

4차 산업혁명 시대의 기업가정신



"The future belongs to
those who can think like an
entrepreneur."

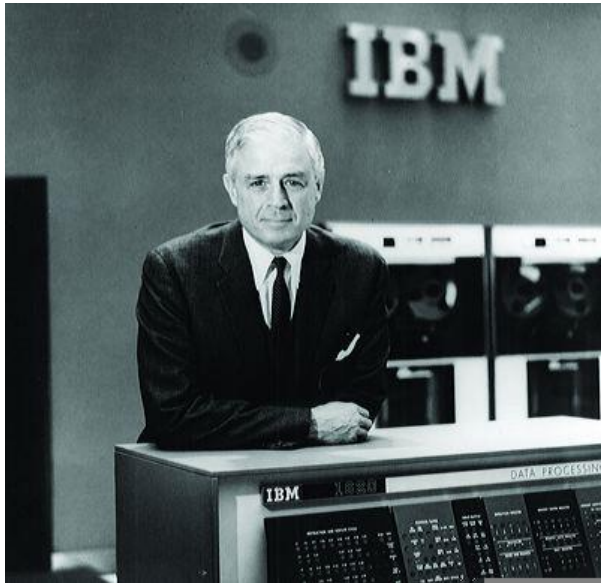
Class Outline



- 기업가적 사고 이해하기
 - 기업가적 환경: Predictive, risky, or uncertain?
 - 관리자적 사고와 기업가적 사고
- 신사업개발 방법론: 기업가적 Approach

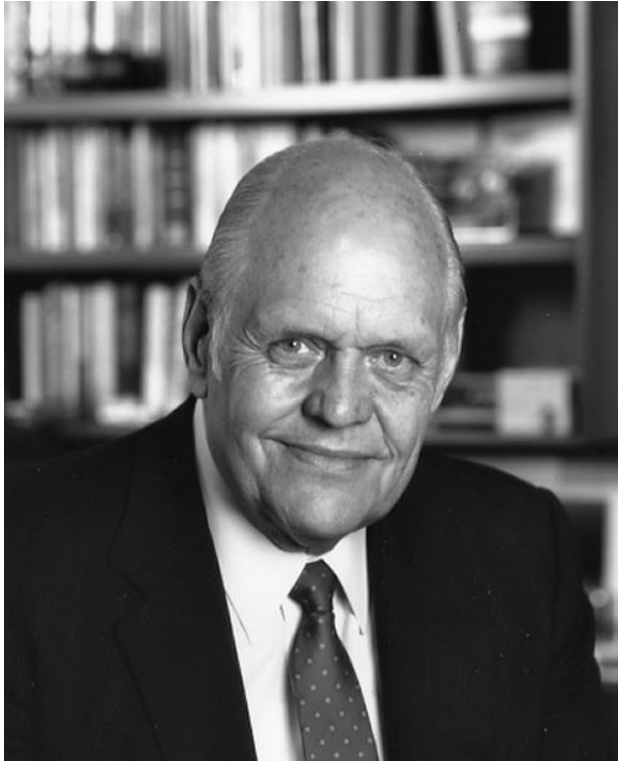
I. 기업가적 사고 이해하기

기업가는 미래예측가?



- “I think there is a world market for maybe five computers.” (Thomas J. Watson, CEO, IBM 1943)

기업가는 미래예측가?



- “There is no reason for any individual to have a computer in his home.” (Ken Olsen, Digital Equipment Corp. Founder 1977)



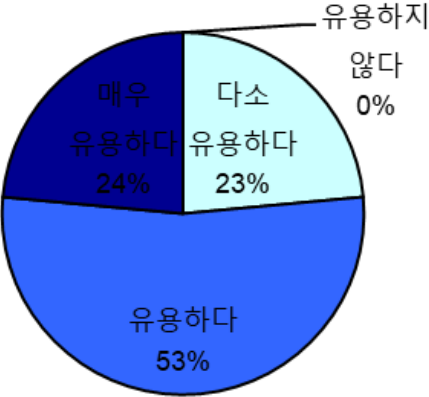
Survey

- 기업이 신제품을 출시하거나 새로운 시장에 진출할 경우, 혹은 신규 사업을 런칭할 때, 필연적으로 높은 불확실성에 직면하게 됩니다. 아래 나열된 정보들이 이러한 불확실한 시장 상황을 타개하는데 어느 정도 도움이 될 것으로 생각되니까?

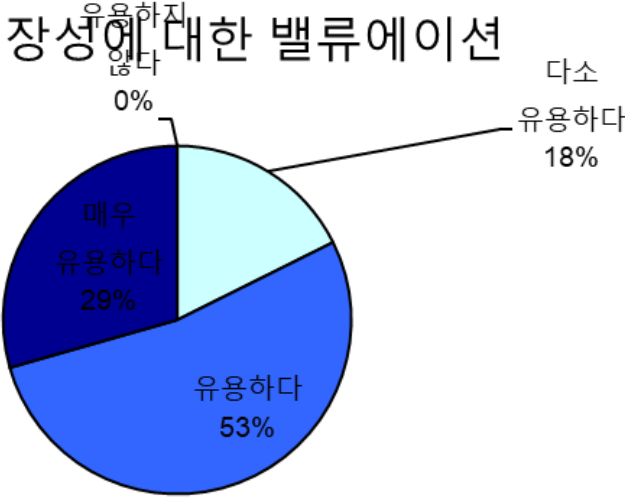
1. 경쟁사 제품의 성능 (가격, 품질 등) 관련 자료
2. 현재 우리 회사가 조달 가능한 내/외부 자원 리스트
3. 미래 산업 트렌드에 대한 전문가의 보고서
4. 파트너 회사의 협력 의지
5. 미래 소비자 수요에 대한 예측 정보
6. 앞으로 일어날 최악의 시나리오에 대한 정보
7. 신규 진입 시장의 성장 잠재력
8. 새로운 정보 획득 시 사업 방향성 수정 의지

