

Customer OI Based Business Model Developing Circle

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[Journal of Open Innovation; Technology, Market, and Complexity. www.jopeninnovation.com](http://www.jopeninnovation.com), BM투
고가능

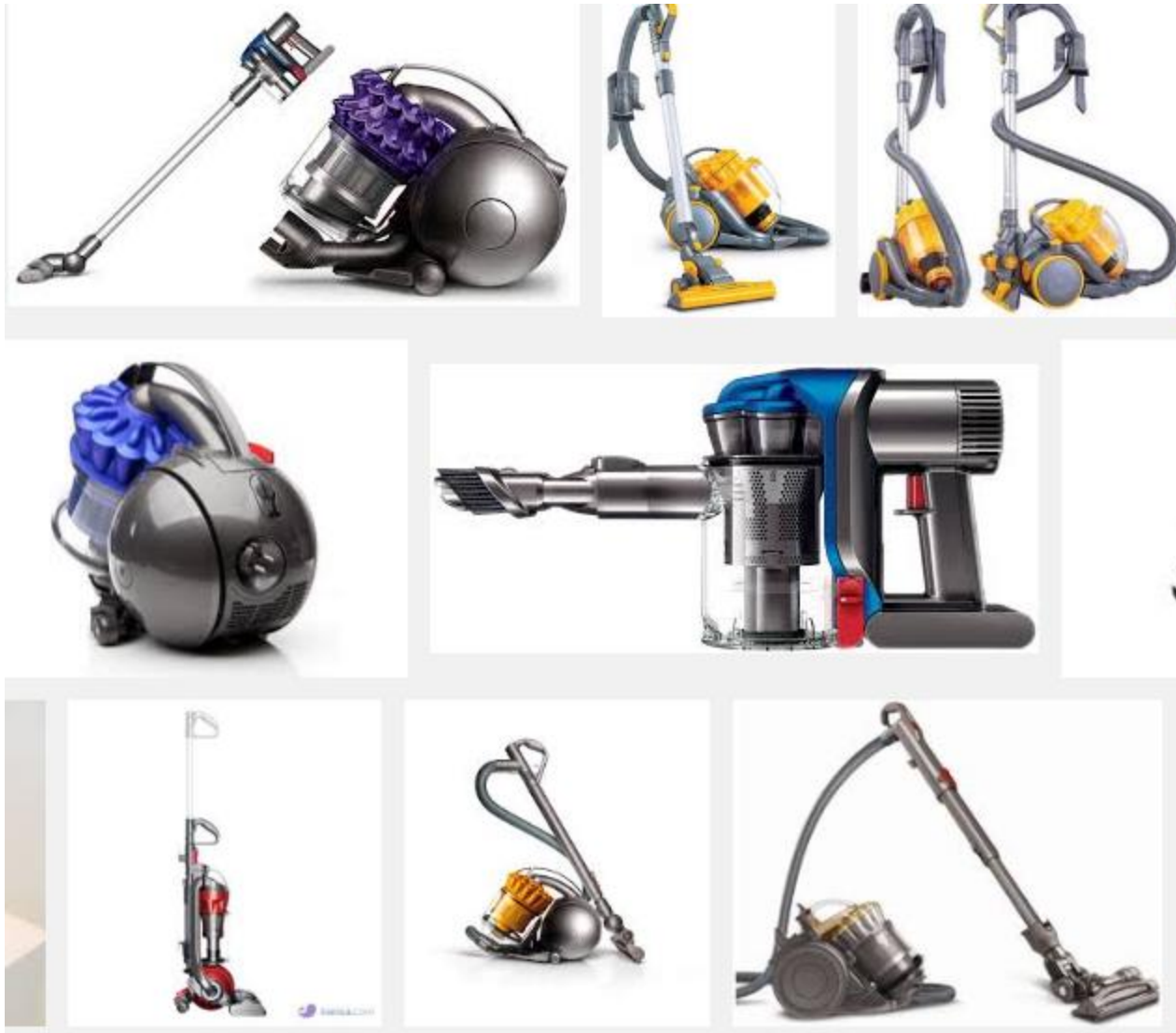
[Society of Open Innovation; Technology, Market, and Complexity. www.openinnovationtmc.com](http://www.openinnovationtmc.com) OI
및 BM 경진대회

동 강의안 2016 0126 Customer OI based BM개발세미나 자료집입니다.
인용후사용 요청 드리며 2016 .06 출간되는 책을 추후 인용 요청 합니다.



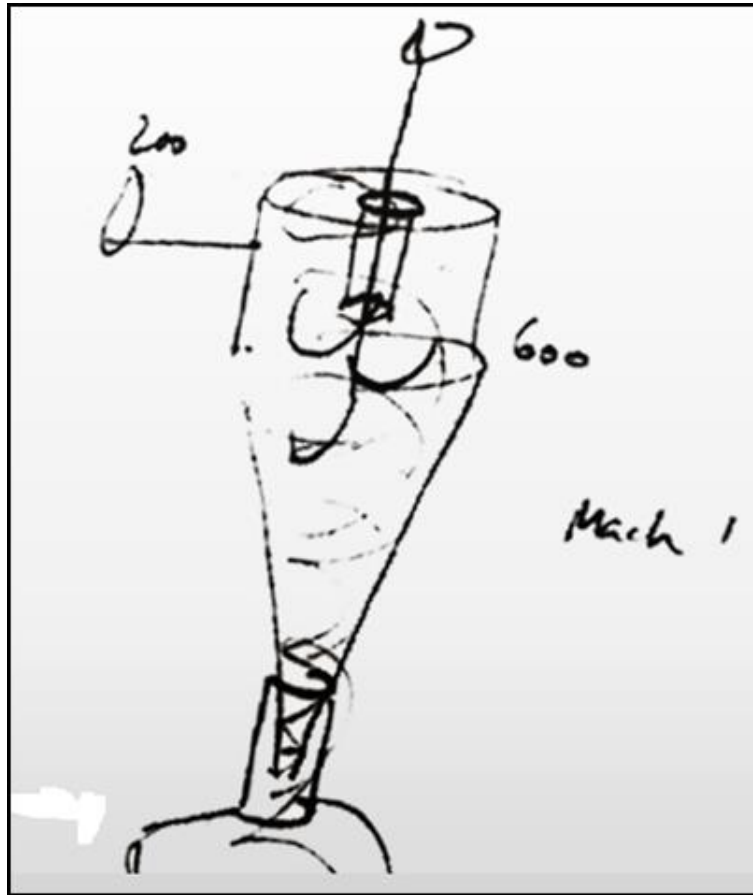






‘진공청소기로 흡입한 먼지가 가득한
먼지봉투를 사람의 손으로 교체하는
것은 불합리하다’

