Collaborative Decision-Making Platforms: A New Way to Make Decisions

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What Is the Cost of Bad Decisions? Do You Even Know?

Cuban Missile Crisis
— Bay of Pigs

"There is no reason anyone would want a computer in their home."

— Ken Olsen, president, chairman and founder of Digital Equipment, 1977

WorldSpace — Burning $1.5 Billion on a Failed India Strategy — Bankruptcy

Lehman collapse sends shockwave round world

Excite — Declined to Buy Google for $1 Million in 1999

Google Buzz Auto Circle of Friends

Decca Records — Turned Down the Beatles

Enron — Mark to Market, SPEs — Implosion

Blockbuster — Failing to Embrace Internet — Netflix
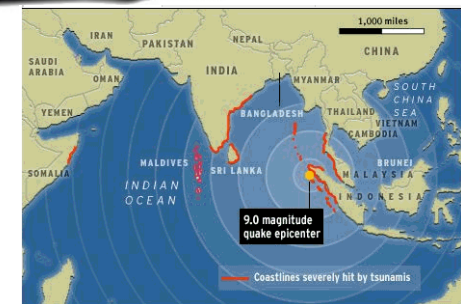
Netflix vs. Blockbuster

The Great Divide: BI and Decision Making
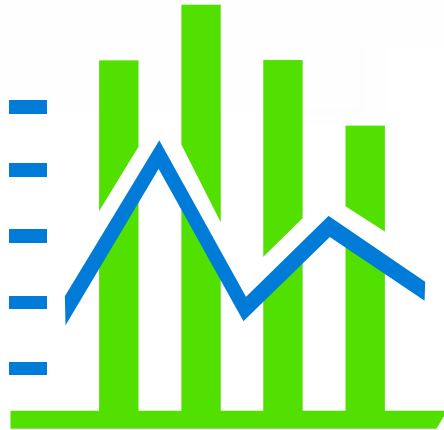
**We have lots of data,
but …**

… are we making better decisions?

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Executives on Decision Making

12%

Good
Decisions
Infrequent

60%

Bad
Decisions as
Frequent as
Good
Decisions

28%

Quality of
Decisions
Good

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Key Issues

1. What types of decisions need new collaborative decision environments?

2. What are the key requirements for enabling collaborative decision making?

3. How will the market evolve?

4. What are the best practices for deploying collaborative decision making?

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Decisions Range From Operational to Strategic

Unstructured

Decision Structure

Semi-Structured

Structured

Operational
- Minimal human intervention
- Highly structured
- Predictable
- Repeatable
- High frequency
- Low individual value

Tactical
- Knowledge-based
- Semi-structured
- Nonroutine analysis
- Moderate frequency
- Medium value

Strategic
- Knowledge-intensive
- Unpredictable, unstructured
- End-to-end processes
- Nonroutine activities
- Low frequency
- High-value decisions
- Iterative

Low **Medium** **High**

Impact on Business/Decision Complexity

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Decisions Range From Operational to Strategic

Decision Structure (vertical axis)
- Unstructured
- Semi-Structured
- Structured

Impact on Business/Decision Complexity (horizontal axis)
- Low
- Medium
- High

Tactical
- Which marketing campaign?
- How to treat customer segments?
- Which new product features?
- Why are sales dropping?
- How to handle exceptions?
- Agree on a revised forecast?
- What should our credit policy be?
- How to stop decline in customer satisfaction?
- RFP analysis and vendor selection?

Strategic
- Acquire a new company?
- Change in product line?
- Invest in new business?
- Enter new territory?
- Do we change our brand?

Operational
- Loan approvals
- Fraud detection
- Dynamic pricing
- Real-time decisioning

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CDM Environment

Target Audience

Knowledge Worker

Decision making is a significant part of work.

Decisions are increasingly collaborative.

Decisions are increasingly connected.

Solution

CDM Environment

Business Need

Disconnect Among Information, Collaboration and Decisions

Decision best practices.

Decision transparency.

Capture tacit knowledge.

Build consensus.

