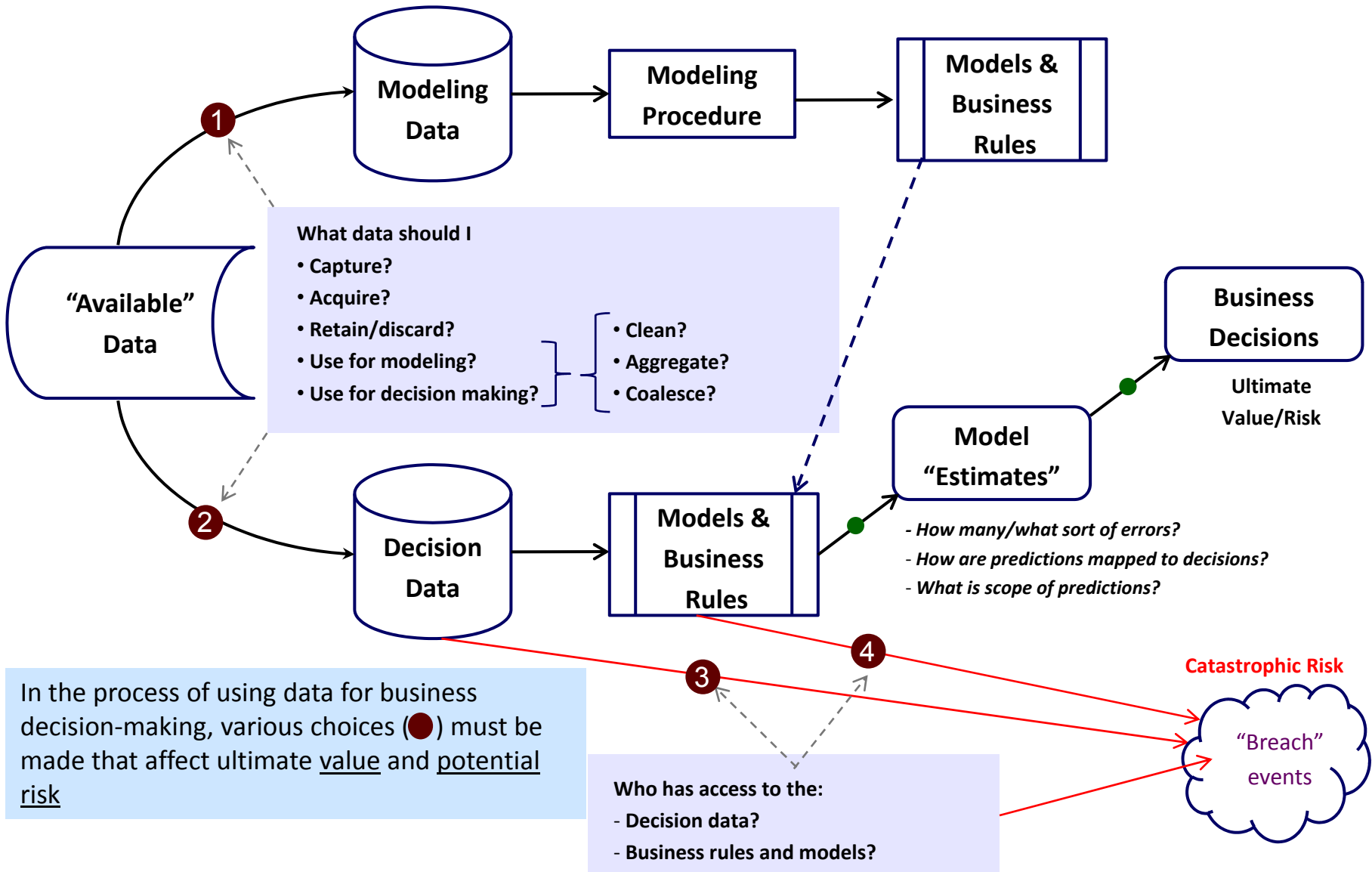




A Framework for Measuring Risk Adjusted Performance

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Data, Models, Decisions and Potential Risk



Observed Risks/Breaches

- CSAT manipulation (rep used client's email account to fill in satisfaction survey)
- Information leakage and client information sent to rep's personal email account
- Rep posted customer information on public website to work on later (to improve personal productivity), which became publicly viewable
- Rep becoming overly friendly and joining social network of customer
- Rep providing freebies to improve CSAT beyond "reasonable" levels
- Clients' HR policies made their way to a public website

Valuing business data while modeling both returns and potential risk

- There is a tradeoff between the returns and the risk from storing and using customer data.
- Organizations today often gather and keep more data than needed:
 - The (disk) cost of simply storing all of the data trails generated as a by-product of electronic commerce is lower than the human cost of figuring out what to keep;
 - There is a perception that the marginal “option value” of data is always positive.
- However, as firms store more customer data, they also expose themselves to risks associated with “breach” events and misuse. This risk (and potentially, the return from better rules/decisions) increases as:
 - i. More data are stored by the firm;
 - ii. The firm assumes “ownership” of its customer data, and
 - iii. More people (employees, partners) can access the data, or there are a larger number of points of data access

