Driving analytics into action

How to enable business decisions with “big data” and analytics
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The financial services industry is looking at “big data” as a way to drive profitable growth. But many companies fail to use analytics effectively. If you are a financial services firm exploring the use of analytics for decision making, you will need to focus first on your purpose. Don’t ask, “What data, staff and software should we install?” Ask, “What decisions do we need help with?” Analytics is used for three types of decisions, each with its own level of sophistication and skill, and each with a greater level of return: (1) direct-to-customer processes, (2) go-to-market processes, and (3) rewriting the profit equation for the entire business system. In this deck, you will see a basic approach to financial services analytics, focusing on empowering the decision makers of the enterprise. It starts with building tools and capabilities, then aiming those tools at pilots and programs in target initiatives, and finally aligning those new practices with your governance and business processes in the enterprise as a whole. Your goal is to develop a multifaceted, robust group of big-data capabilities that are embedded throughout your company.
The financial services industry is looking at “big data” as a way to drive profitable growth

Over 79% of firms in the banking sector have implemented business intelligence/analytics solutions

Accel Partners has launched a $100M fund aimed at early-stage & growth companies in the big-data space

Consumer- & enterprise-focused big data-driven apps can identify trends that help drive business decisions

American Express Business Insights uses sophisticated analytics to process real-time purchasing data

Source: Company websites; American Banker; Analytics Magazine; Aite Group; Strategy& analysis
But many companies fail to use analytics effectively

Some common problem symptoms

• It is not clear which decisions need analytics
• There is no agenda-setting process for the development of big data
• The enterprise has big-data capabilities but no consensus about how to use them
• Many decision processes are not driven by data, even with a big-data system in place
• All facts come with a point of view—the data does not resolve differences of opinion
• The IT department owns and manages the entire design process
• People with analytics talent are recruited but not enlisted in a strategic direction
• The enterprise does not retain those people
• The enterprise is still putting in place its success metrics for analytics talent
• Some departments “over-engineer” the processes; others “under-engineer” them
Don’t ask “What data, staff, and software should we install?” Ask “What decisions do we need help with?”

The vast majority of resources and attention are spent here... …but the greatest impact is here

Data

IT Infrastructure

Information

Analytics

Decision

Action

Output

Outcome
You can use analytics to support three types of decisions, each increasing sophistication and organizational change.

**Direct-to-customer processes**
(Customer insight, products and services)
- Apply micro-segmentation and improve frontline execution practices
- Focus: Customer acquisition and retention; sales of products and services
- Example: Offering individualized credit/debit card plans to particular segments
- Drive 5%-7+% sales/revenue lift when done right

**Go-to-market processes**
(Pricing, sales force management, distribution network design)
- Redeploy customer-facing resources against analytically defined opportunities
- Focus: Core revenue and productivity levers—pricing, sales channel roles, and deployment
- Example: Adjusting pricing and promotional strategies to outpace competitors
- Drive 5%-15+% improvement in sales productivity while acquiring new customers and wallet share

**Analytically driven business systems**
(Rewrite the profit equation and monetize your big-data capability)
- Transform the business model
- Focus: Data and insight embedded systematically across business decisions at all levels
- Example: Reducing back-office costs and raising the efficiency ratios
- Drive 50%-100% improvement in long-term shareholder value

These levels of analytics are associated with different levels of financial impact, as indicated by the dollar signs.
Prioritize your activities so that those with broad application and high financial impact are first to benefit from analytics.

This example, from a multinational bank, shows how cross-market applicability and financial impact became the key criteria, with ease of implementation as a secondary consideration.
This means looking for a simpler, easier approach, focused on empowering the decision makers of the enterprise

- **Build** tools and capabilities
- **Align** your governance and business processes
- **Aim** at pilots and programs in target initiatives
1. **Build tools and capabilities**

- Develop the required models and analytics tool set
- Secure, mobilize, and empower the right talents
- Provide data and business intelligence with continuous business engagement
- Build the IT infrastructure to enable data provision and ensure quality
- Enable constant cycles of testing and learning
Four types of capabilities draw upon big data

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<tr>
<th>Type of Capability</th>
<th>Used in...</th>
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| **Algorithmic capabilities:** Tracking activity (often in digital environments) and adjusting your company’s responses in real time | • Online offers and ad serving  
• Dynamic pricing  
• Call routing  
• Search engine optimization and related techniques |
| **Predictive capabilities:** Establishing data-driven guidance for decisions in the midst of uncertainty | • Sales forecasting  
• Pricing  
• Picking the next likely product |
| **Descriptive capabilities:** Providing a better understanding of business impact and customer response | • Client counts  
• Lead lists  
• Customer segmentation analysis |
| **Reporting and MIS capabilities:** Monitoring everyday financial and operational performance | • Regular and standardized performance reports  
• Business results tracking  
• Guiding employee participation and accountability |
Increase your strategic emphasis on algorithmic and predictive capabilities; invest your time and resources there.

Percentage of total firm’s analytic time spent on each type of capability

Typical FS Company 2011
- Algorithmic ~0%
- Predictive 10–20%
- Descriptive 20–30%
- Reporting/MIS 60–70%

Leading FS Company 2013
- Algorithmic 5–10%
- Predictive 40–50%
- Descriptive 30–40%
- Reporting/MIS 10–15%

Source: Interviews; Strategy& analysis
2. **Aim at pilots and programs in target initiatives**

- Identify the profit pools and define value proposition to leverage analytics capabilities in creating value

- Develop and implement specific offers/programs (e.g., cross-sell) as targeted application of analytics capabilities, including:
  - Field engagement
  - Knowledge dissemination and program refinement
  - Frontline communication

- Execute on constant test/learn cycles
Increase your strategic emphasis on algorithmic and predictive capabilities; invest your time and resources there

One bank used analytics to develop integrated product offerings for customers, such as those shown here.