Survey: Results from Managers

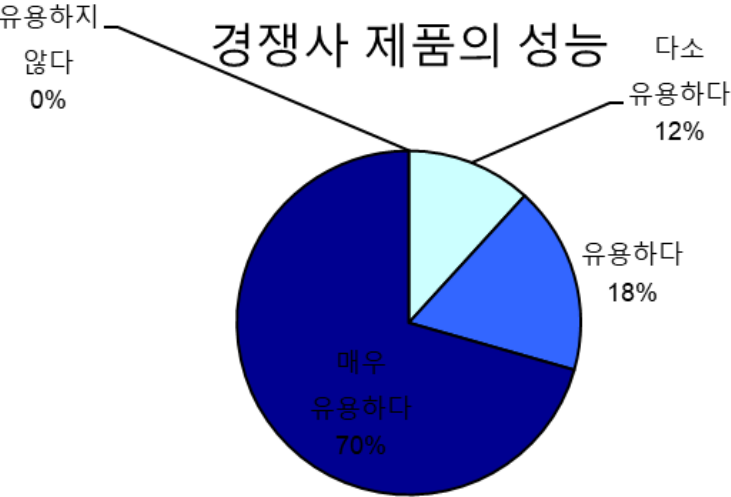
소비자 수요에 대한 예측



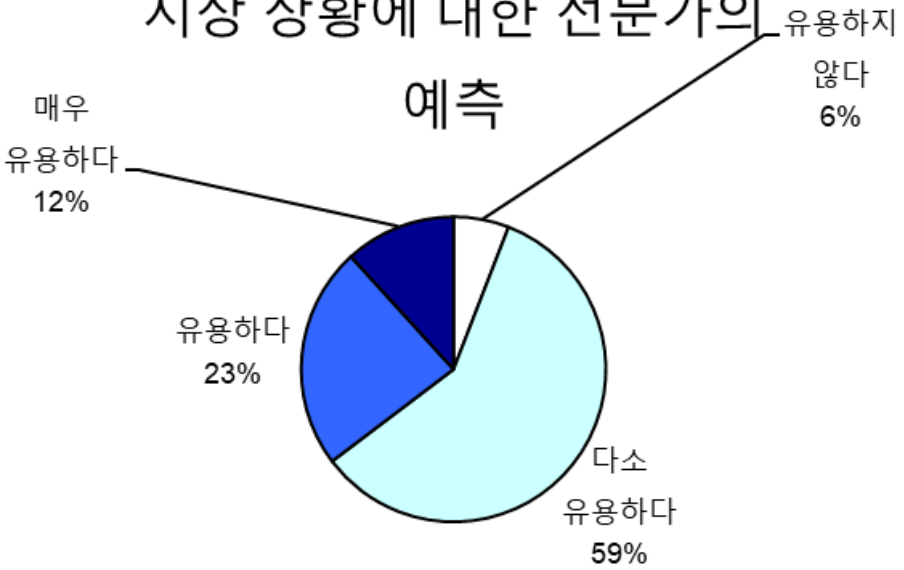
시장 성장성에 대한 밸류에이션



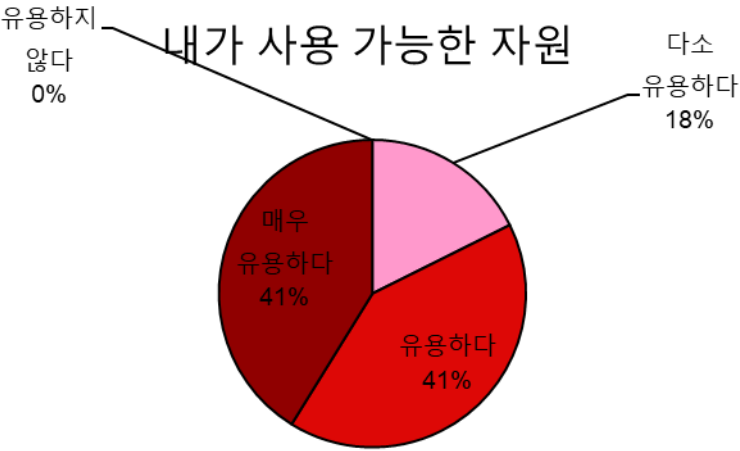
경쟁사 제품의 성능



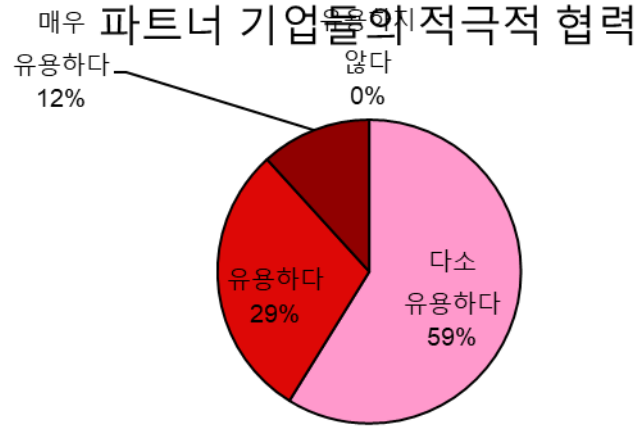
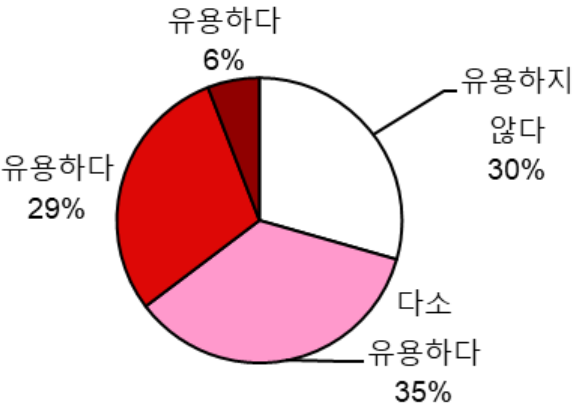
시장 상황에 대한 전문가의 예측



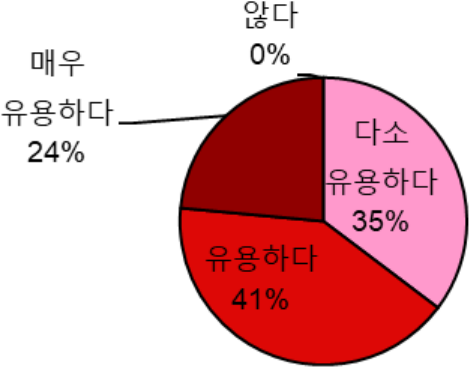
Survey: Results from Managers



최악의 경우 얻게 되는 손실에 대한 명확한 이해

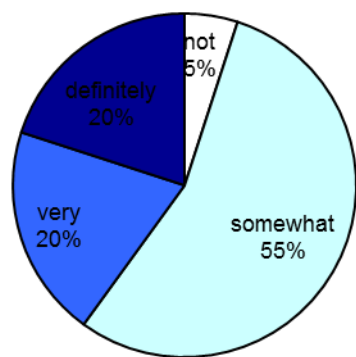


새로운 상황 발생시 초기 설정한 개발 방향성 수정 가능성 정도

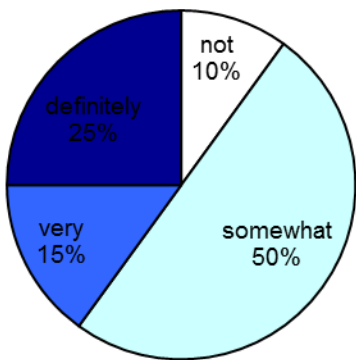


Survey: Results from Entrepreneurs

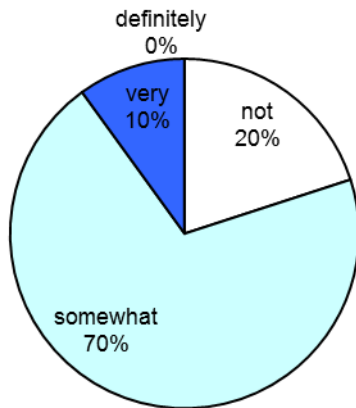
소비자 수요에 대한 예측



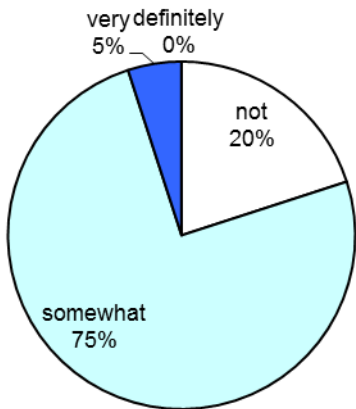
신규 진입 시장의 성장 잠재력



경쟁사 제품 성능

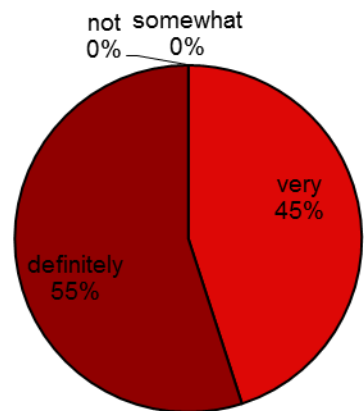


전문가의 산업 트렌드 예측

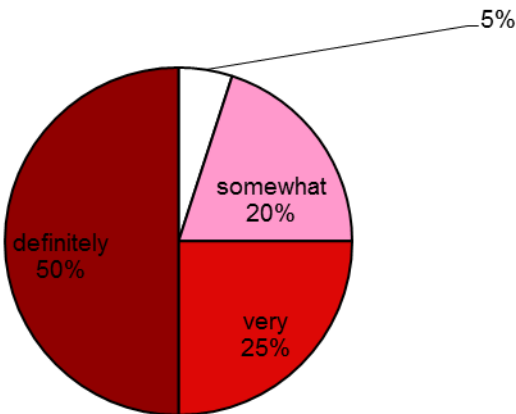


Survey: Results from Entrepreneurs?