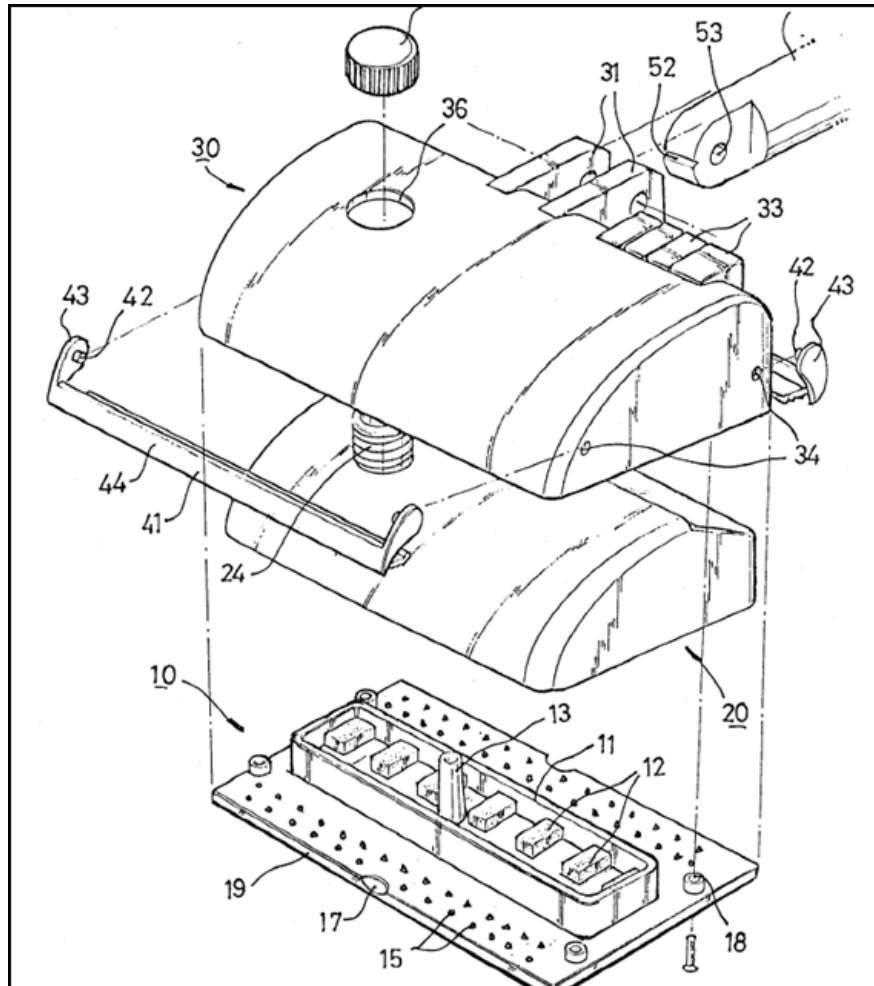
5년간 5,127개의 시제품을 만든 끝에
먼저 봉투없는 청소기 개발에 성공하
였습니다.



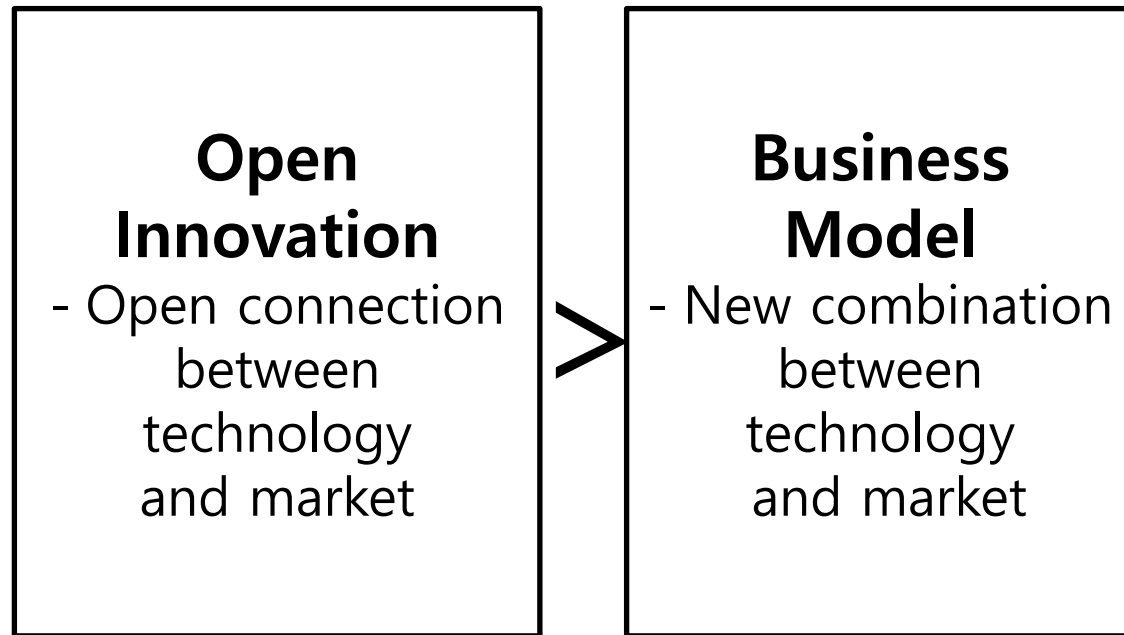


바쁜 생활 속에서 퇴근해 와서 진공청소기 청소 후 다시 걸레질은 무릎을 꿇고 구석구석 닦아야 하며, 많이 닦은 걸레는 세균의 온상이 되어 방바닥에 더욱 세균을 퍼뜨리는 역할을 한다는 사실에 주목

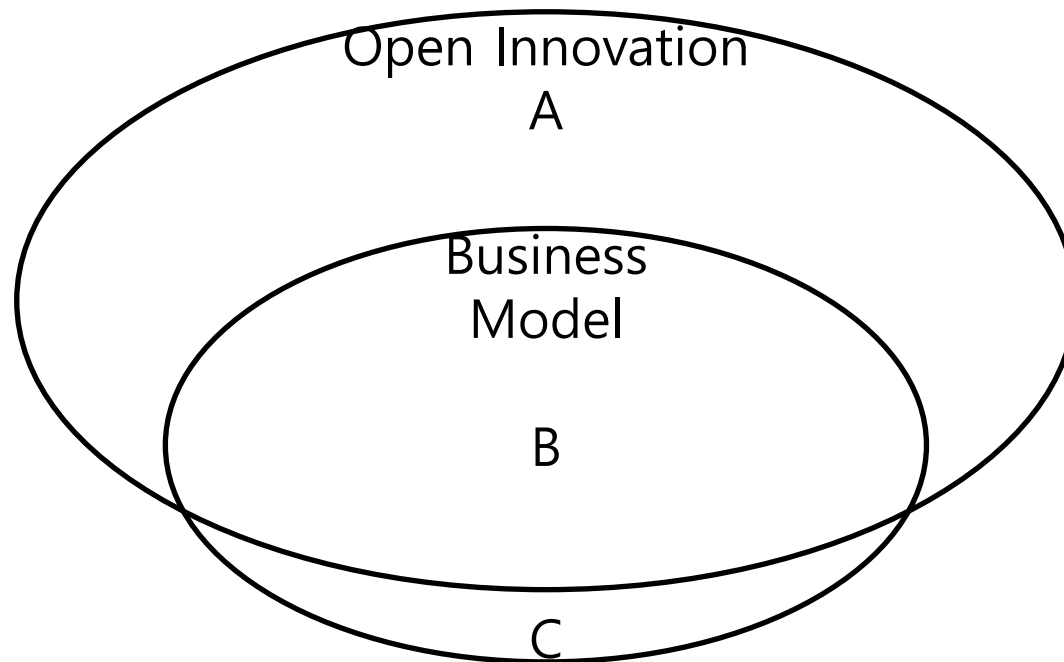
소비자로서의 강한 문제의식은 발명의 원천이 된다. 이화여자대학에서 불문학을 전공하고 대학원에서 경영학을 전공한 한 경희는



