Monetizing Your Information Assets

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Strategic Planning Assumption

By 2020, 10% of organizations will have a highly profitable business unit specifically for monetizing information.

By 2019, 75% of analytics solutions will incorporate 10 or more exogenous data sources from second-party partners or third-party providers.
Accountants don't recognize the value of your information

But investors are starting to

Especially if you do
Infonomics is the economic theory of information as new asset class, and the discipline of accounting for, managing and deploying information just as any other enterprise asset.
Why Monetize Your Information Assets?

- Create a supplemental **revenue** stream or new line of business
- **Barter** for goods/services at a discount or with favorable T&Cs
- Compel enterprise **information management/governance** improvements
- **Defray costs** of enterprise information management and business analytics
- Impress investors; improve market-to-book corporate **valuations**
- Enable **competitive differentiation**
- Strengthen partner, supplier, customer **relationships**
Key Actions/Decisions

1. Establish an information strategy or information product function.
2. Inventory your available information assets.
3. Draw inspiration from and adapt how others have monetized data.
4. Identify ways to generate direct and indirect revenue streams from each information asset.
5. Test monetization ideas for feasibility.
6. Prepare data and establish a market.
1. Establish an Information Product Management Function

- Tasked with developing ways to monetize data
- Ideally reports to chief data officer (CDO)
- Follows corporate product management approach
- Develops information product markets among partners and others
- Coordinates with IT, marketing, finance, legal, other product management groups
- May lead to creating new line of business (LOB)

*Sometimes part of an information strategy group*
Organizing for Information Exploitation

Primary Areas of Responsibility:

- Information…all things…
- Innovation
- Strategy
- Architecture
- Governance:
  - Compliance
  - Stewardship
  - Security
  - Risk
  - Privacy

*Spans Entire Information Continuum*

<table>
<thead>
<tr>
<th>Example Roles*</th>
<th>Example Organizations*</th>
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<tbody>
<tr>
<td>Data Scientist</td>
<td>Info. Governance Board</td>
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<tr>
<td>Information Architect</td>
<td>Info. Stewardship Council</td>
</tr>
<tr>
<td>Information Steward</td>
<td>GRC Board</td>
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<tr>
<td>Security Architect</td>
<td>Business Planning</td>
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<td>Digital Strategy</td>
<td>BICC</td>
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<td>MDM Program Manager</td>
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<td>Compliance Manager</td>
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<td>Risk Officer</td>
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<tr>
<td>Info Products Manager</td>
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<tr>
<td>Analytics Officer</td>
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2. Inventory Your Available Information Assets

Remember: Your biggest database isn’t the one you own and manage; it’s the one you don’t.
3. Draw Inspiration From and Adapt What Others Have Done With Data

Leverage Gartner's library of hundreds of real-world examples
4. Identify Ways to Generate Direct and Indirect Revenue Streams

Indirect Data Monetization:

Direct Monetization:
Indirect Data Monetization (value to operations)

- Using data to improve efficiencies
  - Typical BI/analytics decision making
  - Business process optimization/improvement
  - Information-leveraged business outcomes

- Using data to develop new products, markets
  - Understanding markets, customers, trends, etc.

- Using data to build and solidify partner relationships
  - Driving supply chain efficiencies, discounts, etc.
  - Industry organizations/associations

- Branded indices
  - E.g. Intuit Small Business Employment Index, ADP Jobs Index, Deloitte Confidence Index, Wells Fargo Small Business Index...
Direct Data Monetization

- Bartering/trading with information
  - loyalty programs, coupons, favorable Ts&Cs, free goods/services/apps
- Information-enhanced products or services
  - business apps (tax software) with comparisons/benchmarks of all/similar users
- Selling raw data through brokers
  - 3rd party platform
- Offering data/report subscriptions
  - Internal platform
Methods for Measuring Your Information Assets – Part 1

- **Intrinsic Value of Information**: Presumptive value based only on key characteristics
  - How good and easy to use is the information versus how likely are others outside the organization to have it also?

- **Business Value of Information**: The value of information to a business process
  - How good is the data? How applicable to the business or a particular business process is it? How quickly can we get fresh data to the point of the business process (b)?

- **Performance Value of Information**: Impact of Information On business measures
  - How much does having a unit of information incrementally contribute to moving closer toward a KPI target over a given period
Methods for Measuring Your Information Assets – Part 2

- **Cost Value of Information**: The cost of initially acquiring or replacing lost information
  - What would it cost to replace the data, and what is the financial impact to the business if the data were lost over a time period?

- **Economic Value of Information**: The bottom-line financial impact of an information asset
  - What is the difference in revenue using the information, less the expense of acquiring, administering, and applying the information?