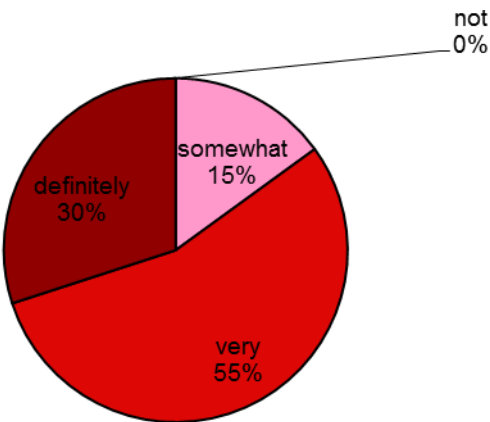
조달 가능한 내/외부 자원



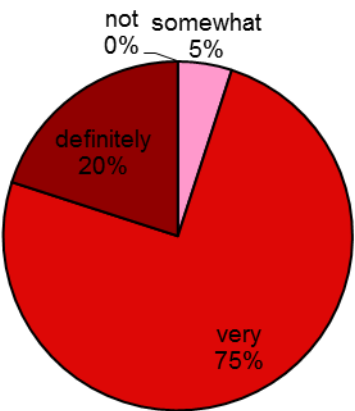
최악의 시나리오에 대한 정보



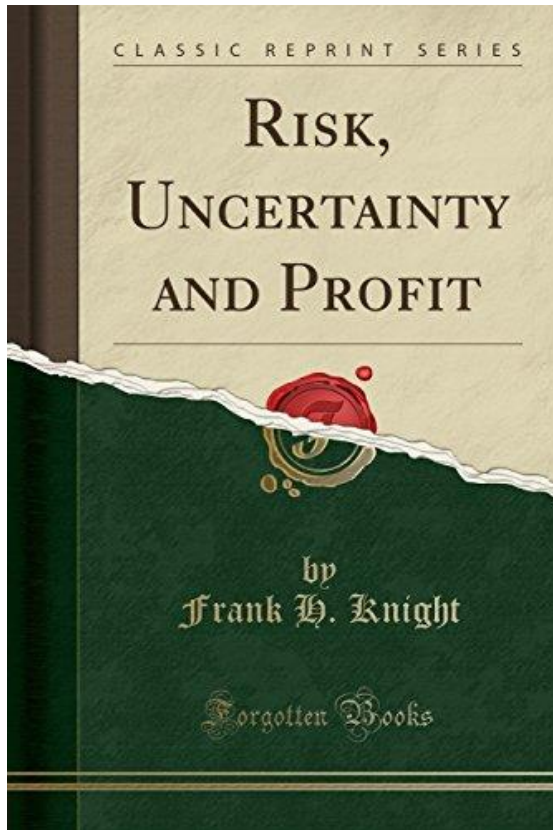
파트너 회사의 협력 의지



사업 방향 수정 가능 여부



Knightian Uncertainty



Predictive

Known distribution

Unknown draw

Risky

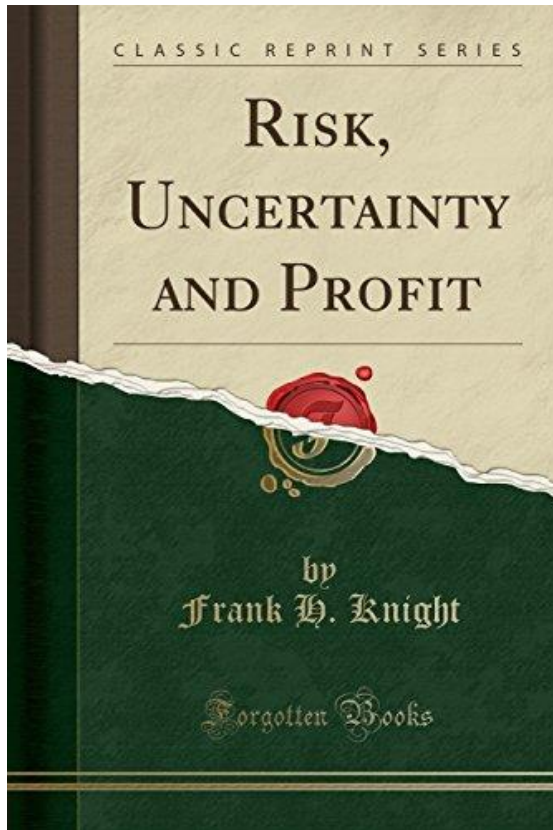
Unknown distribution

Unknown draw

Uncertain

Unknowable
distribution

Knightian Uncertainty



Predictive

Known distribution

Unknown draw

- 카지노, 복권?
- 성숙기

Risky

Unknown distribution

Unknown draw

- 금융, 데이터?
- 성장기?

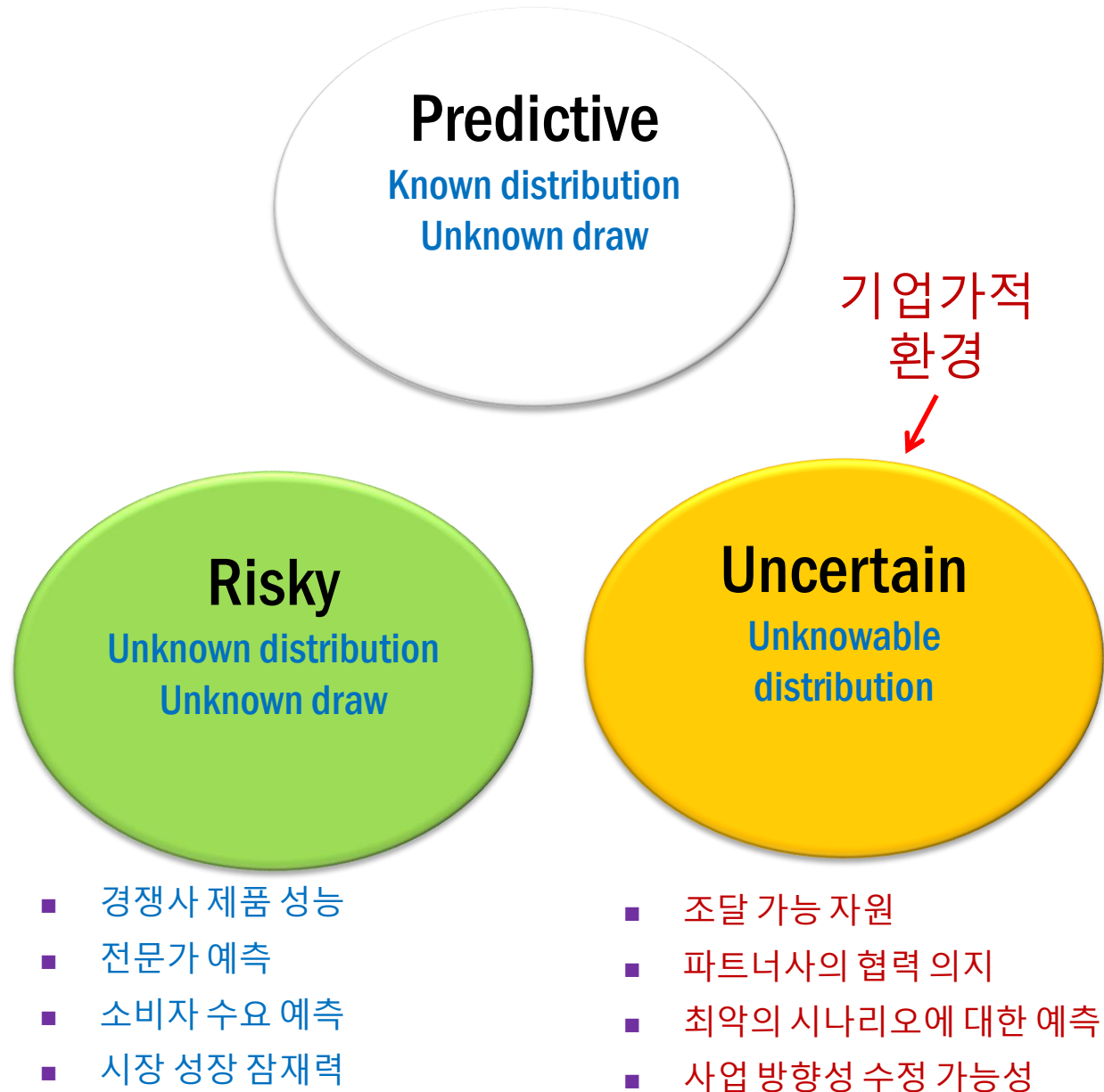
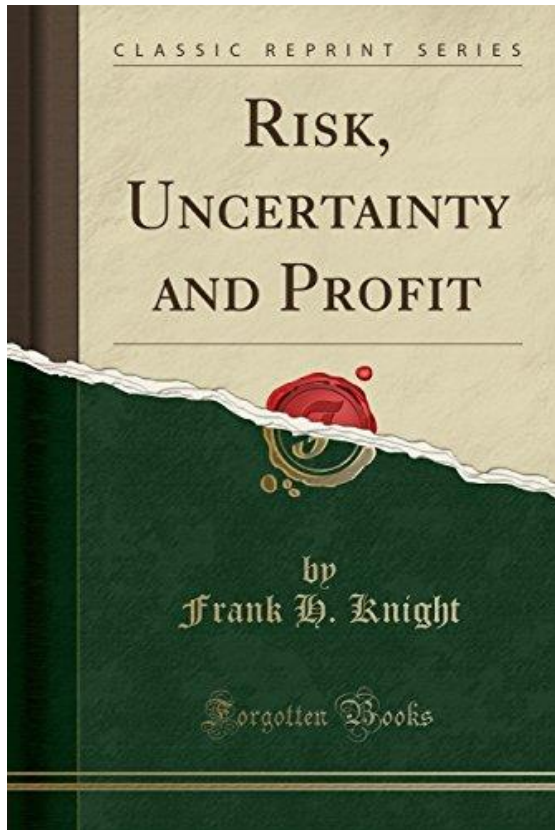
Uncertain