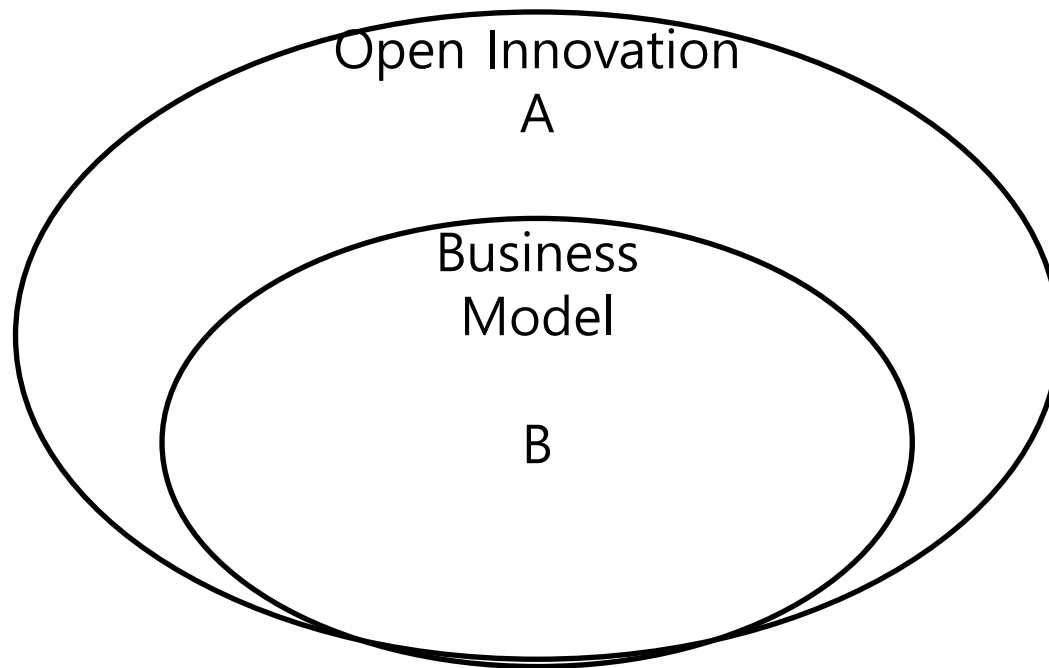
이와 BM의 관계



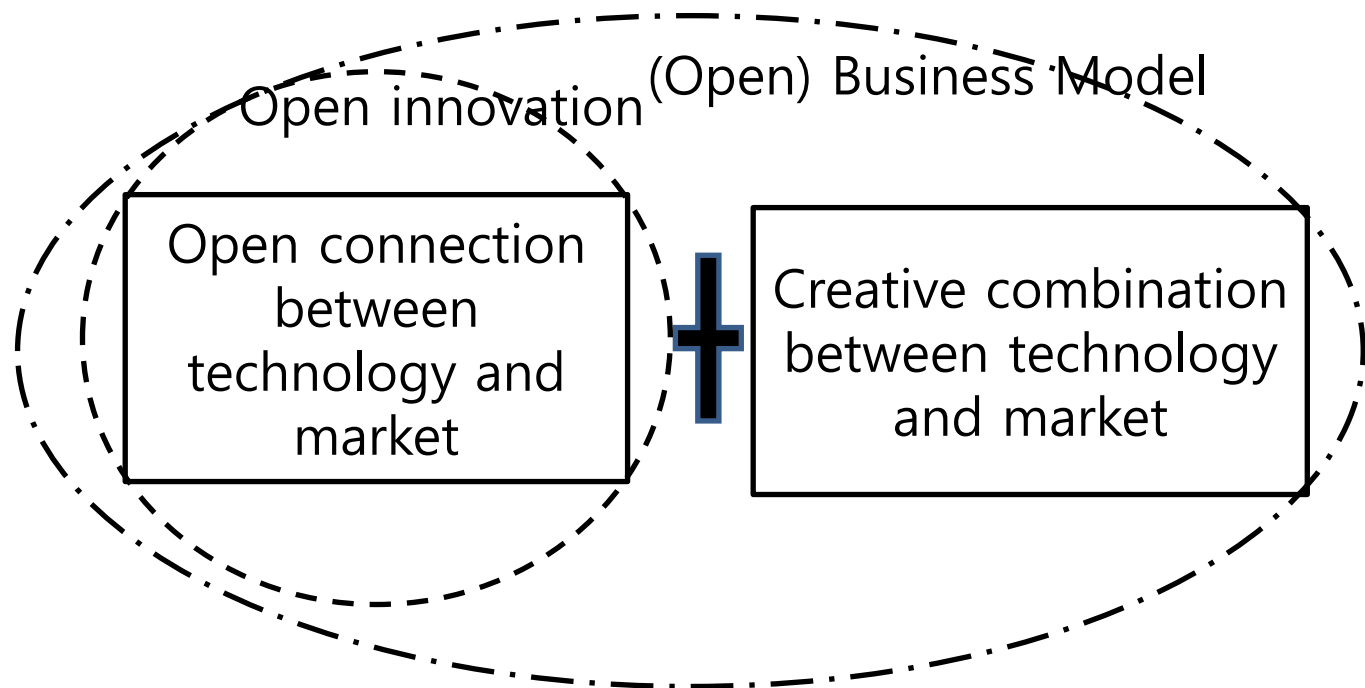
이와 BM의 관계



이와 BM의 관계



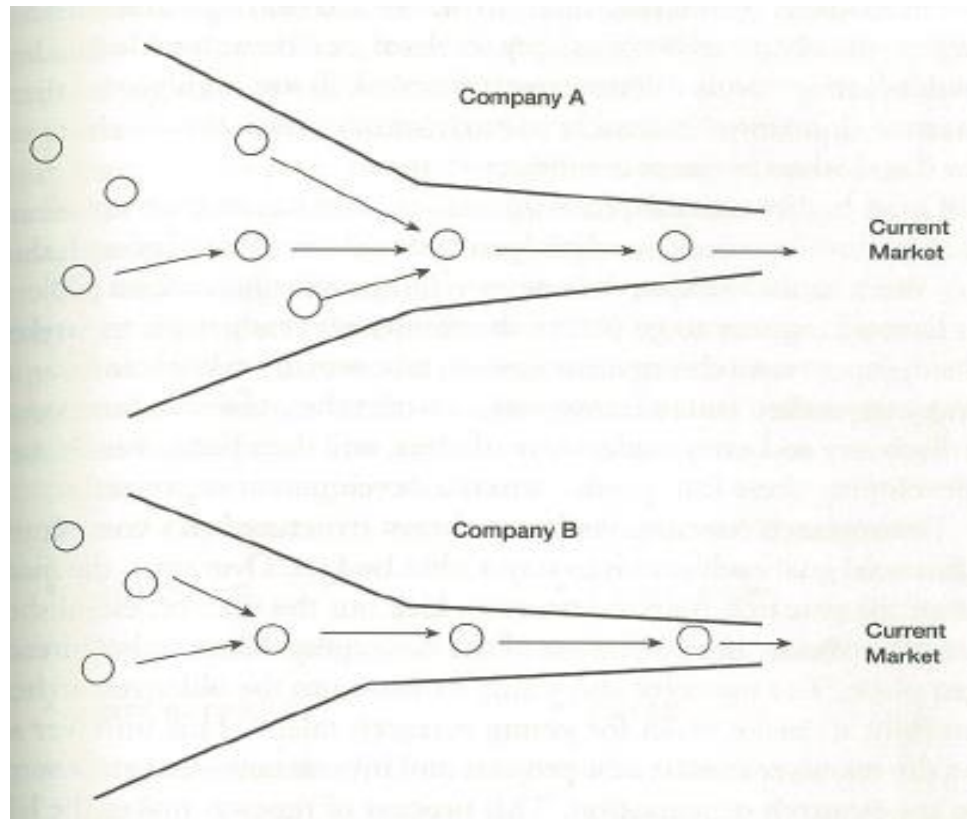
이와 BM의 관계



Closed Innovation

- The Closed Innovation Paradigm is the mental model of most major U.S. corporations to run their labs as well as Xerox's PARC, in the twentieth century
 - inwardly focused
- One must do everything internally, from tools and materials, to product design and manufacturing, to sales, service, and support

Closed Innovation

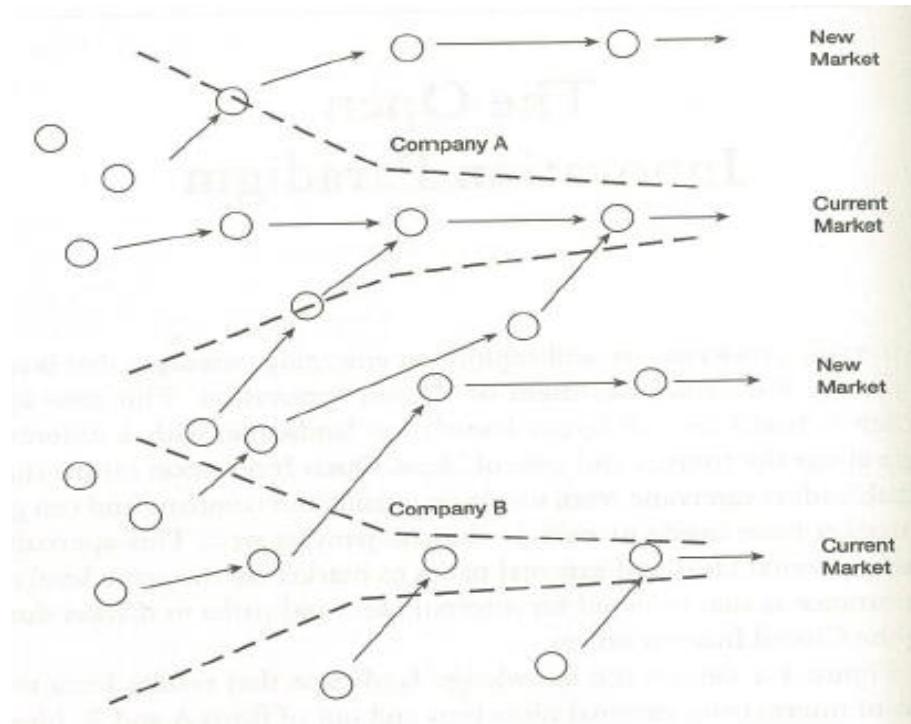


The Knowledge Landscape in Closed Innovation

Open Innovation

- Open Innovation means that valuable ideas can come from inside or outside the company and can go to market from inside or outside the company as well.

Open Innovation



The Knowledge Landscape in the Open Innovation Paradigm

Open Innovation

- New Role of Research
 - not just knowledge generation, but also knowledge brokering.
- New Perspective toward Venture Capital
 - Open Innovation companies accept VCs, and startup firms it funds, whereas Closed Innovation ones view them as pirates and parasites

