



***MODELING THE VALUE OF
KNOWLEDGE WITH A
THROUGHPUT MODEL.***

FOUR MAJOR CONCEPTS
THAT GOVERN STRATEGIC
BEHAVIOR AND ACTIONS

MAJOR BARRIERS IN NOT VALUING INTANGIBLES

- Misuse of framing situations
 - Inadequate sequence in the use of information
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INFLUENCES ON INTANGIBLES

- Incomplete information
 - Changing environments
 - Time pressure
 - Expertise
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FOUR MAJOR CONCEPTS GUIDING DECISIONS

- Perception
 - Information
 - Judgment
 - Decision Choice
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PERCEPTION

- *Perception* involves the process individuals use to frame their problem solving set or view of the world.
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INFORMATION

- Data is considered as facts, and information is processed, interpreted data. Also, knowledge is personalized information.
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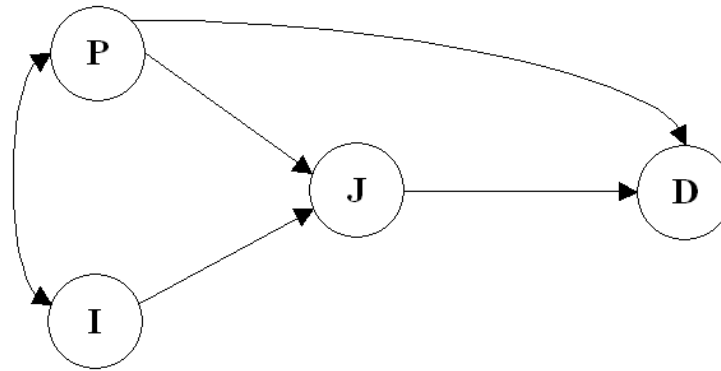
JUDGMENT

- *Judgment* contains the process that individuals implement to analyze incoming information as well as the influences from the perception function. From these sources, rules are implemented to weigh, sort, and classify knowledge and information for problem solving or decision-making purposes.
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DECISION CHOICE

- *Decision choice* represents an action taken or not taken.

DECISION MAKING MODEL



- where *P* = perception, *I* = information, *J* = judgment, and *D* = decision choice.
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6 DECISION MAKING PATHWAYS

- Based on Figure 1, we can establish six general pathways:
 - (1) $P \rightarrow D$ **Expedient**
 - (2) $P \rightarrow J \rightarrow D$ **Ruling Guide**
 - (3) $I \rightarrow J \rightarrow D$ **Analytical**
 - (4) $I \rightarrow P \rightarrow D$ **Revisionist**
 - (5) $P \rightarrow I \rightarrow J \rightarrow D$ **Value-Driven**
 - (6) $I \rightarrow P \rightarrow J \rightarrow D$ **Global Perspective**
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INFORMATION

- *Information* includes the set of information available to a decision maker for problem-solving purposes.
 - Information should be both reliable and relevant.
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RELIABLE INFORMATION

- *Reliable* relates to information sources as being correct, verifiable, or dependable.
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RELEVANT INFORMATION

- *Relevant* relates to information sources as being timely or sufficient to understand and implement in matters that are important to us.
 - Typically, information is not complete, may have errors, or may be difficult to interpret.
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INCOMPLETE INFORMATION

- Typically, information is not complete, may have errors, or may be difficult to interpret.
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DEGREES OF INFORMATION

- *Information* is precise if it can be interpreted in exactly one way.
 - Information is imprecise or vague if it is not clearly defined or cannot be understood in at least one precise way.
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EVENTS

- *Events* or objects are vague if they cannot be completely ordered.
 - For example, if we cannot order Company A, Company B, and Company C from best to worst management team, then these objects are vague.
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UNCERTAINTY

- Uncertainty can also be considered as precise or vague.
 - For example, let us consider rolling a die and calculating the probability that the number 5 will appear on top. A die (plural: dice) is a small cube—a square, box-shaped solid with a different number of spots on each of its six sides.
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UNCERTAINTY

- The probability that a rolled die will display the number 5 is a *precise* uncertainty of $1/6$.
 - Calculating the probability of rainfall two years from now in Rome, Italy, on four days in June requires *vague* uncertainties.
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UNCERTAINTY x EVENT TYPE x INFORMATION PRESENTED

■ Precise Uncertainty Vague Uncertainty

	Precise Info	Vague Info	Precise Info	Vague Info
■ Precise events	1	2	3	4
■ ■				
■ Vague events	5	6	7	8

Combining the Six Pathways

- The six pathways can be divided into four major groupings of:
 - no information
 - lack of perceptual influences
 - no detailed analysis (judgment), and
 - complete use of the four concepts.
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No Information on valuation

■ $P \rightarrow D$

Expedient

■ $P \rightarrow J \rightarrow D$

Ruling Guide



Information & analysis on valuation

■ I→J→D

Analytical





No Detailed Analysis (Judgment) on valuation

■ $P \rightarrow D$

Expedient

■ $I \rightarrow P \rightarrow D$

Revisionist

Analytics & Rules augmented by expertise /

information

■ $P \rightarrow I \rightarrow J \rightarrow D$

Value-Driven

■ $I \rightarrow P \rightarrow J \rightarrow D$

Global Perspective

SUMMARY

- Due to incomplete information, biases may also creep into our analysis before, during, and after we decide.
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SUMMARY

- In examining a vast amount of information, we sometimes use prior experiences or biases to select certain types of information for decision-making purposes.
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SUMMARY

- No matter how well attuned our thoughts or sentiments are, biased information can sometimes result in “garbage in, garbage out.”
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