Unknowable

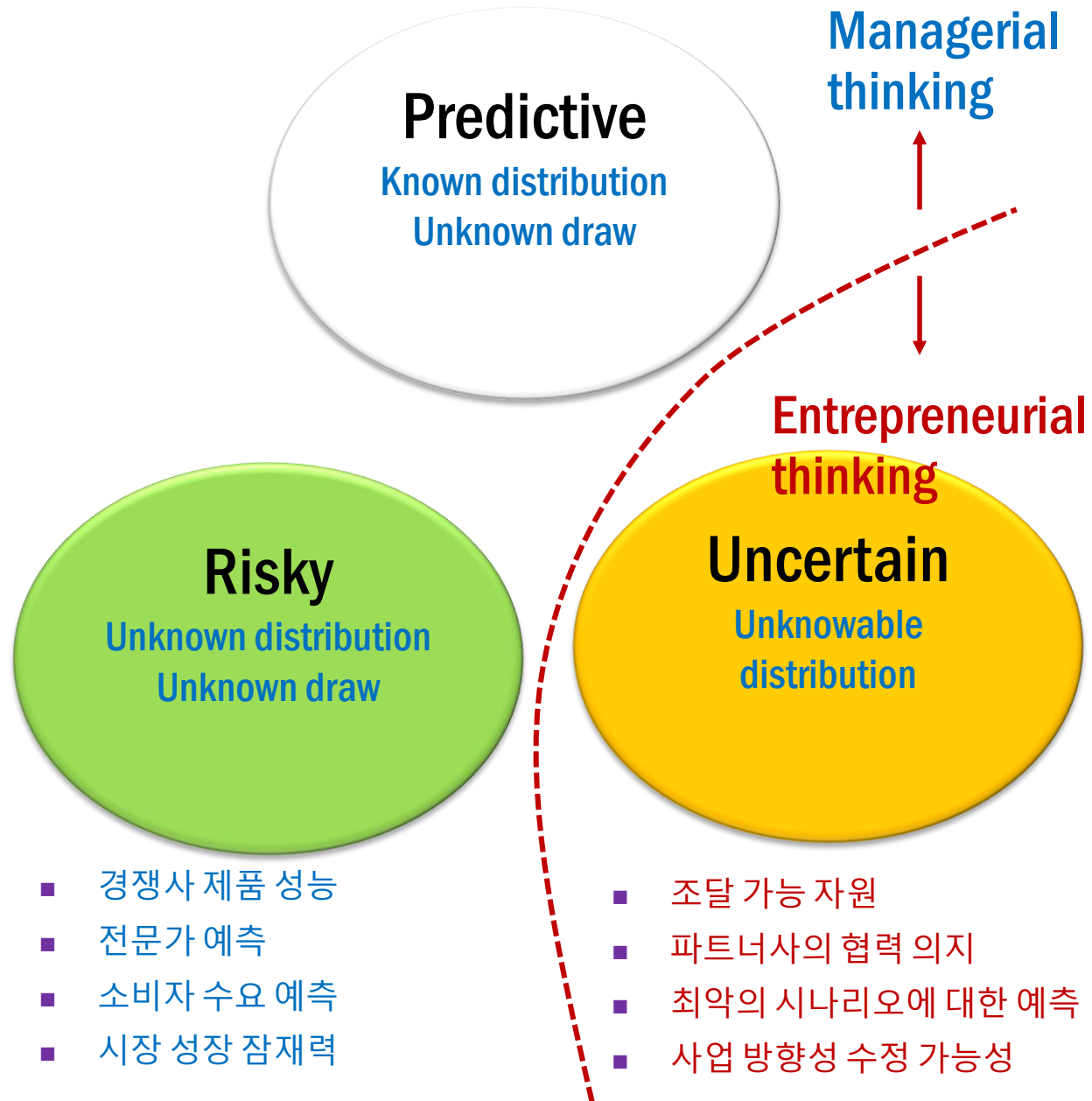
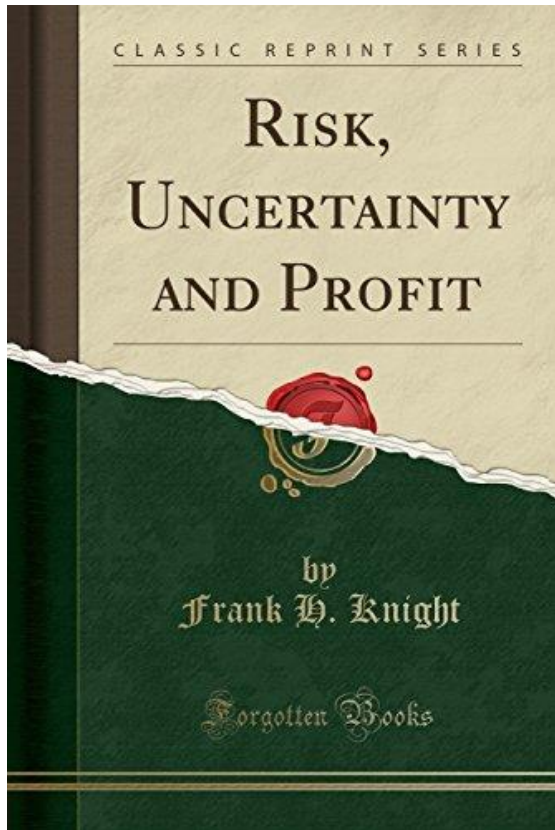
distribution