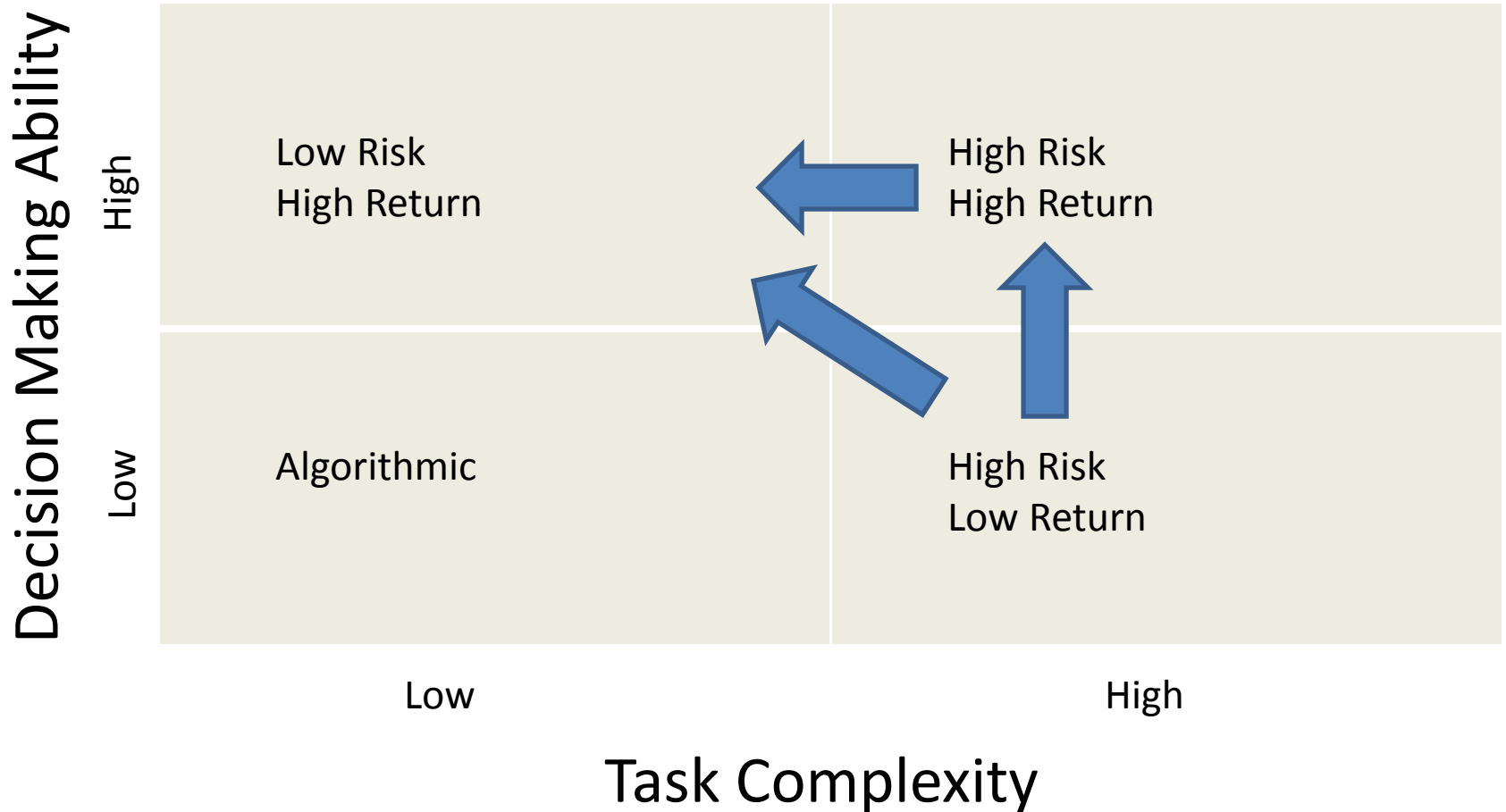
Quantifying Return and Potential Risk

- Candidate dimensions for measuring performance
 - Throughput or efficiency of contact
 - Level of customer satisfaction
 - Cost of service delivery relative to industry average
 - Quality
 - Relative depth of interaction

Quantifying Return and Potential Risk

- Data governance choices drive potential risk
 - How much data is stored by an organization?
 - How many individuals have access to what parts of customer data?
 - What is the distribution and pattern of data access?
 - How well are data use policies communicated to people who have access to the data?
- Our eventual framework will associate the contribution of these factors to performance, but on a potential risk-adjusted basis

