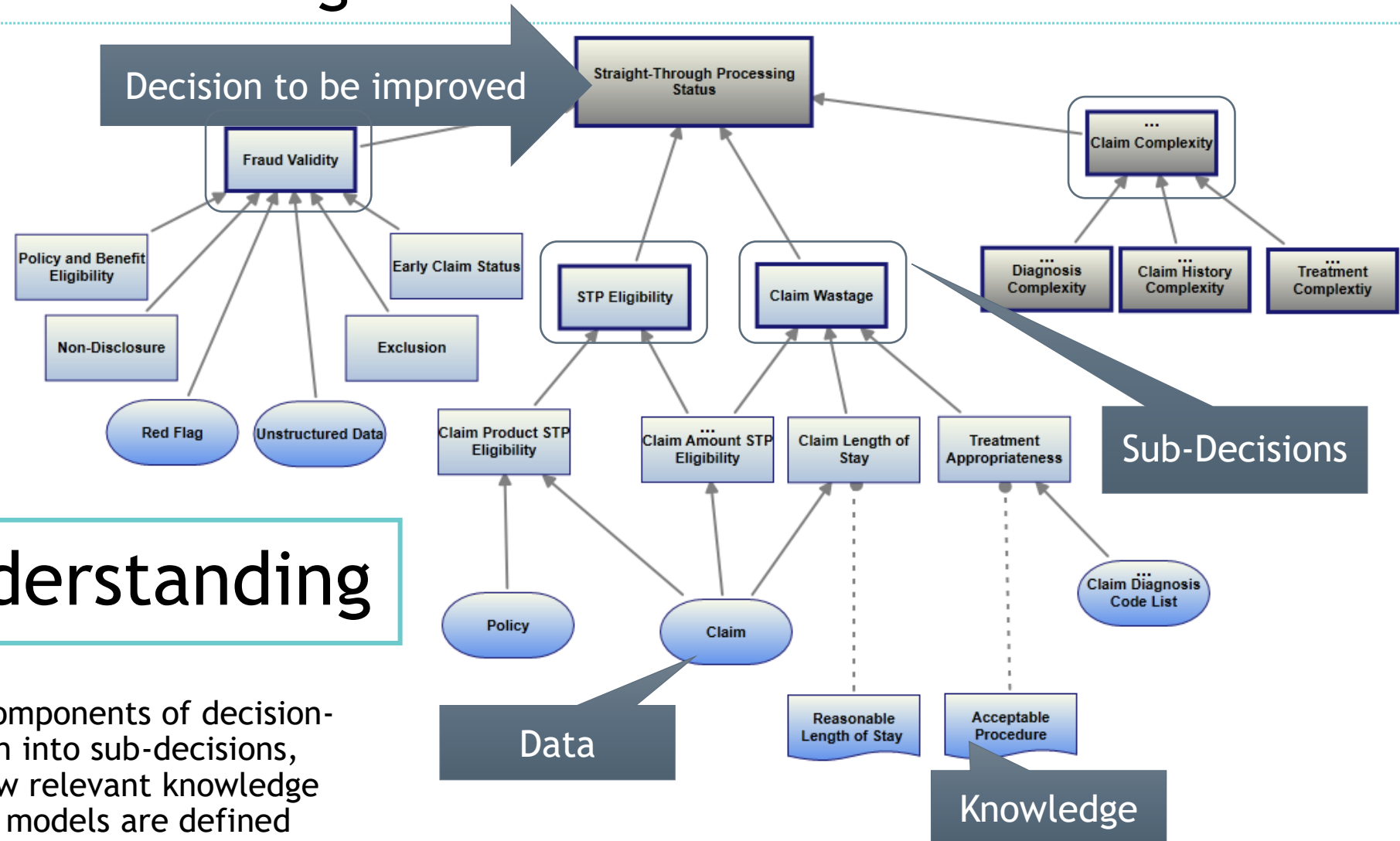
Make the project about the **Decision**, not the **Analytic**

# Build Business Understanding

- ▶ Decision
  - ▶ Specific question
  - ▶ Allowed answers
- ▶ Data
- ▶ Sub-Decisions
- ▶ Knowledge