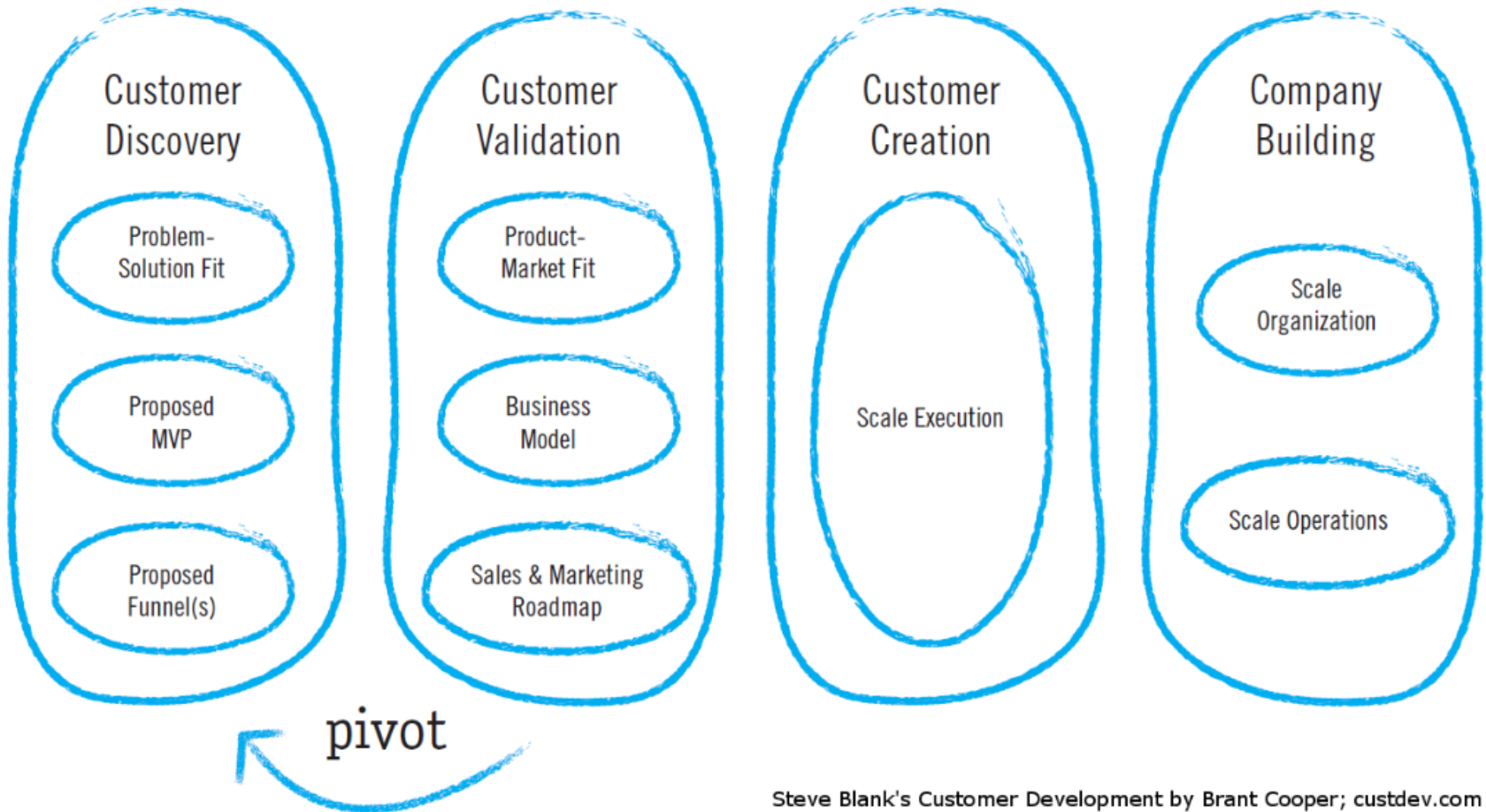
Components of creative performance of leader user

- domain-relevant resources
 - product related knowledge and use experience
 - technical skills required
- Creativity-relevant resources
 - appropriate cognitive style
 - implicit or explicit knowledge of heuristics for generating novel ideas
- Motivation
 - attitudes and motivation toward the task

Lean Startup

- Entrepreneurs are everywhere.
- Entrepreneurship is management
- Validated learning
- Build-Measure-Learn
- Innovation accounting
 - how to measure progress
 - how to set up milestones
 - how to prioritize work