Complexity and Decision Rights → Risk/Return



Example of Top Right Quadrant Moving Left

- Day 1, 3pm: **Rep1** calls **Client** asking whether he's aware he's being charged margin interest while he has cash in account. **Client** says no. Margin interest of \$1,306, has been charged to the account during the last 8 months.
- Day 1 3:05pm: **Client** calls **Firm** and complains to **Rep2** who says "I'm sure we can help; goes offline for 30 seconds and says "I checked with my principal, we can credit you for the first month, which is \$304. **Client** says no, not good enough.
- Day 1 3:15pm: **Principal** calls **Client** and asks what client would like to do. **Client** says "I don't know why this happened, but I propose we split the total 50/50."
- Day 2 9:00am: **Principal** calls back and says "I reviewed the transcript and I can't do any better than \$304. "**Client** asks to hear the transcript.
- Day 2 9:30am: **Principal** calls back and plays back transcript to **Client** who says "No way, this is your error, my intention was clear, you should give me back my entire \$1,306." **Principal** disagrees and tells client he will escalate to "**dispute**" manager.
- Day 2 11:30am: **Dispute manager** calls back and informs **Client** that the entire 1,306 will be refunded. His explanation is that **Firm** holds its **reps** to a high standard which was not met during the interaction
- Day 2 12 noon: **Principal** calls **Client** and tells him to be aware of tax consequences since there are 2 transactions that happened in different tax periods.

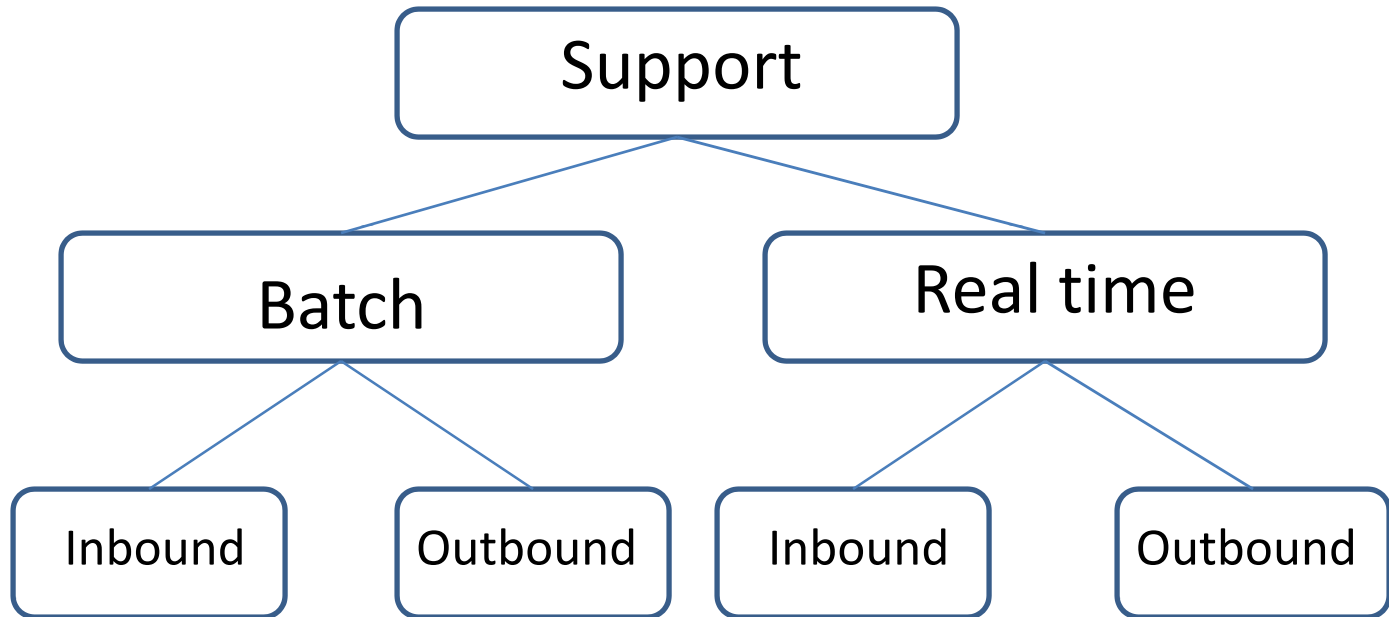
Case Studies of Customer Support

- 8 case studies of customer support of varying complexity
 - 4 insurance companies
 - Simple tasks, adjudication, complex problem solving
 - All batch
 - 1 media/communication
 - 1 information
 - 1 software support
 - 1 financial services

Measures of Performance

- Throughput
 - Cases/day
 - Response time to client
- Cost
- Quality
 - Error rate in decision making/adjudication
 - First call response/resolution rate
 - Customer satisfaction
 - Customer attrition/retention monitoring
 - Dollars saved for client through better decision making or troubleshooting

Process/Risk Taxonomy



Preliminary Observations

- Cost pressures and potential quality improvements are making outsourcing of customer support more viable
- But outsourcing customer support creates new kinds of risks for both client and vendor
 - Batch processes involve lower risk for both than before with potentially higher quality
 - Batch processes provide greater incentives for vendor to invest in systems for reducing risk (data masking tools, semi-automated real-time monitoring systems of reps, etc)
 - Real time processes involve greater risk for client
 - “High value” real time processes will remain local within client organization since these are critical for differentiation