- **Market Value of Information**: The income that can be generated by selling, renting or bartering with this information
  - How much are business partners willing to pay for access to this information?
What is the primary way your organization is monetizing its data today?

- Measured economic benefit of data through better decisions: 31%
- We’re not monetizing our data yet: 50%
- Selling our data directly ourselves: 10%
- Selling our data through a third party: 3%
- Exchanging our data for goods and services from others: 6%
- Selling our data directly ourselves: 3%

Webinar: Methods for Monetizing Your Data, 20-Aug-2015
## 5. Test Monetization Ideas for Feasibility

<table>
<thead>
<tr>
<th>Type of Feasibility</th>
<th>Questions to Ask</th>
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<tbody>
<tr>
<td><strong>Practical</strong></td>
<td>Is the idea something that is utilitarian, or merely interesting/cool? Is it usable?</td>
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<tr>
<td><strong>Marketable</strong></td>
<td>Is the idea something with sufficiently broad appeal, internally or externally?</td>
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<tr>
<td><strong>Scalable</strong></td>
<td>Is the idea something that can be developed and implemented to the extent required or intended?</td>
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<td><strong>Manageable</strong></td>
<td>Is the idea something you have the skills to oversee the development of?</td>
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<tr>
<td><strong>Technological</strong></td>
<td>Is the idea something you have the tools and skills to develop and rollout?</td>
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<tr>
<td><strong>Economical</strong></td>
<td>Is the idea something that will generate sufficient return on investment?</td>
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<tr>
<td><strong>Legal</strong></td>
<td>Does the idea conform to local laws where it will be used or implemented?</td>
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<tr>
<td><strong>Ethical</strong></td>
<td>Will the idea be something that has the potential for customer/user backlash?</td>
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<tr>
<td><strong>Ecological</strong></td>
<td>Will the idea cause undue impact on the environment?</td>
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6. Prepare Data and Establish Market

**Sourcing**
- Transaction data
- Customer, employee, partner, supplier data
- Process data
- Existing product deinformationalization
- Industry data
- Public/Government sources
- Solicitation

**Production**
- Aggregation
- Integration
- Supplementation
- Analytics
- Cleansing
- Deidentifying

**Marketing**
- Packaging
- Productizing
- Marketplace platform
- Licensing
- Access/Distribution
DaaS: Data as a Service

A style of information architecture geared towards transformation of raw data into meaningful data assets, and timely delivery of these data assets on demand via a standard connectivity protocol.
DaaS functions form the business data delivery “building blocks”

**Collect**
- Disparate Sourcing: Internal, External.
- Diverse: Structure, language, tokens.

**Compose**
- Integration: Data Virtualization/Data Federation
- Preparation: Data Enrichment, Data Curation, Data Aggregation
- Analysis: Context, Analytics, Predictive Modeling (DM, ML), NLP, Text Mining, Event Correlation, Semantic Search
- Workflow: High-level services/Orchestration
- Catalog & Publish

**Share**
- Share: Deliver data assets
- Monitor: Report & audit consumption of data assets

**Consuming Applications**
- Monetization
- Inter- and Intra-Enterprise Information Sharing
- Analytics
- BI/Analytical tools
- Applications (mobile, SOA, portals, etc.)
- Discovery

Alignment with Gartner Information Capabilities Framework

“Describe”, “Organize”

“Integrate”, “Govern”, “Implement”

“Share”, “External”, “Govern”
DaaS has Analytic Architecture Risks

- Data licensing and ownership
- Non-resilient technical architectures
- Potential impact due to Business model changes.
- Potential to encourage retention and expansion of information silos.
- Potential for inconsistent metadata and master data due to on-the-fly rationalization.
- Potential to lose historical context when used in place of an EDW

DaaS is like the opposite of the “telephone game”. It has the risk that one whisper stays the same, but always changing context—soon it is out of context and nonsense.
What Does Success Look Like?

✓ You have productized information or informationalized a product.
✓ You are generating significant new revenue streams.
✓ You have made the old guard uneasy, and invigorated the rest.
✓ You have frightened traditional competitors and invited new ones.
✓ You have improved enterprisewide appreciation of and attention to information collection and management.
✓ You can quantify the economic value of your information assets.
✓ Investors have noticed. They call you the "Google" of your industry!
A Tale of Retailing Retail Data

Opportunity:
- Gain free strategic advice on promotions, stocking etc. from CPG partners.

Data and Analytics:
- Place billions of rows of POS, inventory, promotion, and other data into a cloud-based data store for partners to analyze in a common spreadsheet-like format.
- Data hosting and analytic processing provided by 1010data.