- 모든 스타트업?
- 초기

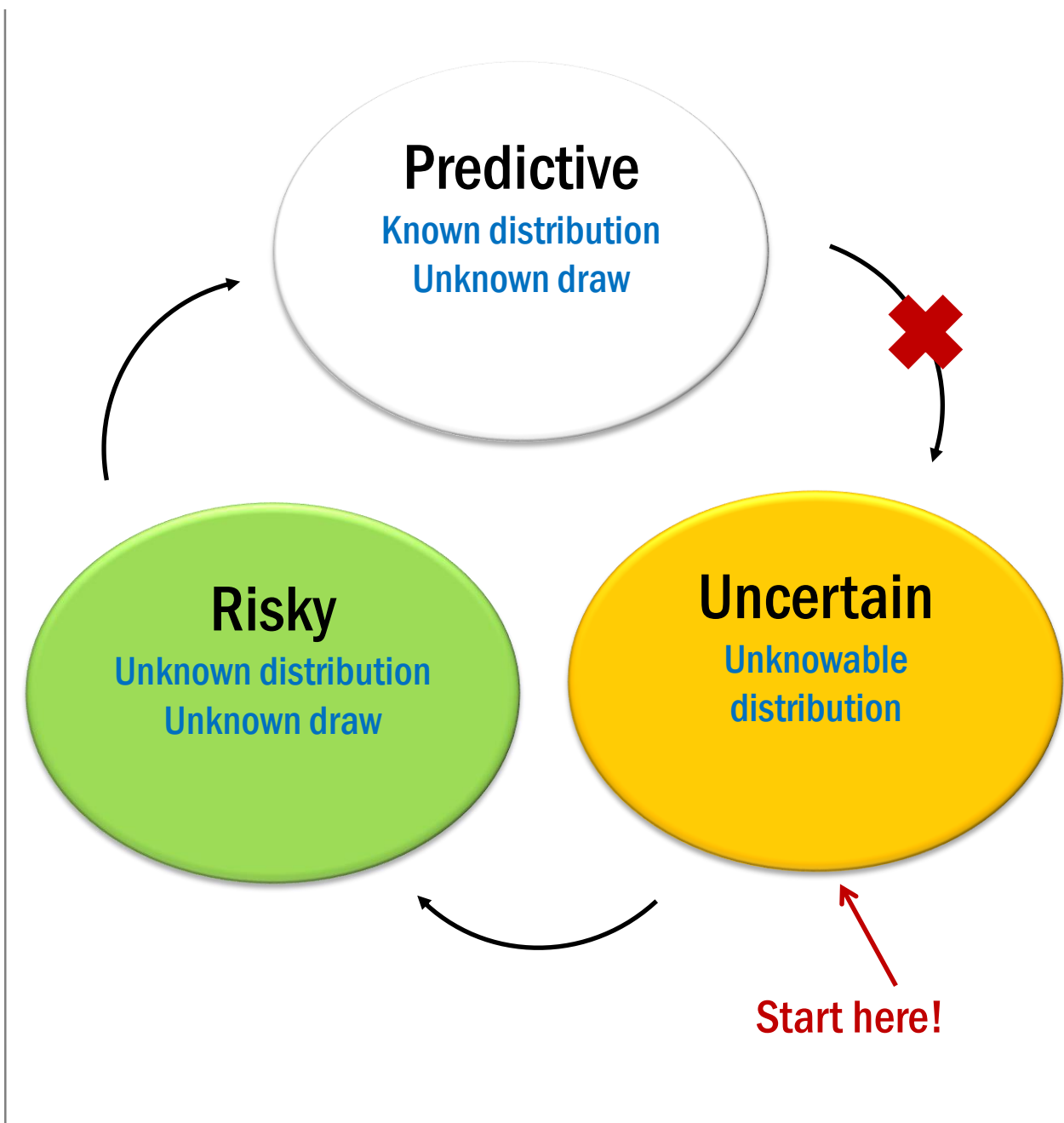
Knightian Uncertainty



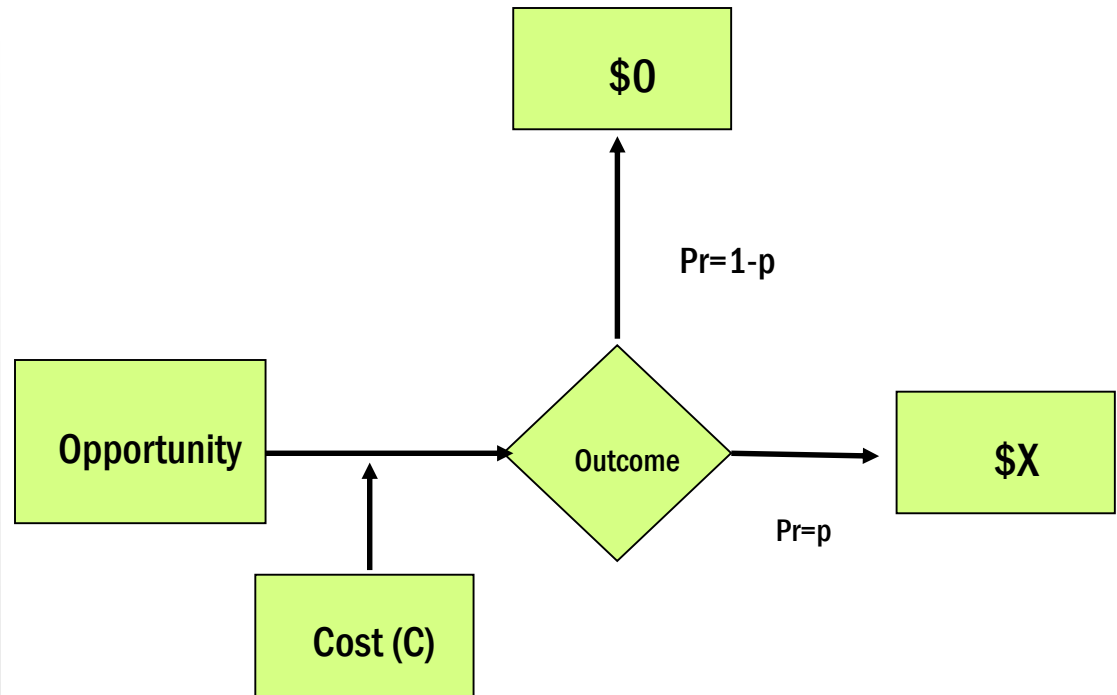
Knightian Uncertainty



Innovation Loop



Predictive (or Risky) World: Managerial Thinking

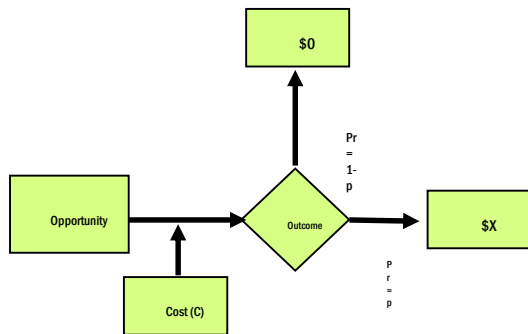


$$\begin{aligned}\text{Expected value} &= (p \cdot X + (1-p) \cdot 0) - C \\ &= p \cdot X - C\end{aligned}$$

Managerial Thinking

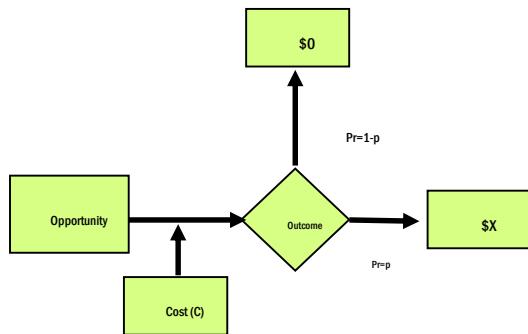
Causal reasoning path

- 1) Problem / Goal (ex. ROI)
- 2) Identify full range of solutions
- 3) Analyze along key dimensions (ex. costs, sales, etc.)
- 4) Select best solution (etc. DCF, B/C ratio, etc.)



$$\begin{aligned}\text{Expected value} &= (p \cdot X + (1-p) \cdot 0) - C \\ &= p \cdot X - C\end{aligned}$$

Managerial Thinking



$$\begin{aligned}\text{Expected value} &= (p \cdot X + (1-p) \cdot 0) - C \\ &= p \cdot X - C\end{aligned}$$

■ Expected Returns

- Probabilistic – and exhaustive –outcomes

■ Competitive Analysis

- Well-known (and limited) set of competitors
- Identify superior position beforehand

■ Exploit knowledge

- Better predict the future
- Avoid surprises
- Key strategy is to learn *all* unknowns *prior to decision*

Case: Fujifilm



■ Acquisition

- In 2001, purchased 25% share of FujiXerox
- In 2008, Toyama Chemical → Pharmaceutical
- In 2011, Diosynth RTP and MSD Biologics → Fujifilm Diosynth → Healthcare & Material Solutions

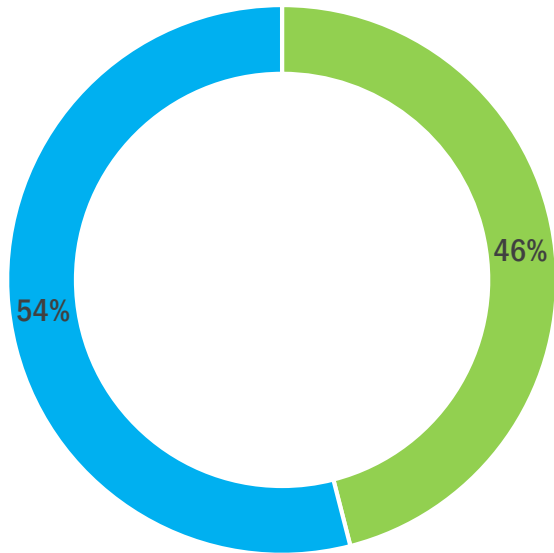
■ Improve

- Invest in new facilities (Fujitac) to produce a high-performance film essential for making LCD panels
- Founded a skin care line Astalift

■ Divest

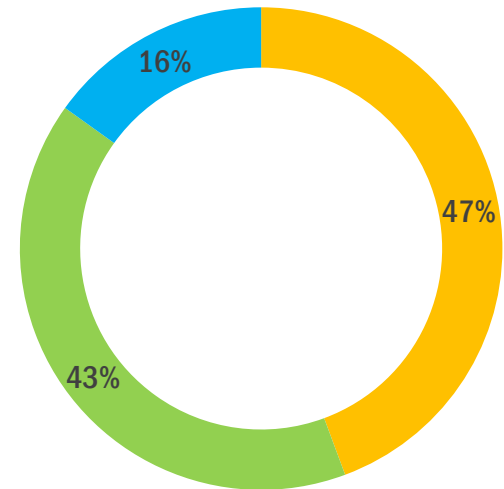
- In 2006, downsize its photographic film business