## Decision Understanding

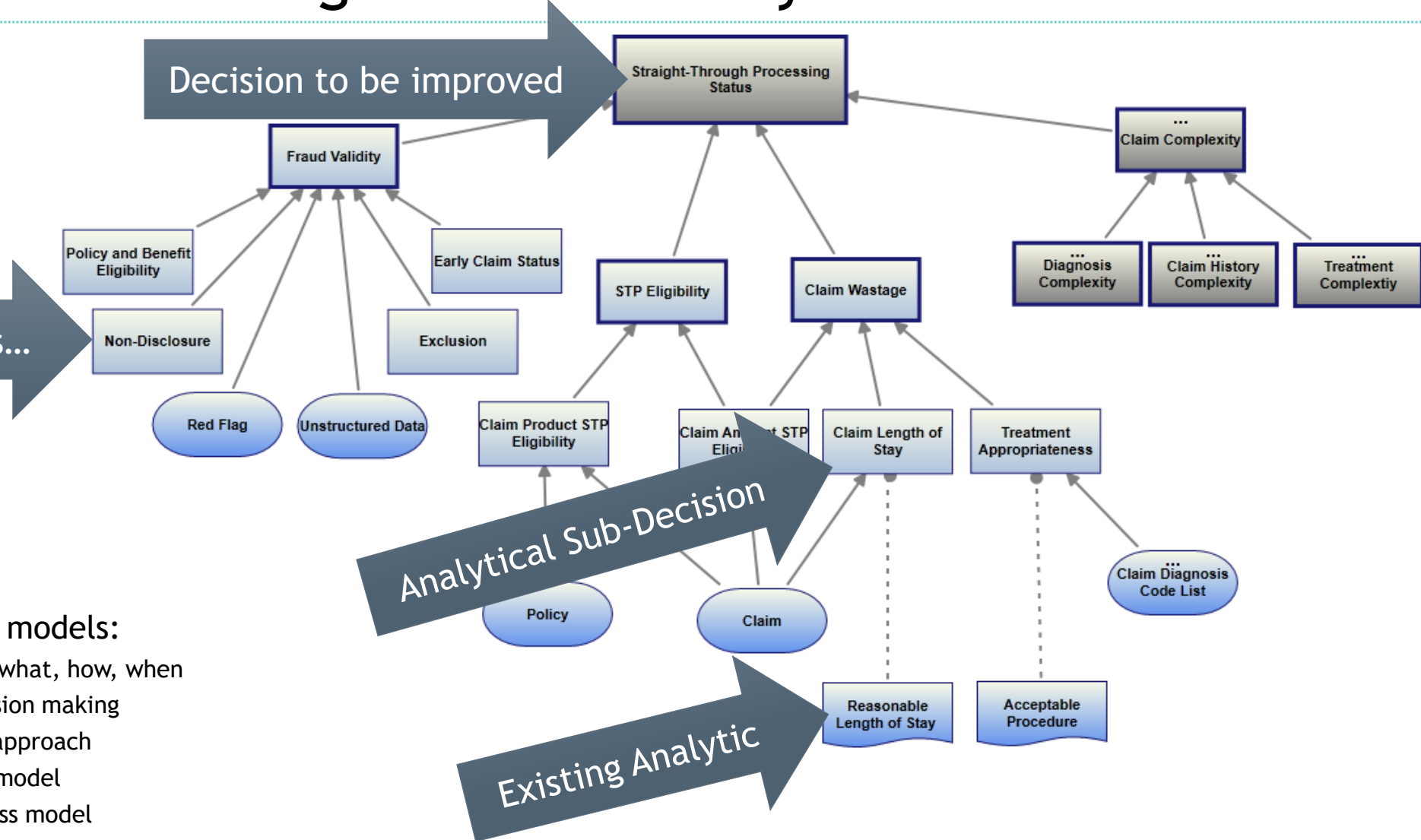
A decision model clarifies all the components of decision-making, breaking down the decision into sub-decisions, showing where data is used and how relevant knowledge and analytics are applied. Decision models are defined using the Decision Model and Notation (DMN) standard.



# Use Decision Understanding to Frame Analytics

- ▶ Map Analytics
- ▶ Ask “If Only”  
Find new ones

If only we could predict this...



- For analytic teams, decision models:
  - Provide decision structure - who, what, how, when
  - Standardize the approach to decision making
  - Provide transparency of decision approach
  - Foster innovation in the business model
  - Show improvements to the business model
  - Promote “buy in”

# Business (People) Understanding

- ▶ Let experts speak
- ▶ Model the decision
- ▶ Let experts frame the problem

Make sure it will be actionable  
Before you build it

- Too many analytic teams let the data speak but ignore SMEs.
- Model the decision to capture what the SMEs know about how the decision is, or should be, made.
- Let what the experts know-how frame the problem for the analytic project. Let them identify:
  - Which analytics
  - Applied where
  - In what format
  - With what level of accuracy and timeliness



# Mix And Match Decision-Making Technology

- ▶ Most decisions need more than just predictions
  - ▶ Descriptive analytics and statistics
  - ▶ Rules and decision logic
  - ▶ Data mining
  - ▶ Predictive analytics
  - ▶ Machine Learning
  - ▶ AI
  - ▶ ...