The lifetime value of a customer with this type of multiple-product loyalty is worth more than the sum of the value of the individual products.
Identify some places where direct-to-customer support is needed...

This example, from another bank, shows its branches grouped by their current customer traffic (the y-axis) and their targets (the x-axis). Each orange dot is a branch.

Two branches (335 and 112) were singled out for analytics to learn why their transaction rates were lower than expected.

Branches 507 and 204 were comparison branches with similar traffics but more profitable transactions.
...and aim your analytics to enable improved offerings

In two branches (135 and 141), the analytics yielded new insights about customer segments and the products and services they wanted…

...which in turn led to a more successful mix of products offered by the branches.

(Details have been omitted to preserve confidentiality.)
3. **Align your governance and business processes—to ensure successful targeted application of analytics to drive initiatives**

- Define a governance framework including roles, responsibilities, and decision rights
- Facilitate effective interaction with the businesses and geographies, covering the scope of analytics support, resource commitment, and data access
- Establish a joint decision-making forum with the businesses and a project oversight process
- Agree on the performance metrics to measure the results of programs
Several organizational design principles have been shown to yield optimal results

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<th>Design Principles</th>
<th>Results</th>
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<td>• Focus the senior executive team on the importance of analytics capabilities</td>
<td>• Fundamental redefinition of how you see your customers</td>
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<td>• Treat fact-based decision making as a best practice</td>
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<td>• Generate information, creating a test/learn culture based on numerous targeted campaigns</td>
<td>• Increased earnings per share</td>
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<td>• Design tailored offers to meet customer needs</td>
<td>• Gains in EBITDA</td>
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<td>• Be committed to building robust analytics capabilities for several years</td>
<td>• Rising revenue</td>
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<td>• Effectively collect information</td>
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<tr>
<td>• Increased marketing ROI</td>
<td>• Successful new product introductions</td>
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Your goal is to develop a multifaceted, robust group of big-data capabilities, embedded throughout your company.

### Types of analytics required

- **Descriptive**: Voice of customer, market research, cluster analyses
- **Predictive**: Next-best-offer models, LTV uplift model, demand forecast
- **Optimization**: Investment allocation
- **Predictive**: Response, incremental profit models
- **Algorithmic**: Dynamic offers at channel touch points
- **Descriptive/predictive**: Effective sales process/protocol/agent
- **Descriptive**: Root cause, correlative/causative analytics

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Source: Strategy& analysis
To implement this new system, proceed in phases — first, with a credible pilot project

**Phase 1 (Pilot)**
- Create basic customer segmentation scheme
- Create or integrate customer valuation and potential value measures
- Build prototype data warehouse
- Institute test/learn discipline
- Establish small team of talent
- Develop targeting models
- Develop customer value proposition
- Launch pilots

**Phase 2**
- Deploy customer value measures for decision making
- Expand use of product information across lines of business
- Integrate segment and risk data
- Build offer history database
- Build tracking capacity
- Apply what you learned in the pilot to wider-scale programs
- Launch second-wave pilots
- Influence and drive relationship manager (RM) deployment
- Influence RM calling and incentive plans

**Phase 3**
- Formulate segment strategy and allocate resources
- Use internal and external customer information consistently in value proposition
- Leverage two-way flow of information between channel and customers
- Establish continuously improving test/learn process
- Create context awareness and targeted value propositions
- Focus decision processes on analytics-based trade-offs
- Put required data and analytics in place

**Build Tools & Capabilities**
- Identify and fill data and analytics gaps
- Establish go-forward organization and governance structure

**Aim at Pilots & Programs in Target Initiatives**
- Engage business and field
- Position pilots
- Track and reward right behaviors

**Align Your Governance & Business Processes**
- Engage business and field
- Position pilots
- Track and reward right behaviors

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20
For instance, you might begin with a revenue-driving pilot, like a targeted home equity line of credit (HELOC) cross-sell.
Top 10 best practices in managing pilots; they can help you “act your way to a new way of thinking”

10. Understand each pilot’s objectives from the outset; not all pilots should seek to prove the same points (some may test new cross-sell tactics, while others refine client targeting models, and others find interim methods to increase revenues)

9. Be willing to deviate from current process and procedures to better fulfill the pilot objectives, including adjusting critical compensation schemes

8. Agree up front on what will define success for the pilot and what information you will need to gather to decide whether to roll out these practices after the pilots are complete

7. Reflect potential rollout conditions for the pilot; in particular, pilot participants (branches, individual call center agents) should have a mix of skills and experience, and on the whole be average performers

6. Run the pilots; identify the people responsible for overseeing progress and troubleshooting

5. Continuously fine-tune the pilots; if pilots are not going as expected, be willing to make midcourse corrections

4. Show demonstrable, measurable impact (such as increase in sales) for participating individuals in order to motivate the front line and ensure consistent participation

3. Seek continuous feedback and support from pilot participants:
   - Use pre-pilot discussions to help design pilot initiatives
   - Conduct focus groups during the pilot to fine-tune the process and identify best practices
   - Get participants to champion rollout to their senior management once the pilot is completed

2. Capture pilot-specific performance data on a regular basis (perhaps weekly), even though some metrics may not be used currently and may require additional resources to compile the data

1. Secure management focus and frontline commitment to make the pilot a success; senior management involvement is important to regularly review pilot performance and hold periodic check-ins with participants
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