2001



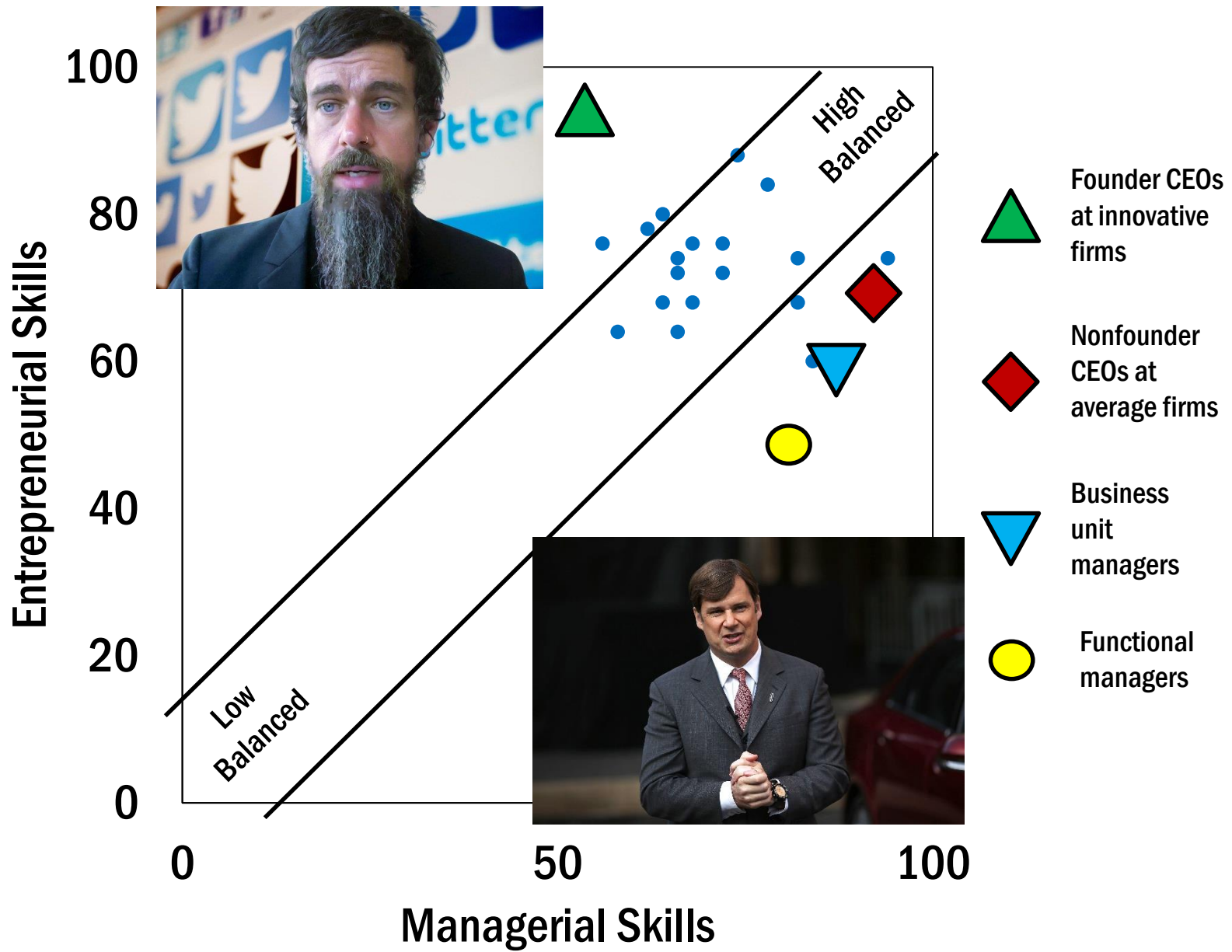
- Document Solutions (Office products & printers, Production services, Solutions & services)
- Imaging Solutions (Photo imaging, electronic imaging, optical devices)

2009



- Health Care & Material Solutions (Health care & material, Highly functional materials, Recording media, Graphic systems/Inkjet display materials)
- Document Solutions
- Imaging Solutions

Jack Dorsey vs. Jim Farley



Uncertain World: How to Manage Uncertainty

- 2 approaches: High-power and Low-power
 - High-power
 - Low-power
- High-power
 - Leverage existing resources
 - Aggressive pursuit
 - Best strategy if have power
- Low-power → Effectuation
 - Start with what you have
 - Then figure it out
 - Involves bigger risks
 - But ways to minimize – e.g., didn't spend too much
- Today is about **effectuation** – or low-power thinking → '**Entrepreneurial Thinking**'

II. 신사업개발 방법론: 기업가적 Approach

신사업개발 방법론: 기업가적 Approach

(1) Bird in the Hand



- Work with your means
 - Who I am
 - What I know
- Question: What can I do?

Idea vs. Opportunity

- 아이디어와 사업기회의 차이는 무엇일까?
- “If opportunities were obvious, there would be no extra economic rewards (rents) for the entrepreneur.”

Frederick W. Smith: “Absolutely, Overnight!”



플랫폼 비즈니스

- 교차 네트워크 확보
 - Sellers 와 Buyers 모두 네트워크 효과 누림
- 어떻게?
 - 가격탄력성이 낮은 집단부터 공략
 - 이들에게 혜택을 우선적으로 혜택을 주어 모으자
 - 소위 '대박' 상품(Marquee User) 기획
- 교차 네트워크가 확보되면 플랫폼 거래가 시장 거래 보다 싸진다
- 수익은 교차 네트워크 확보 이후에나...

플랫폼 비즈니스

- 혁신 주도형 R&D 사업? 메타버스?
NFT?
 - 노동집약적 산업
 - 발로 뛰는 것

Example

- 배달의 민족 (김봉진 대표)
 - 자영업자
- 직방 (안성우 대표)
 - 부동산 업자

Idea vs. Opportunity



- Ideas come from everywhere
- Ideas are cheap
- Ideas are not just from technology but from change
- Constraints help
- Ideas are a function of means (different people look at the same news story and come up with different business ideas)
- $\text{Opportunity} = \text{Idea} + \text{Action}$
- Action is what matters—gives you profits!

신사업개발 방법론:
기업가적 Approach

(2)
Strategic
Partnership



- Evaluate options for action through your network of social contacts
 - Whom I know
- Question: Whom do you know, and how might they help guide your new business?
 - Do NOT directly compete against incumbents
 - Do NOT engage in price competition

Example: 경쟁?



■ Yahoo! attacks

- In 1998, eBay went public with an IPO
- Yahoo! announced to plan to enter the p2p auction business; and it was entirely free!
- eBay created a SWAT team

■ Counter attacks by eBay

- Decided to stand firm on price
- But made more extensive use of pictures, organized auction categories in a more effective way, simplified the registration process, and offered a bidding tutorial for newcomers
- Put more efforts on category-specific trade shows, a major venue for buyers and sellers to meet

Example: 경쟁?



■ Amazon attacks

- In 1999, Amazon's own p2p auction service is now online
- Amazon also started showing up at trade shows, which is eBay's grassroots strategy
- eBay reinstated the SWAT team.
- Amazon offered free insurance, paid out on an honor system, lower listing fees (10 cents vs. 25 cents), accepted a credit card (larger merchants)
- But no commodity, not even a chat board

■ Counter attack by eBay

- Failed in partnering with Accept.com but then acquired Billpoint to facilitate p2p credit card payments

Example: 협업!