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Key Issues

1. What types of decisions need new collaborative decision support systems?

2. What are the key requirements for enabling collaborative decision making?

3. How will the market evolve?

4. What are the best practices for deploying collaborative decision making to support a performance-driven culture?

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Challenges of a Typical Decision-Making Process

1. Decide to Decide

- **Detect events.**
- **Seek market cues and patterns.**

Alerts, dashboards, social analytics, social media analysis, leading indicators

No feedback loop
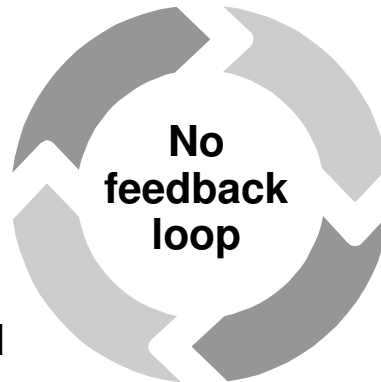
2. Diagnosis Decision

- **ID root cause.**
- **Assess situation.**
- **Analyze input.**

Ad hoc analysis, visualization, descriptive analytics, predictive models

Right people, information, bias?

4. Assess Results

- **Determine effectiveness.**
- **Assess need for adjustment.**

Reporting, disconnected collaboration

No link between decision and results.

3. Action Decision

- **Examine options.**
- **Decide how to implement.**

Expert decision models, simulations

Right decision tools?

S Strengths	**W** Weaknesses
O Opportunities	**T** Threats

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Challenges of a Typical Decision-Making Process

1. Decide to Decide

- Detect events.
- Seek market cues and patterns.

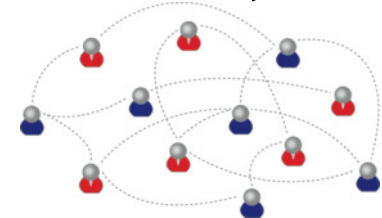Alerts, dashboards, social analytics, social media analysis, leading indicators

2. Diagnosis Decision

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- ...tion.
- ...

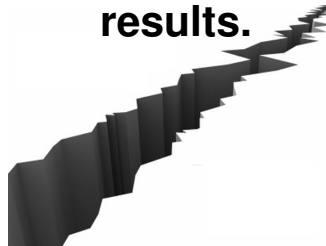**Right people, information, bias?**

...ysis, ...n, ...lytics, ...dels

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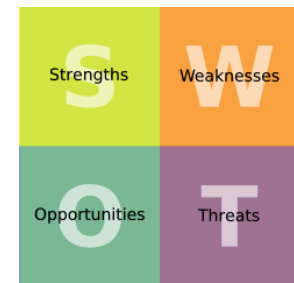Reporting, disconnected collaboration

No...

...ision

- ...ions.
- ...to implement.

Expert decision models, simulations

Right decision tools?

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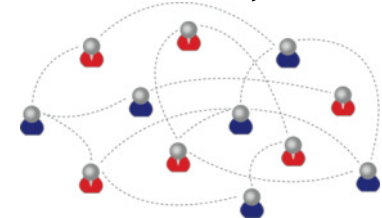
Decision element silos

Manual connections

No formal feedback loop

Most of process and collaboration lost

Risk of biased decisions

No capture of best practices

No auditability

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CDM Environment: Higher Decision Quality and Transparency

Social software

SNA

Tagging

Best Practices

Decide to Decide

Identify patterns

Adjust leading indicators

Evaluating Decisions

CDM Environment

Making Decisions

Assess Result

Closed-loop

Tagging track assumptions

Diagnosis Decision

Ad hoc analysis

Collaboration

Reduce bias

Action Decision

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CDM Environment: Higher Decision Quality and Transparency

Social software

SNA

Tagging

Best Practices

Capture decision practice and action tag for reuse

Decide to Decide

Leading indicators alert to likelihood

Identify patterns

Adjust leading indicators

CDM Environment

ID root cause, right people and info.

