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

Ian Bertram
Managing Vice President, Analytics, BI and Performance Management Research Team, Asia Pacific Head Of Research
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

Decca Records — Turned Down the Beatles

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

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

Google Buzz Auto Circle of Friends

Enron — Mark to Market, SPEs — Implosion

Blockbuster — Failing to Embrace Internet — Netflix

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What Is the Cost of Bad Decisions? Do You Even Know?
The Great Divide: BI and Decision Making

We have lots of data, but ...

... are we making better decisions?
Executives on Decision Making

12% Good Decisions Infrequent
60% Bad Decisions as Frequent as Good Decisions
28% Quality of Decisions Good

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

**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

**Impact on Business/Decision Complexity**

- **Structured**
- **Semi-Structured**
- **Unstructured**
Decisions Range From Operational to Strategic

Impact on Business/Decision Complexity

- Low
  - Operational
    - Loan approvals
    - Fraud detection
    - Dynamic pricing
    - Real-time decisioning
  - District
    - Acquire a new company?
    - Change in product line?
    - Invest in new business?
    - Enter new territory?
    - Do we change our brand?

- Medium
  - 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?

- High
  - Strategic
    - Acquire a new company?
    - Change in product line?
    - Invest in new business?
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    - Do we change our brand?
CDM Environment

Target Audience
Knowledge Worker

Business Need
Disconnect Among Information, Collaboration and Decisions

Solution
CDM Environment

- Decision making is a significant part of work.
- Decisions are increasingly collaborative.
- Decisions are increasingly connected.

- Decision best practices.
- Decision transparency.
- Capture tacit knowledge.
- Build consensus.
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?
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
   - ID root cause.
   - Assess situation.
   - Analyze input.
   - Ad hoc analysis, visualization, descriptive analytics, predictive models

3. Action Decision
   - Examine options.
   - Decide how to implement.
   - Expert decision models, simulations

4. Assess Results
   - Determine effectiveness.
   - Assess need for adjustment.
   - Reporting, disconnected collaboration

No feedback loop

Right people, information, bias?

Right decision tools?
Challenges of a Typical Decision-Making Process

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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

Right people, information, bias?

Right decision tools?

- Strengths
- Weaknesses
- Opportunities
- Threats

Alerts, dashboards, social analytics, social media analysis, leading indicators
Expert decision models, simulations
Reporting, disconnected collaboration
CDM Environment: Higher Decision Quality and Transparency

Best Practices
- Social software
- SNA
- Tagging

Assess Result
- Closed-loop
- Tagging track assumptions

Action Decision
- Decision tools
- Mind mapping
- Simulation of alternatives

Diagnosis Decision
- Identify patterns
- Adjust leading indicators

Decide to Decide
- Leading indicators alert to likelihood
- ID root cause, right people and info.

Ad hoc analysis
- Collaboration
- Reduce bias
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
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
Key Issues

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# Determine Your Decision-Making Maturity

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<td><strong>2</strong></td>
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<td>Defined process for decision making in use throughout the organization.</td>
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<td><strong>4</strong></td>
<td>Decisions are linked to performance metrics, processes and systems of record.</td>
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<td><strong>5</strong></td>
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If this describes your organization …

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… then this is the step you should take.

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<td>Teach decision-making best practices.</td>
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<td>Audit decisions to determine impact.</td>
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<td>Socialize value of better decisions.</td>
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<td>Look for opportunities to tie BI data to business outcomes and assumptions.</td>
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<td>Use tools to improve detection, collaboration and process transparency.</td>
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<td>Uncover social network dynamics.</td>
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<td>Employ decision optimization techniques across decision types.</td>
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<td>Evolve based on results.</td>
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Address Decision Bias; Create a Culture of Auditing Decisions

- Generally Performed
  - Long-Term and Short-Term Considerations
  - Tailored Approach
  - Innovative Ideas
  - Stakeholders' Shared Information
  - Incentives Aligned With Strategic Objectives
  - Competitor Actions Accurately Anticipated

- Sometimes Performed
  - Opportunity for Dissenting Voices
  - Active Seeking of Contrary Evidence

- Not Universal but More Common in Successes
  - Balanced Mix of Strategic and Financial Targets
  - Realistic Self-Assessment
  - Objective Review of Business Case
  - Robust Fact Base
  - Accurate Forecast of Market Demand

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

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
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
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)
Gartner delivers the technology-related insight necessary for our clients to make the right decisions, every day.