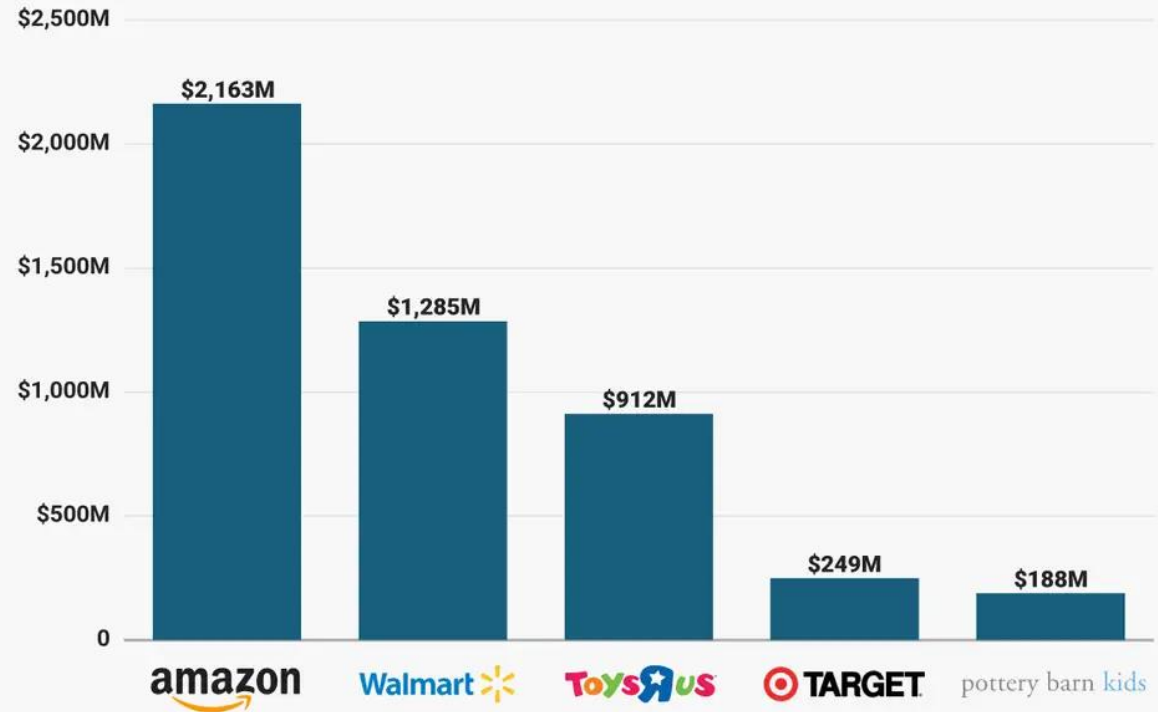
■ Amazon vs. Toys“R”us

■ 온/오프라인 협업



ONLINE SALES OF TOYS AND BABY PRODUCTS IN THE US

Estimates include segment specific net sales in 2016



SOURCES: ecommerceDB.com, Statista

BUSINESS INSIDER

Example – 협업!



- SpaceX and T-Mobile plan to work together to use the rocket company's satellites to provide connections to T-Mobile cellphones across the U.S., even in remote areas with no current wireless service.
- “It won’t compete with PH telcos, will merely be a complementary connectivity provider.” - Elon Musk



신사업개발 방법론:
기업가적 Approach

(3) Affordable Loss



- Only invest what you can afford to lose
- If that is not enough – make it enough
 - Change what you want to do and/or
 - Get others to commit resources
- Question. What can you afford to lose?

신사업개발 방법론: 기업가적 Approach

(4) Leverage Surprises

- Every event is an opportunity...
- So long as you are willing to adapt to the new world that results from it.
- Question: Are you prepared to leverage contingency or learn from failure?



Lean Approach

- **사내벤처 - affordable loss**
 - 기회비용이 적은 것부터 시작
 - 필요시 개발팀이나 마케팅팀 등 다른 팀 직원들과 협조
 - 사내 자원을 많이 쓰는 방식이 아니라 소규모로 운영
 - 예: 네이버 웹툰, IBM E3, Sony Startup Accelerator Program (SSAP), Bosch Acceleration Program

Bosch



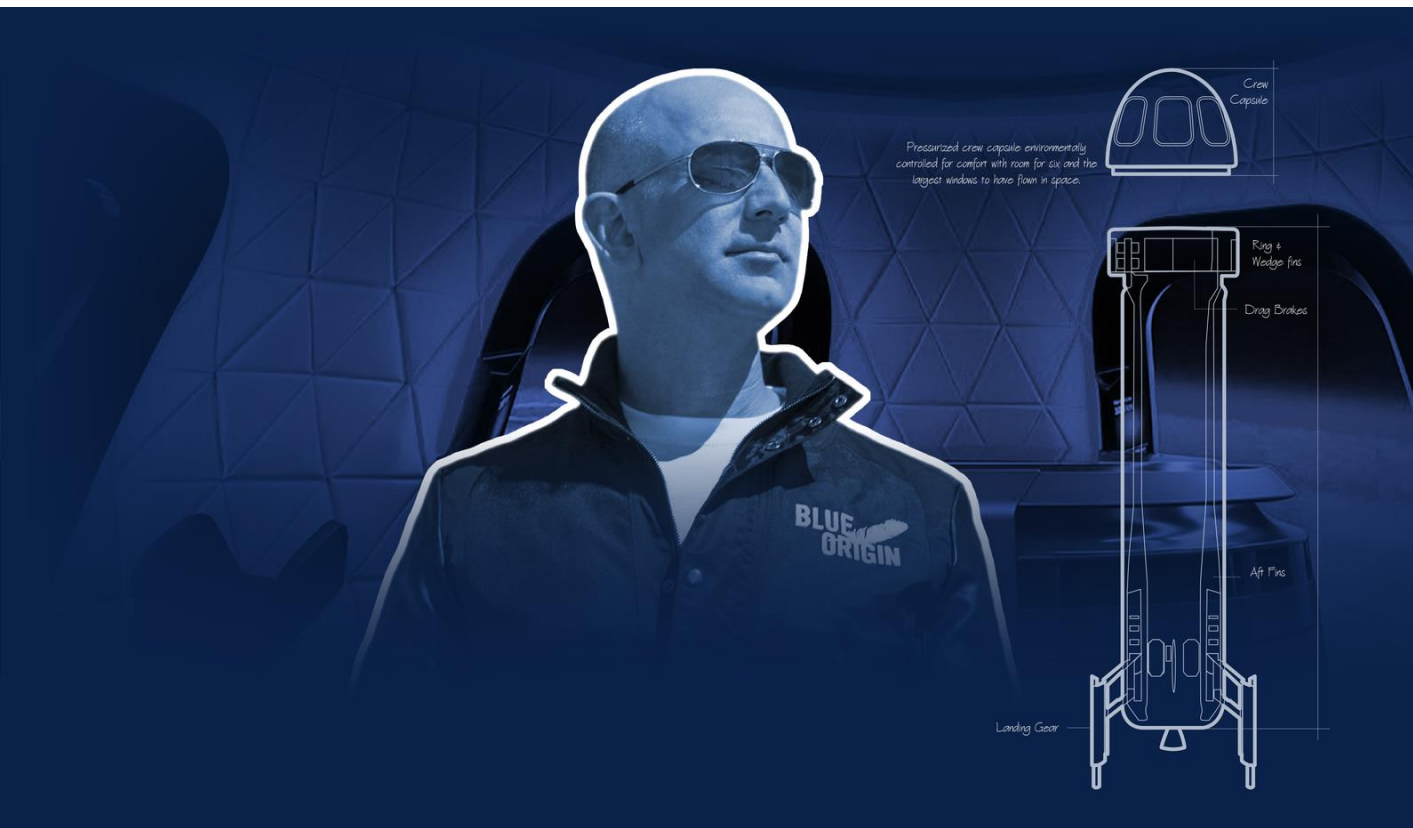
- **German MNC founded in 1886**
 - **Mobility Solutions (hardware and software)**
 - **Consumer Goods (household appliances and power tools)**
 - **Industrial Technology (drive and control)**
 - **Energy and Building Technology**
- **Business Model Innovation Dept. in 2015**
 - **Bosch Accelerator Program in 2017**
 - **200 teams, 2~10 months, 120K euros,**
 - **15 teams, additional 300K euros**

Lean Approach

- Learning from failure
 - 실패를 ‘용인’? ‘기대’!
- 최소 비용으로 최대한 빠르게 학습
 - Ideation/hypothesis → Prototyping → Test → Feedback → Ideation
- Iterative development
 - SpaceX
 - “SpaceX really brought that Silicon Valley, entrepreneurial culture to an industry that had a very different corporate culture. That was revolutionary”

Blue Origin's New Glenn

: Developmental program began in 2012



SpaceX's Starship

: Announced the project on Mars Colonial Transporter (MCT) in 2012



Blue Origin's New Glenn

: BE-4 engine has not been developed yet



SpaceX starship

: Starhopper successfully hovered and landed in 2019

“If design is taking too long, the design is wrong,” said Elon Musk



From July 25, 2019 to May 5, 2021

: SN8 (77 days); SN9 (41 days); SN 10 (33 days); SN 11 (22 days);
SN15 (25 days)

LIST OF STARSHIP FLIGHTS



신사업개발 방법론:
기업가적 Approach

(5) Execute



- $\text{Innovation} = \text{Creation} * \text{Commercialization} * \text{Commitment}$
 - Creation of ideas
 - Commercialization: value capturing activities
 - Commitment: making it happen
- $\text{Viable business} = \text{Opportunity} + \text{Commitment}$
- 기회는 만들어지는 것
- 예: Fedex

Which Is Correct about an Entrepreneurial Leader?



- Entrepreneurs are usually creative.
- Entrepreneurs enjoy and seek risk.
- Entrepreneurs are more personally ambitious than other leaders.
- Entrepreneurs are natural salespeople.