Diagnosis Decision

Ad hoc analysis

Collaboration

Reduce bias

Assess Result

Identify leading indicators

Closed-loop

Tagging track assumptions

Decision tools
Mind mapping
Simulation of alternatives

Action Decision
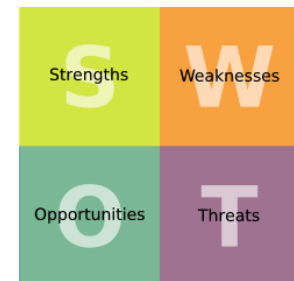
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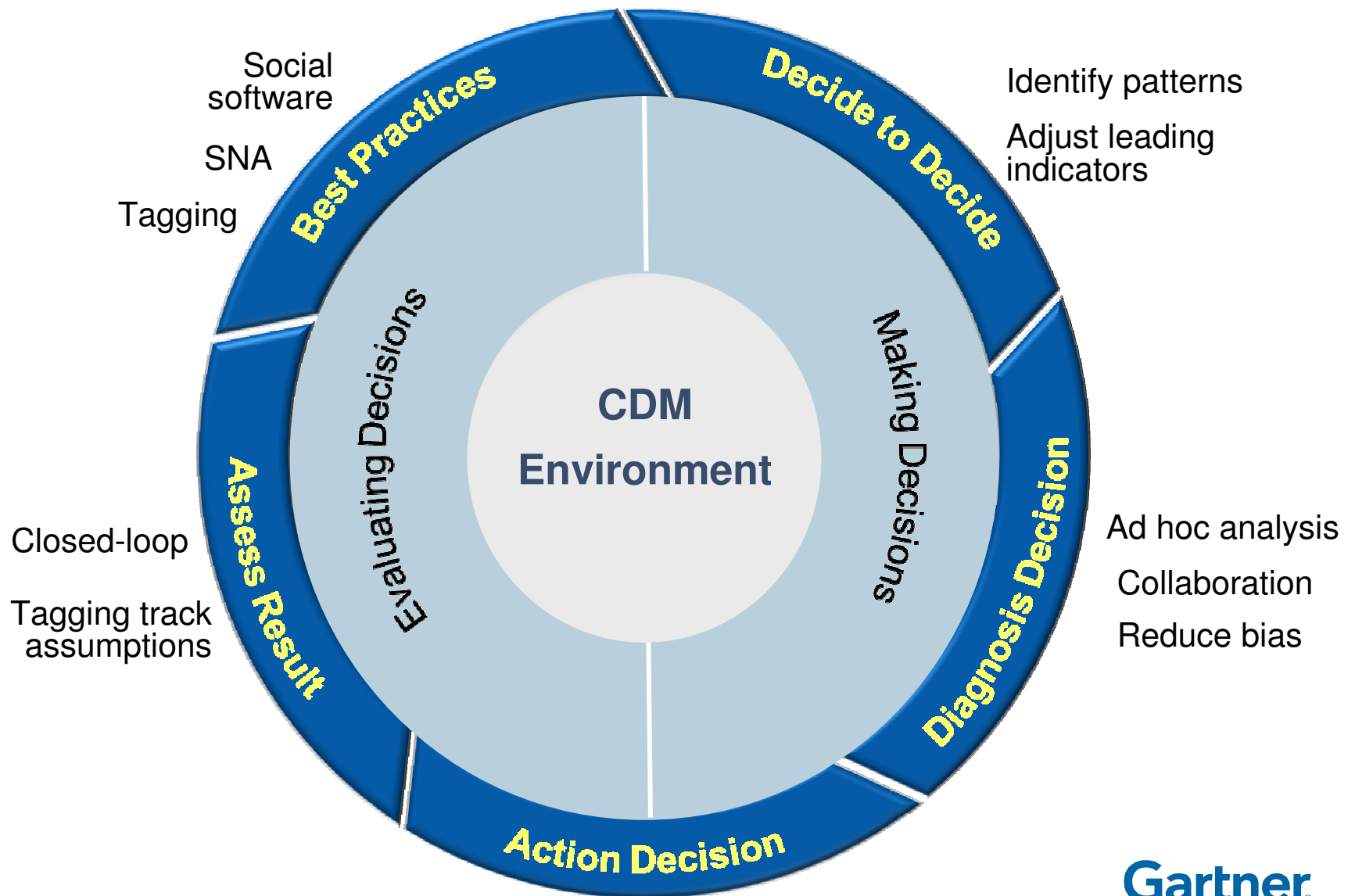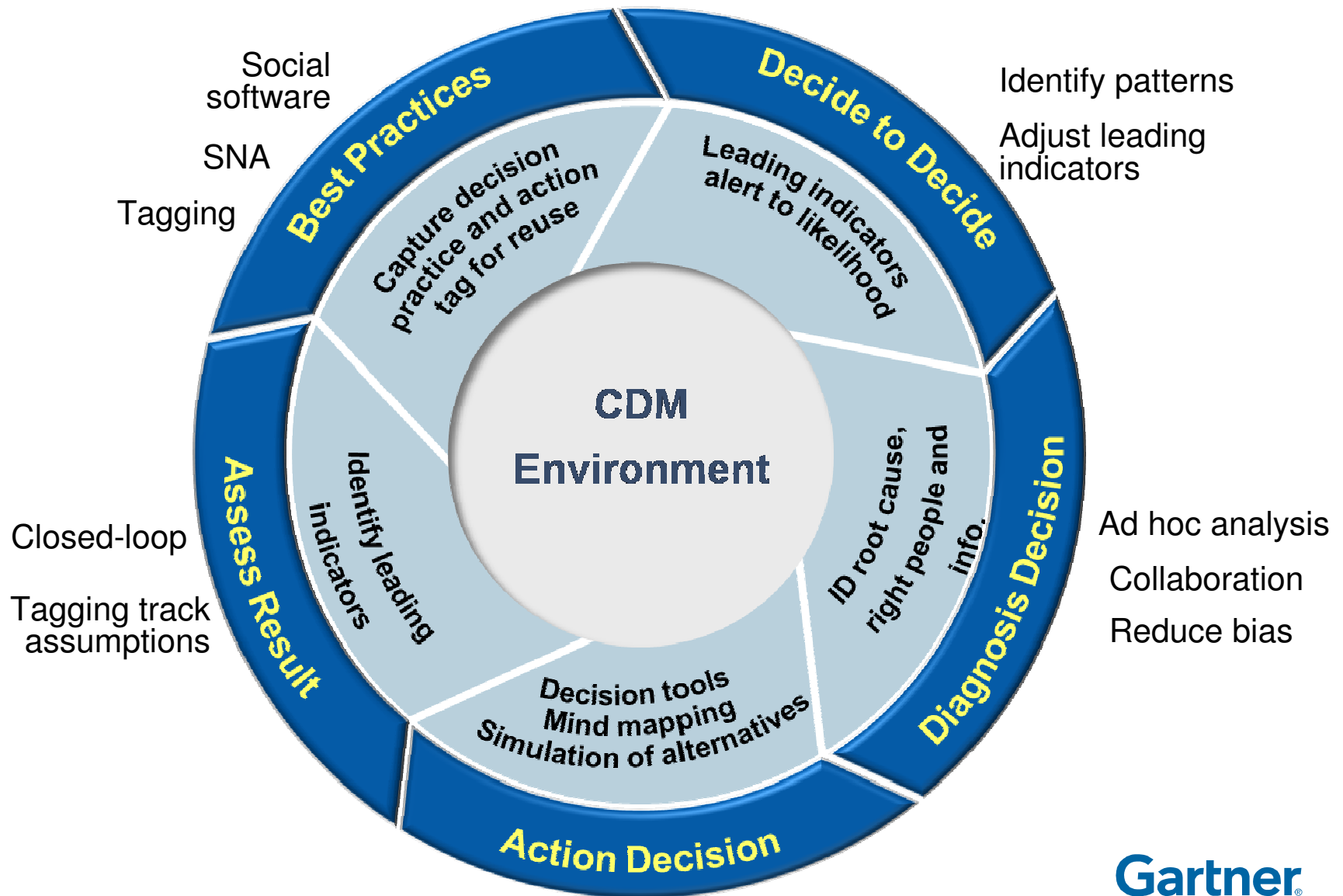
Key Requirements of a CDM Solution