Results:
- CPG partners (e.g., P&G) now pay for access. As a result, Dollar General has a self-funding enterprise data warehouse and was able to eliminate its complex, expensive RDBMS-based EDW.
A Smorgasbord of Restaurant Menu Data

- **Opportunity:**
  - Monetizing the data in online restaurant menus

- **Data and Analytics:**
  - Aggregates menu data from GrubHub and restaurant review websites into its database of over 23,000 food terms and 22M menu items
  - Analyzes menu item, ingredient and ingredient pairing trends

- **Results:**
  - Food producers and suppliers can anticipate increases or decreases in need for certain ingredients by geography and restaurant type
  - Restaurateurs and chefs can identify restaurant opportunities, craft unique items and align with ingredient or terminology trends
The Parade of Autonomous Vehicles Keeps on Truckin’

- **Opportunity**
  - Improve highway safety; reduce transportation costs

- **Data and Analytics**
  - Daimler’s Freightliner Inspiration Truck automates lane stability, collision avoidance, speed control, braking, steering and an advanced dash display
  - Long-range radar with a range of 820-ft, scans an 18-degree view; the short-range radar, with a range of 230 feet, has a scanning range of 130-degrees

- **Results**
  - Nevada Dept. of Motor Vehicles license to operate
  - National Highway Traffic Safety Administration designation as “Level 3 autonomous vehicle”
  - Shattered the U.S. Dept. of Energy goal by achieving a 115% ton-miles per gallon freight efficiency improvement
Opportunity
- Improve call center performance

Data and Analytics
- 3000 customer care reps (CCRs) in seven sites handling over 20 million calls per year
- Deployed Mattersight’s predictive behavioral routing system to optimally match callers with CCRs based on personality traits. Draws from Mattersight’s 350TB of caller/content data and analytics from over 70 million known phone numbers over the past 10 years.

Results
- Net 8.4% (58 second) reduction in call time
- 12.8% shorter calls for those intelligently routed
- Top CCRs now handle more calls; members and CCRs report improved experience
- Results improve as the matching algorithm learns
Instrumentation and Analytics is now a Racket

- **Opportunity**
  - Improve tennis player consistency, power and strategy

- **Data and Analytics**
  - Integrated tennis racquet sensors and algorithms determine the strength of impact, point of impact, spin, the way the racquet is moving, twisting or turning, and number of forehand vs backhand shots
  - Streams data via bluetooth to mobile dashboard

- **Results**
  - Enables advanced players to optimize power vs spin, and adjust their stroke and shot selection for future matches
  - Compare your shots to those of top pros
  - Discover and compare any player or any match, virtually instantly
Sniffing and snuffing insurance fraud

- Opportunity
  - Save and make money by reducing fraudulent auto insurance claims

- Data and Analytics
  - Predictive analytics against years of historical claims and coverage data
  - Text mining adjuster reports for hidden clues, e.g. missing facts, inconsistencies, changed stories

- Results
  - Improved success rate in pursuing fraudulent claims from 50% to 88% and claim investigation time by 95%
  - Additional $12 million in subrogation recoveries
  - Marketing to individuals with low propensity for claim fraud
Recommendations: The Principles of Infonomics

1. Information is an actual asset (if not a recognized asset class)
2. Information has both potential and realized value
3. Information's value can be quantified
4. Information should be accounted for as an asset (internally)
5. Information's realized value should be maximized
6. Information's value should be used to help budget IT and business initiatives
7. Information should be managed as an asset
Recommended Gartner Research

- Hackers Know the Value of Health Information, So Why Don't HDOs Appreciate Healthcare Infonomics?
- Seven Steps to Monetizing Your Information Assets
- How Organizations Can Best Monetize Customer Data
- Customer Analytics and the Art of the Possible With Big Data
- Why and How to Measure the Value of Your Information Assets
- Algorithm Marketplaces Are Bringing the App Economy to Analytics
Recommended Reading

- **The Hidden Shareholder Boost From Information Assets**  
  Douglas Laney, Forbes

- **The Hidden Tax Advantage of Monetizing Your Data**  
  Douglas Laney, Forbes

- **To Twitter You're Worth $101.70**  
  Douglas Laney, Gartner Blog Network

- **Twitter's Secret Nest Egg Is in Plain Sight**  
  Douglas Laney, Gartner Blog Network

- **Infonomics: The New Economics of Information**  
  Douglas Laney, Financial Times

- **To Facebook You're Worth $80.95**  
  Douglas Laney, Wall Street Journal

For more information, stop by Gartner Research Zone.
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Thank You