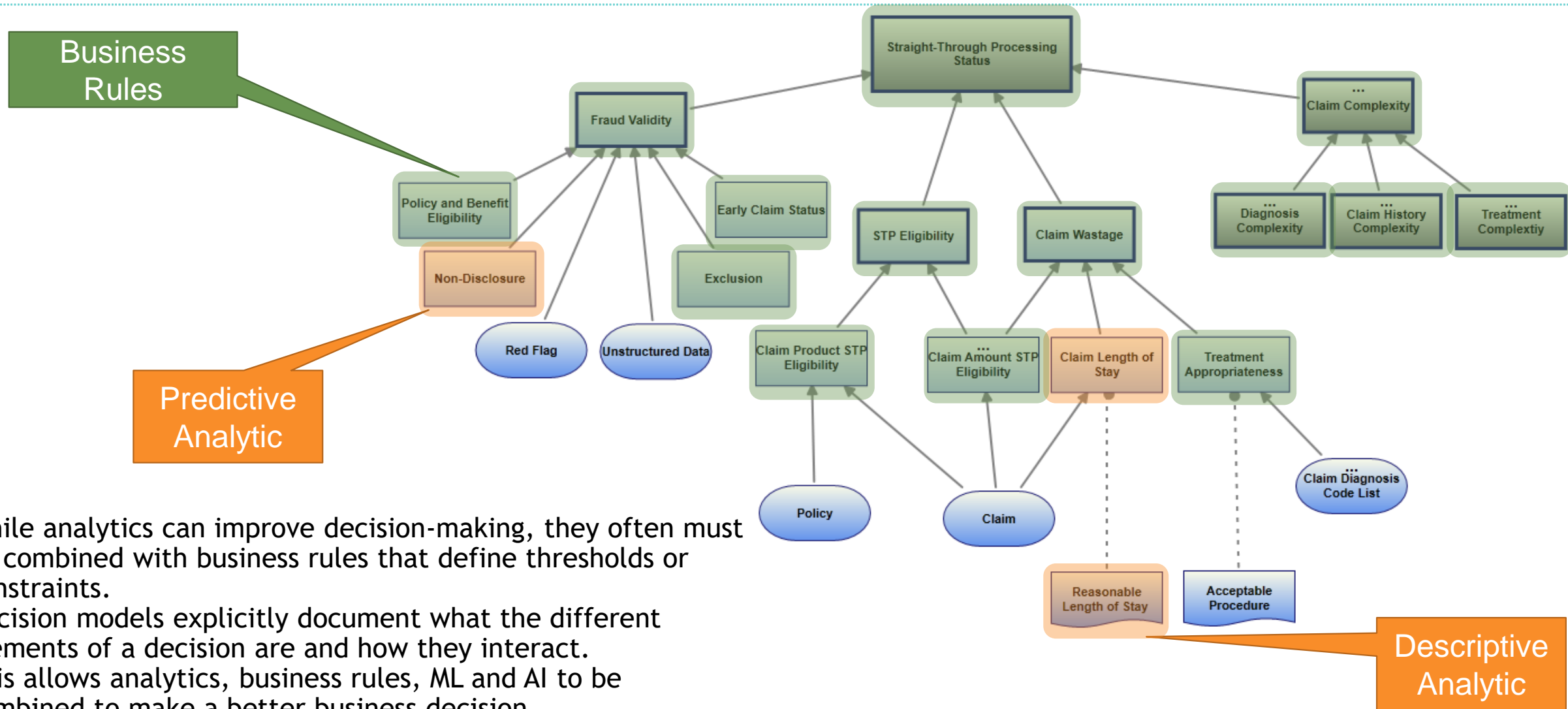


Use a decision model to mix and match



# Define Better Decisions

## Make Analytics Actionable With Business Rules



# A Recent Analyst Report

- ▶ Enterprises waste time and money on **unactionable analytics**
- ▶ **Digital decisioning** can stop this insanity
- ▶ Institute a culture of digital **decisions-first design** thinking
- ▶ Think of digital decisioning as the nexus of **business rules, data, analytics, and machine learning models**.
- ▶ **One smarter, automated decision can be worth millions** in terms of customer acquisition, retention, and/or operational efficiency

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*The Dawn Of Digital Decisioning: New Software Automates Immediate Insight-To-Action Cycles Crucial For Digital Business*  
John R. Rymer and Mike Gualtieri

# The Bottom Line

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Analytic teams are done when the  
business changes its decision-making  
in a way that creates business value  
  
**and not before**

# Be a Hero

## Make Analytics Actionable and Acted On



- ▶ Decisions First
  - ▶ Know what decision you are improving
- ▶ Let The Experts Speak
  - ▶ Let them tell you how they decide
- ▶ Adopt Business Rules
  - ▶ Partner with IT to adopt business rules technology
- ▶ Analytic Don't Stand Alone
  - ▶ Remember, it's all about decision-making
- ▶ Change The Business
  - ▶ Measure analytic teams on business value added





DECISION  
MANAGEMENT  
SOLUTIONS

If you have further questions or comments:

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# Thank You

For more on  
Decision Management, go to:  
[decisionmanagementsolutions.com](http://decisionmanagementsolutions.com)