Social Networking
- Examine relationships of decision makers
- Intelligent social profiles

Collaboration
- Shared work space
- Communication (e-mail, IM, phone, etc.)
- Web conferencing

Decision Tools
- Simulations
- Optimization tools
- Scenario planning
- Mind mapping
- Brainstorming
- SWOT
- Predictive analytics
- Prediction markets

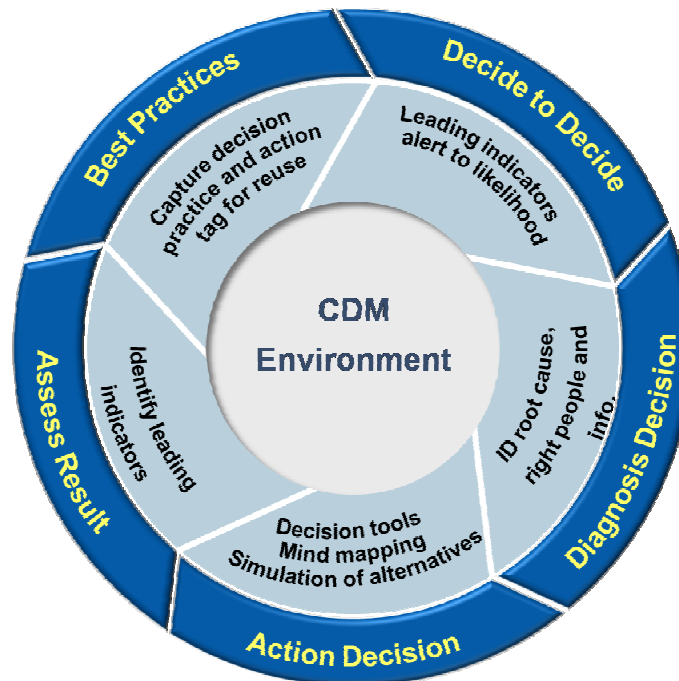## All Information
- Access to any data source and decision input
- Search
- Content analytics
- Visualization tools
- Business intelligence content
- Assumptions and pattern detection and monitoring

People
- Involve the right people to inform the decision
- Incorporate expert and diverse opinions
- Minimize bias

CDM Environment
- Reliable and secure
- Integrated with systems of record
- Complex decision support (workflow/BPM)
- Capture best practices

Best Practices
Capture decision practice and action tag for reuse

Decide to Decide
Leading indicators alert to likelihood

Assess Result
Identify leading indicators

CDM Environment

Diagnosis Decision
ID root cause, right people and info.

Action Decision
Decision tools Mind mapping Simulation of alternatives

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Key Issues

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Examples of How Organizations Are Using CDM

New Product Development	Forecasting and Budgeting	Capturing Decision Logic and Best Practices of Experienced Workers
Acquisition Due Diligence	Resource Optimization	RFP Analysis
Student Acceptance Process	Oil and Gas Lease Renewal	Risk Management

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Determine Your Decision-Making Maturity

1 Chaotic	**2** Repeatable	**3** Defined	**4** Managed	**5** Optimized

If this describes your organization ...

Every decision-making event is handled differently. No feedback loop	Some consistency to the decision-making process within groups. Some feedback on decisions	Defined process for decision making in use throughout the organization. Feedback loop, but no connections between types of decisions.	Decisions are linked to performance metrics, processes and systems of record.	Decision making is continuously reviewed and deliberately improved. Proactive feedback between types of decisions.

… then this is the step you should take.