Subtler Truth: Entrepreneurial Leader

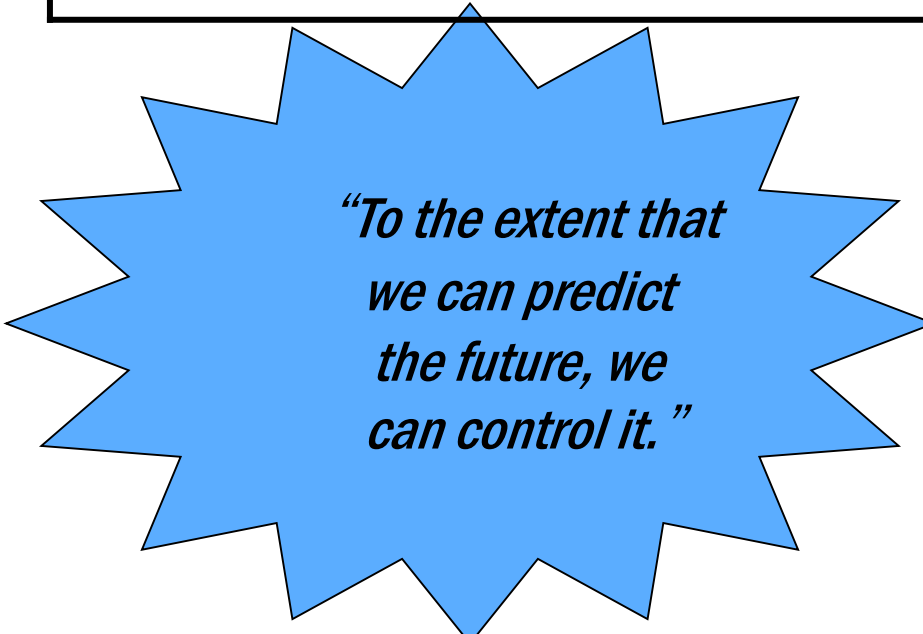
- Entrepreneurs are usually creative.
 - Entrepreneurs are curious seekers of adventure, learning and opportunity.
- Entrepreneurs enjoy and seek risk.
 - Entrepreneurs are more comfortable with risk.
- Entrepreneurs are more personally ambitious than other leaders.
 - Entrepreneurs are driven by a need to own products, project and initiatives.
- Entrepreneurs are natural salespeople.
 - This one is correct.

Entrepreneurial Leaders vs. Conventional Managers

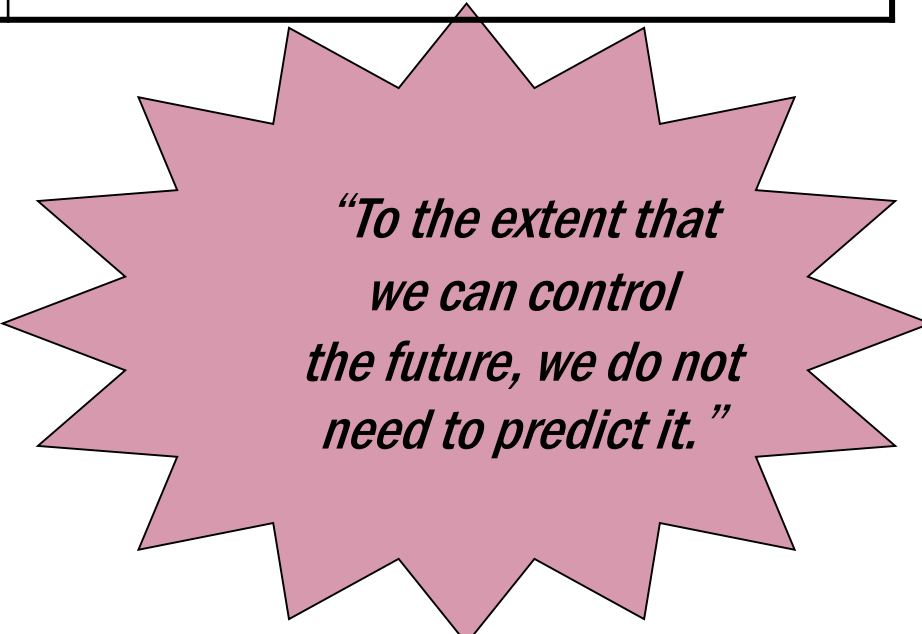
- What makes entrepreneurial leaders special?
 - The ability to thrive in uncertainty
 - A passionate desire to author and own projects
 - Unique skill at persuasion

“신사업 개발: Two Approaches”

Managerial Thinking	Entrepreneurial Thinking
Goal-driven	Means-driven (Bird in Hands)
Competitive Analysis	Strategic Partnership
Expected Returns	Affordable Loss
Avoid Surprises	Leverage Surprises
Plan	Action

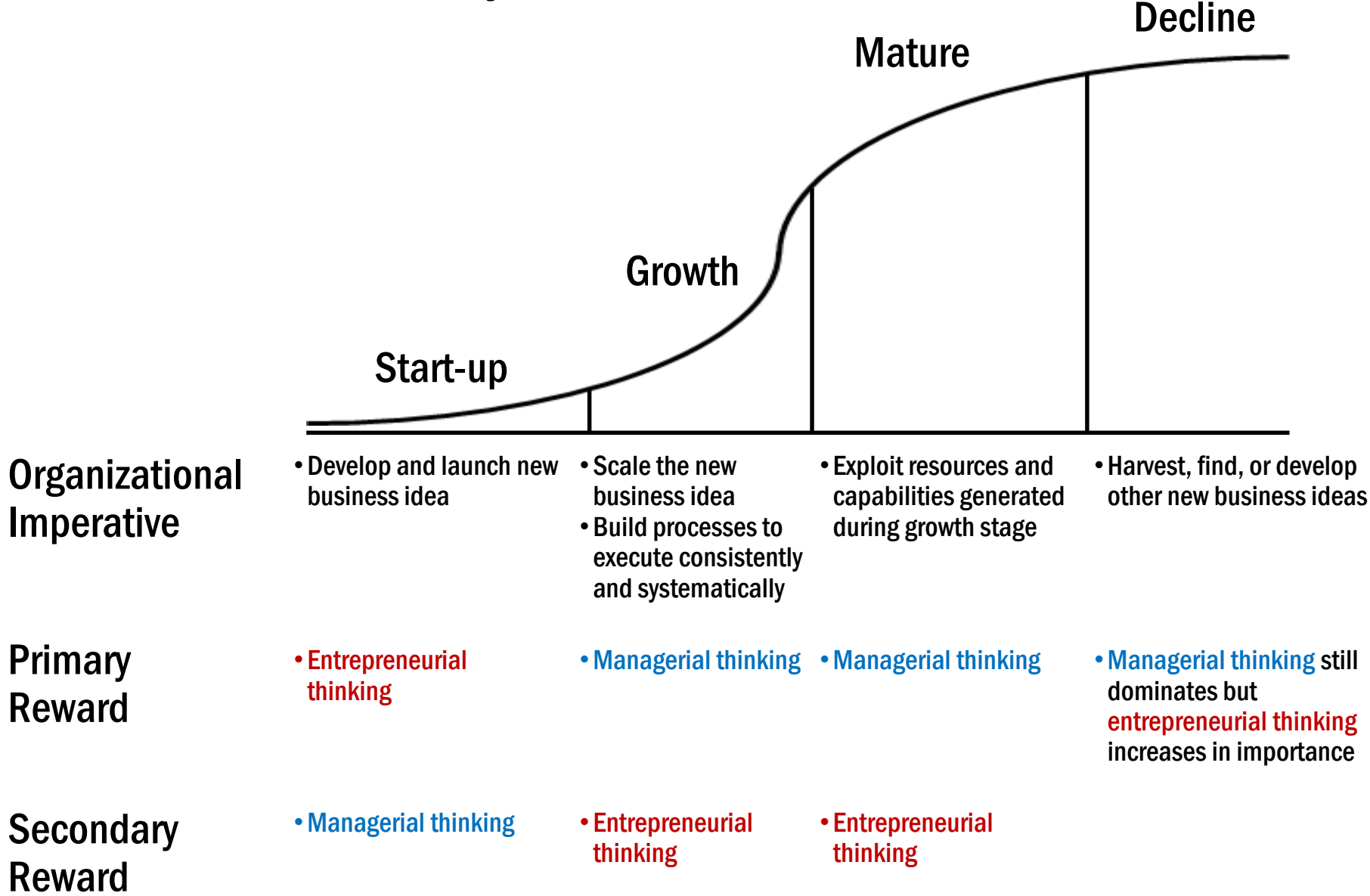


*“To the extent that
we can predict
the future, we
can control it.”*



*“To the extent that
we can control
the future, we do not
need to predict it.”*

Executive Skill Life Cycles



Questions?

Thank you!