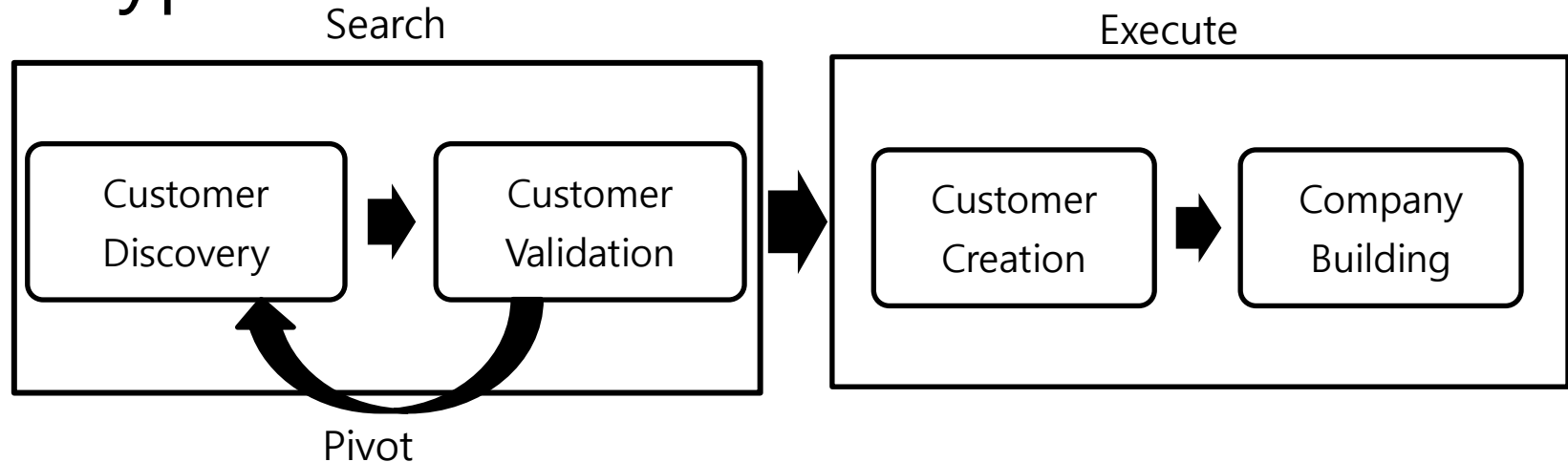
Customer Development



Steve Blank's Customer Development by Brant Cooper; custdev.com

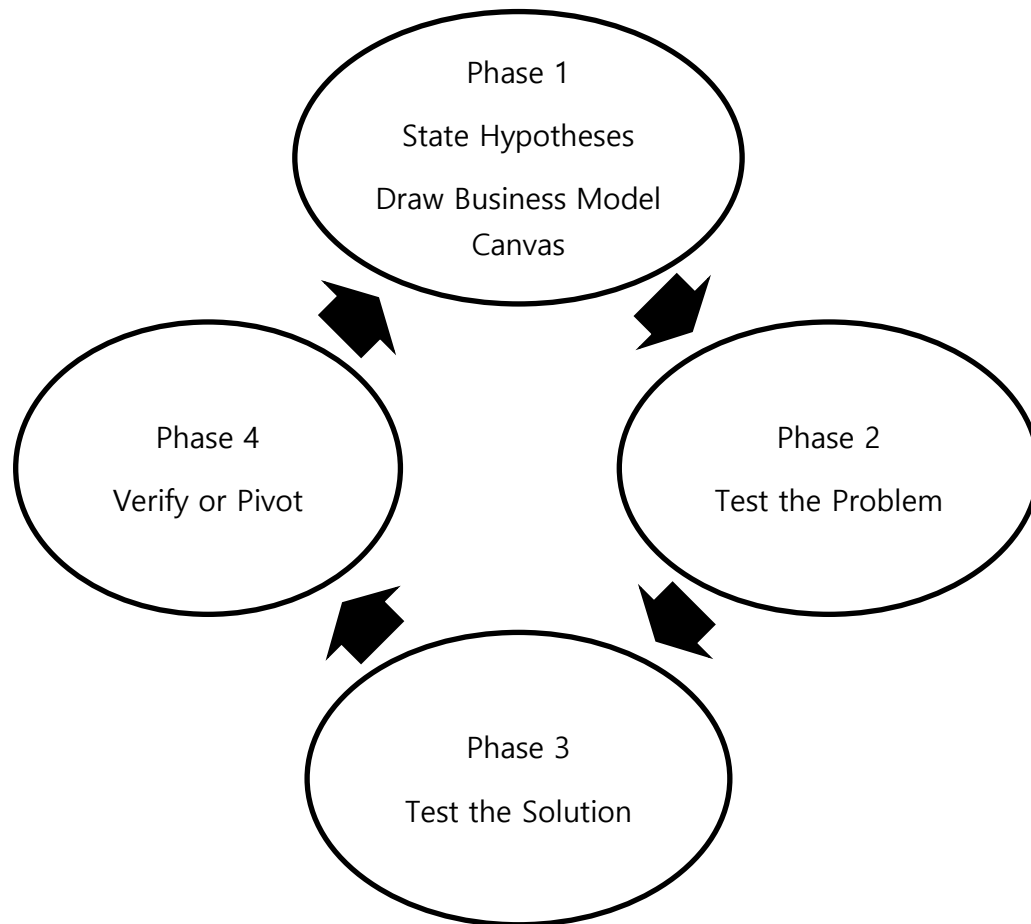
Customer Development Process

- Most Startups lack a structural process for testing their business model hypothesis.



Blank S., Dorf B.(2012)

Overview of Customer Discovery

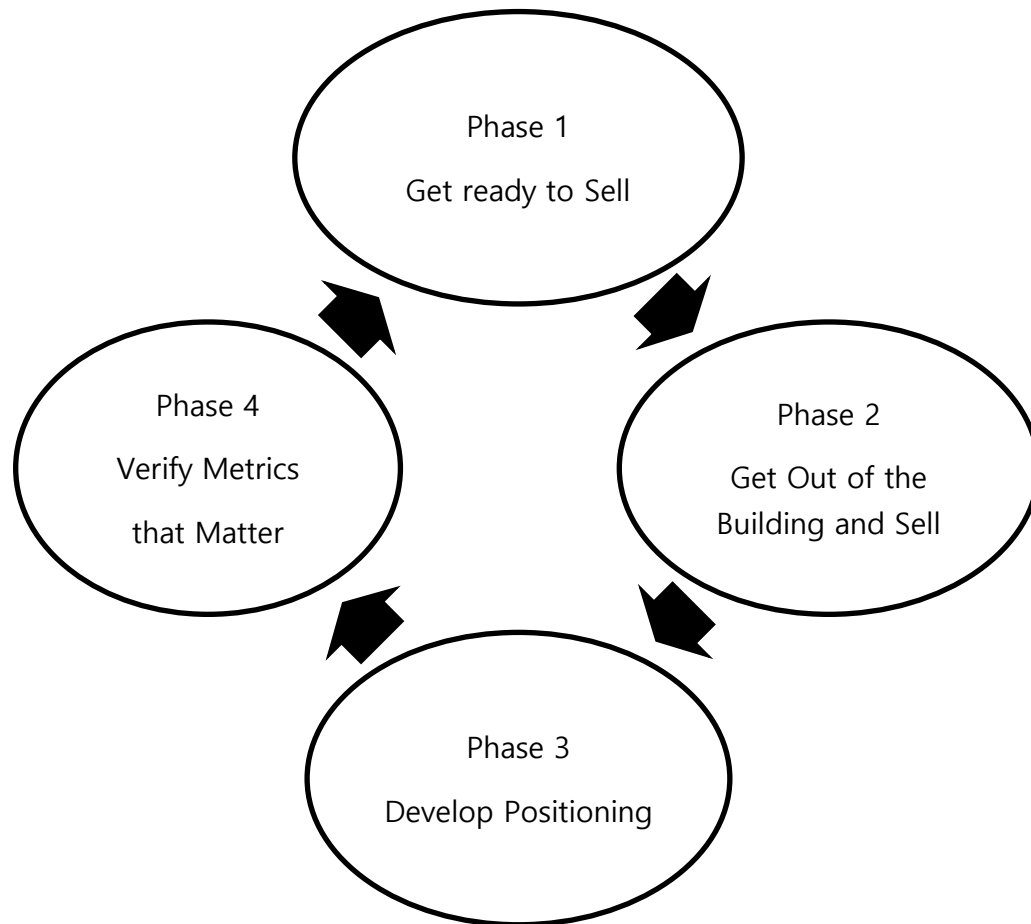


Customer Discovery:
Overview of the Process

Customer Discovery
Philosophy

- Get out of Building
- Develop the Product for the few not Many
- Build a Minimum Viable Product(MVP) First

Overview of Customer Validation



Customer Validation

- Have We tested sales and Distribution Channels?

Customer Validation Philosophy

- From Business Model Canvas to the Sales Roadmap Get out of Building
- Developing a sales roadmap is part of the search for a business model.