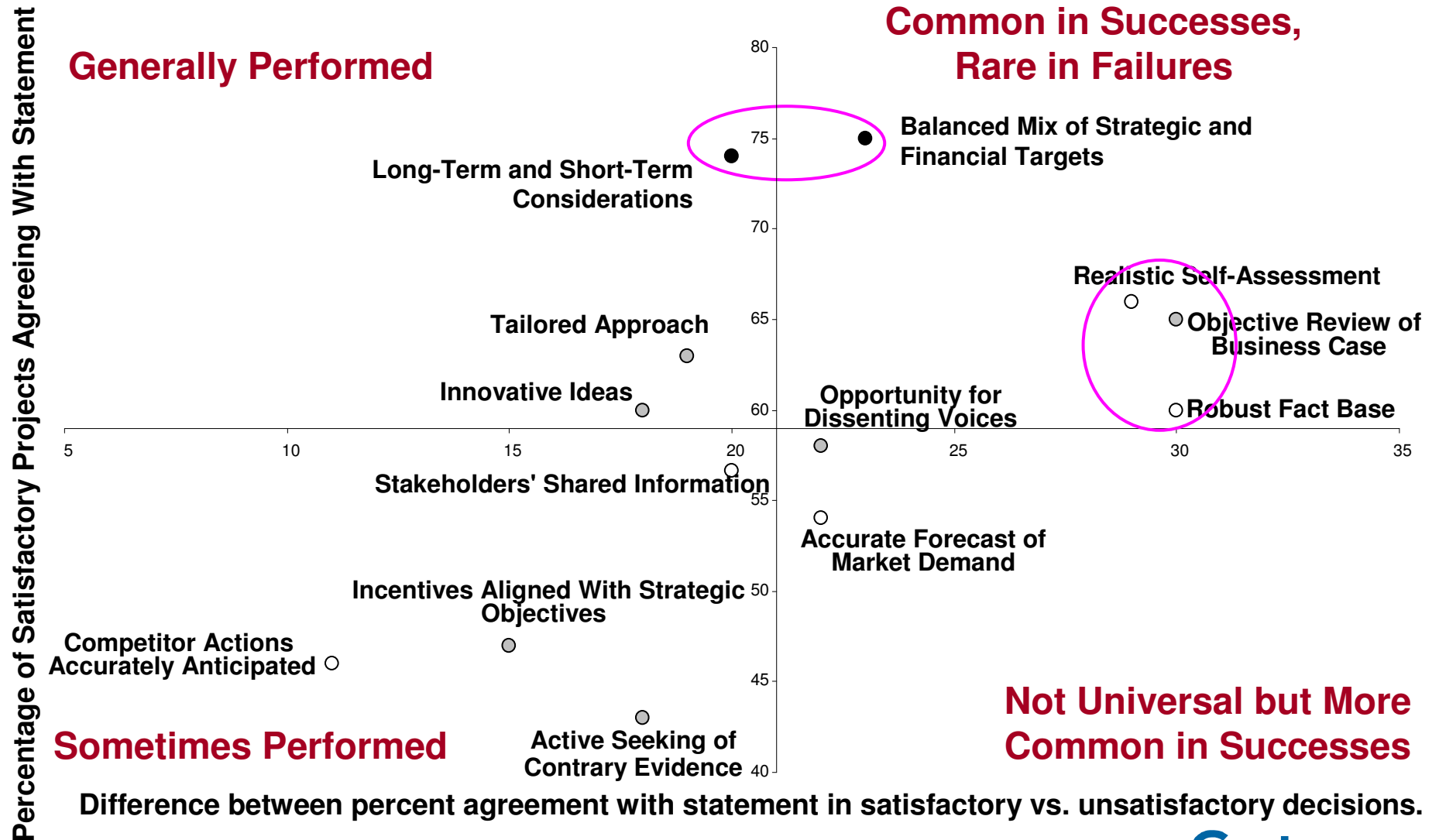|				
Teach decision-making best practices. Audit decisions to determine impact. Socialize value of better decisions.	Look for opportunities to tie BI data to business outcomes and assumptions.	Use tools to improve detection, collaboration and process transparency. Link decisions to metrics.	Uncover social network dynamics. Link operational, tactical and strategic decisions.	Employ decision optimization techniques across decision types. Evolve based on results.