Lean Startup: Customer and Product Development Interrelatedness

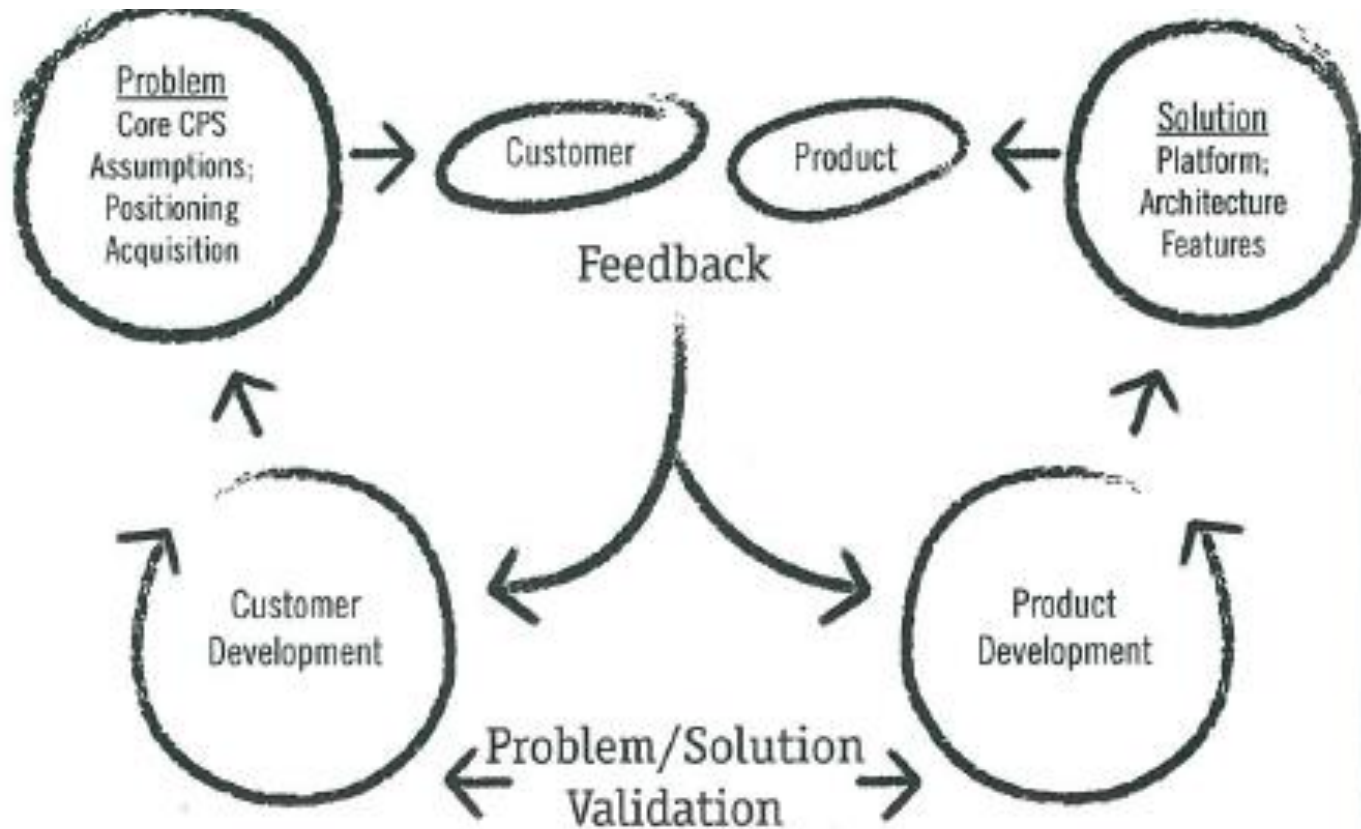
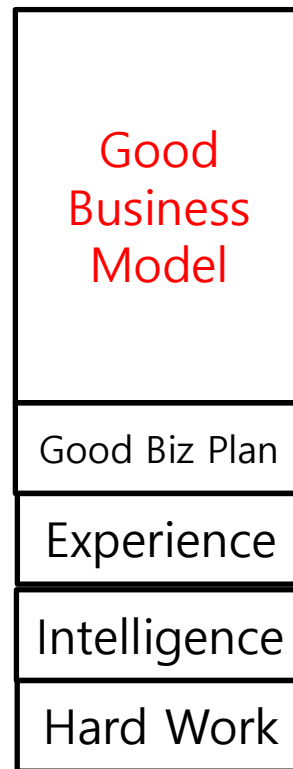


Figure 4: Lean Startup: Customer and Product Development Interrelatedness

The Profit Ladder



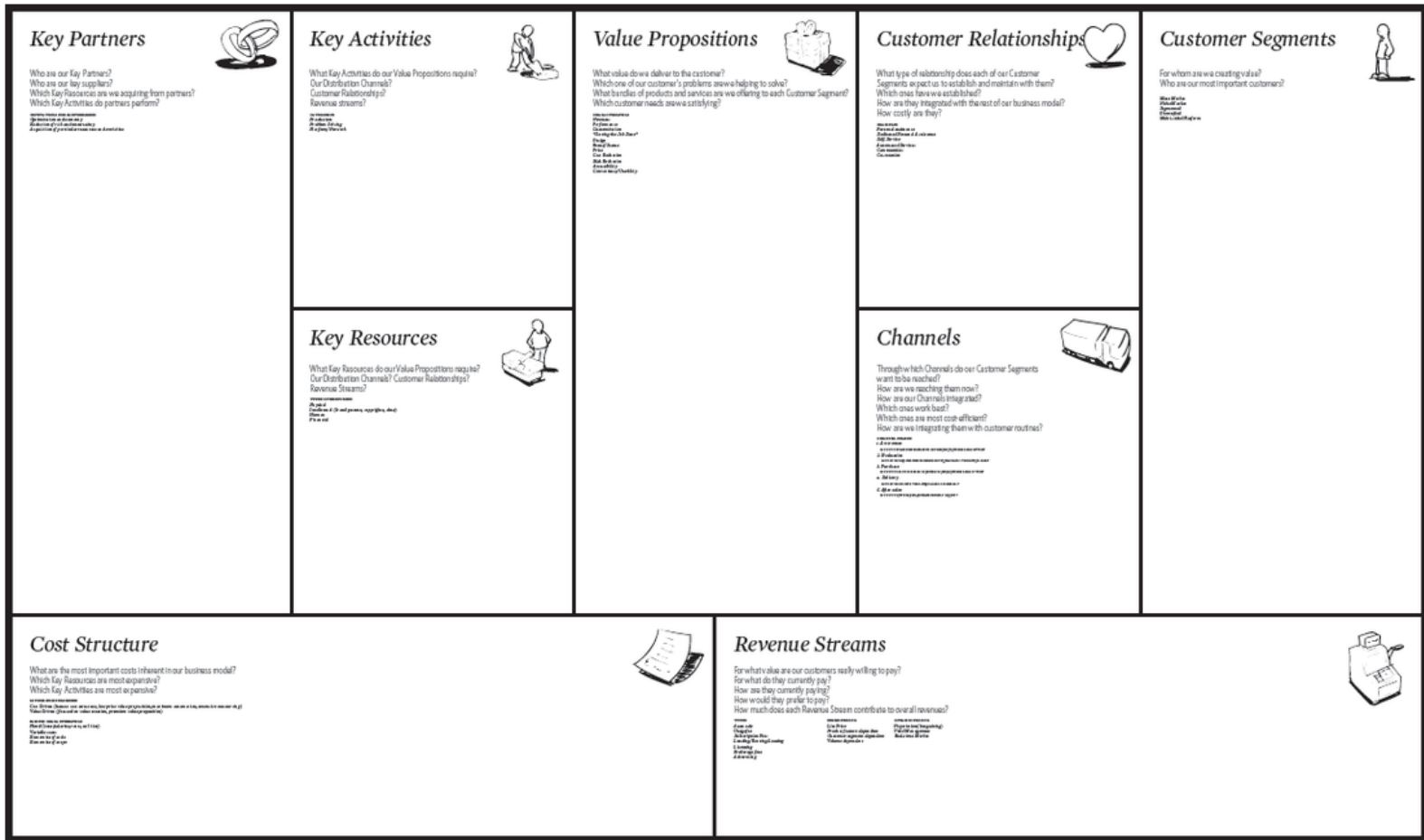
Future of Business Model

- Increased sophistication
- More virtual good
- Intellectual property protection
- Leveraging transparency
- The power of efficient operators
 - not just cheaper