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Address Decision Bias; Create a Culture of Auditing Decisions

Percentage of Satisfactory Projects Agreeing With Statement (y-axis)

Generally Performed

Common in Successes, Rare in Failures

- Balanced Mix of Strategic and Financial Targets
- Long-Term and Short-Term Considerations
- Realistic Self-Assessment
- Objective Review of Business Case
- Tailored Approach
- Innovative Ideas
- Opportunity for Dissenting Voices
- Robust Fact Base
- Stakeholders' Shared Information
- Accurate Forecast of Market Demand
- Incentives Aligned With Strategic Objectives
- Competitor Actions Accurately Anticipated

Sometimes Performed

- Active Seeking of Contrary Evidence

Not Universal but More Common in Successes

Difference between percent agreement with statement in satisfactory vs. unsatisfactory decisions.

Note: Figure is adapted from "Flaws in Strategic Decision Making: McKinsey Global Survey Results," January 2009.

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CDM Adoption and Evolution

2009 → 2010 → 2011 and Beyond

2009
- Little technology convergence
- Early pilots
- Manual, cobbled together POCs
- Small vendors offering parts of the solution
- Megavendors have many of the pieces, but no focused integration

2010
- Emergence of integrated tools and partnerships for building CDM solutions
- Focus on workgroup and departmental solutions with basic decision use cases
- Some megavendors focus on space
- Vendors recruiting solution providers to offer templates and repeatable solutions
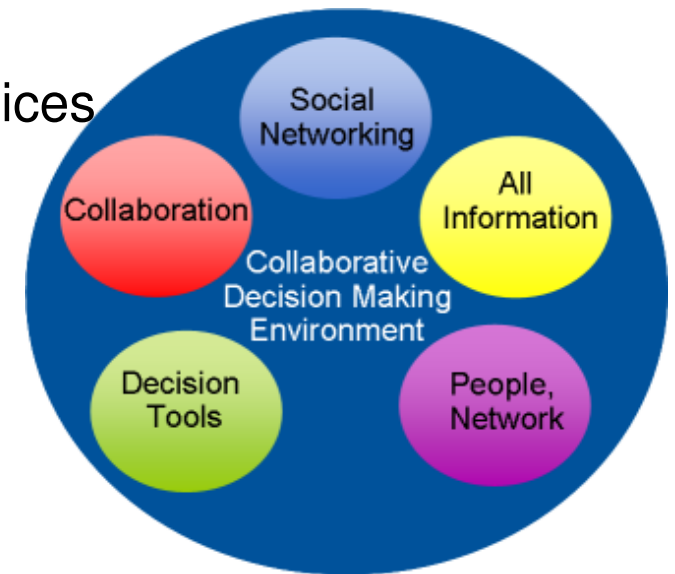
2011 and Beyond
- Emergence of CDM platforms
- Expand to enterprise solutions and complex decision use cases
- Solution providers offering templates and repeatable solutions
- Integration with application systems

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Recommendations

✓ Address cultural and change
   management barriers to adoption
   by demonstrating the value of CDM

   ✓ Evolve decision-making maturity and practices

   ✓ Use training and incentives

   ✓ Link decisions to performance metrics

   ✓ Decision audits and simulations

✓ Find the leaders/champions of
   decision collaboration in your
   organization and start building
   those workgroups

   ✓ CDM pilot

   ✓ Build/buy in incrementally

Collaborative Decision Making Environment
- Social Networking
- Collaboration
- All Information
- Decision Tools
- People, Network

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Related Gartner Research

➔ **Tutorial for Collaborative Decision Making**
Rita Sallam, Carol Rozwell (G00200278)

➔ **Predicts 2011: New Relationships Will Change BI and Analytics**
Bill Gassman and others (G00209225)

➔ **Collaborative Decision Making Enables the Disciplines of Pattern-Based Strategy**
Carol Rozwell, Rita Sallam (G00200677)

➔ **Hype Cycle for Business Intelligence, 2010**
Andreas Bitterer (G00205777)

➔ **The Rise of Collaborative Decision Making**
Kurt Schlegel, Rita Sallam and others (G00164718)

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