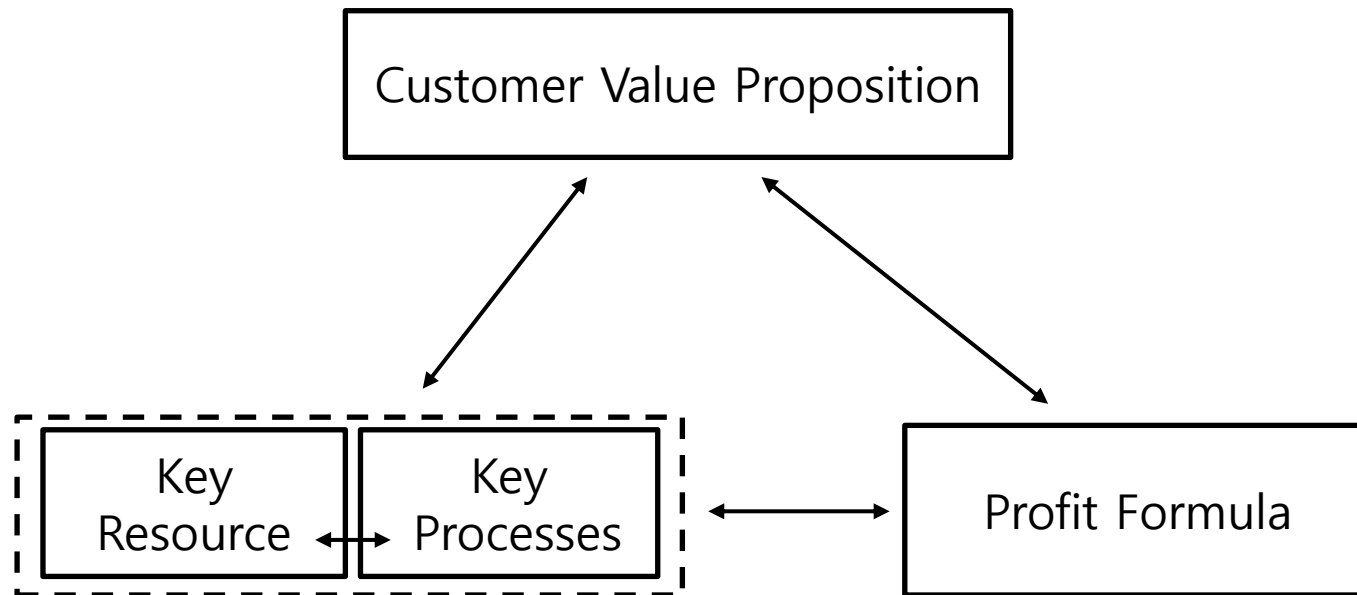
Make your BM difficult to copy

- Deliver products and services better, cheaper, or faster through a BM known only to that company
- Create a closed ecosystem where ongoing use of your product is highly-desirable or required
- Find a way to serve customers other though were unprofitable
- Create a BM, product or service that's patented, trademarked, or difficult to duplicate

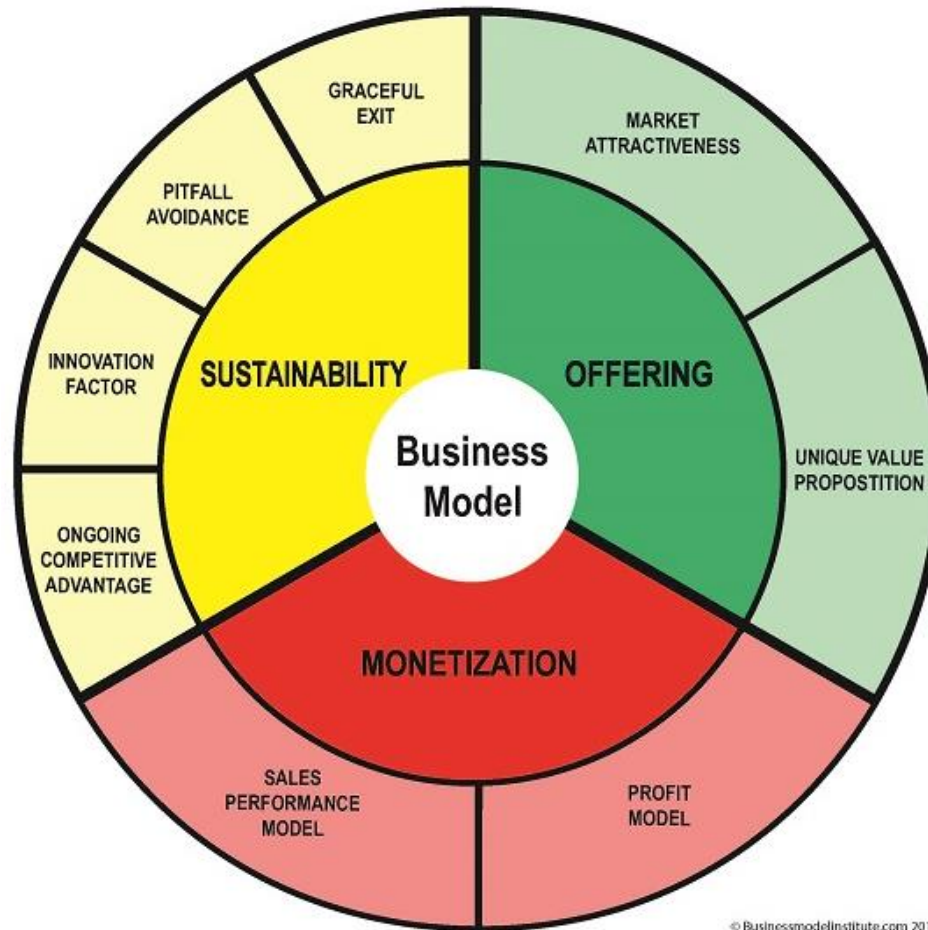
Business Model Canvas



Four Box Business Model




Business Model Wheel



Open Business Model

- Business Model : connection between technology and Market-> value proposition and capturing
- Open BM create value by leveraging many more ideas, due to their inclusion of a variety of external concepts.
- Open BM can also enable greater capture, by using a key asset, resource, or position not only in the company's own business but also in other companies' businesses.
 - Qualcomm, Genzyme, Procter & Gamble, Chicago

Interaction between Manufacturer and Customer

Manufacturer-Customer Interaction in the New Product Development Process		
Mode 1 Listening in		Indirect collection of market/customer information
Mode 2 Asking about		Customers as passive target of observation
		Manufacturer imitated dialogue with customer
		Customer initiated dialogue with manufacturers
Mode 3: Taking Part		Customers are equal partners of the organization
		Customers are independent innovations
		Customers start Startups from their own experience as consumers

Source of Customer Entrepreneurship

- Hobby Addiction
 - fascinated consumer
- Watch Movie
 - meeting creative idea by comparing individual experience and indirect experience at movie
- Read Books
 - creative idea by comparing individual experience and indirect experience at books
- Travel
 - creative idea by comparing normal consuming habit and strange situation at travel sight.

The way to increase Customer Entrepreneurship

- Take a walk with good music
 - enjoy sunshine, fresh air, tree, grass, mountain, river and natures
 - 30 minutes will be good for a day.
- Meditate everyday
 - meditate at least 5 minutes everyday
 - read books which have effect of meditation.

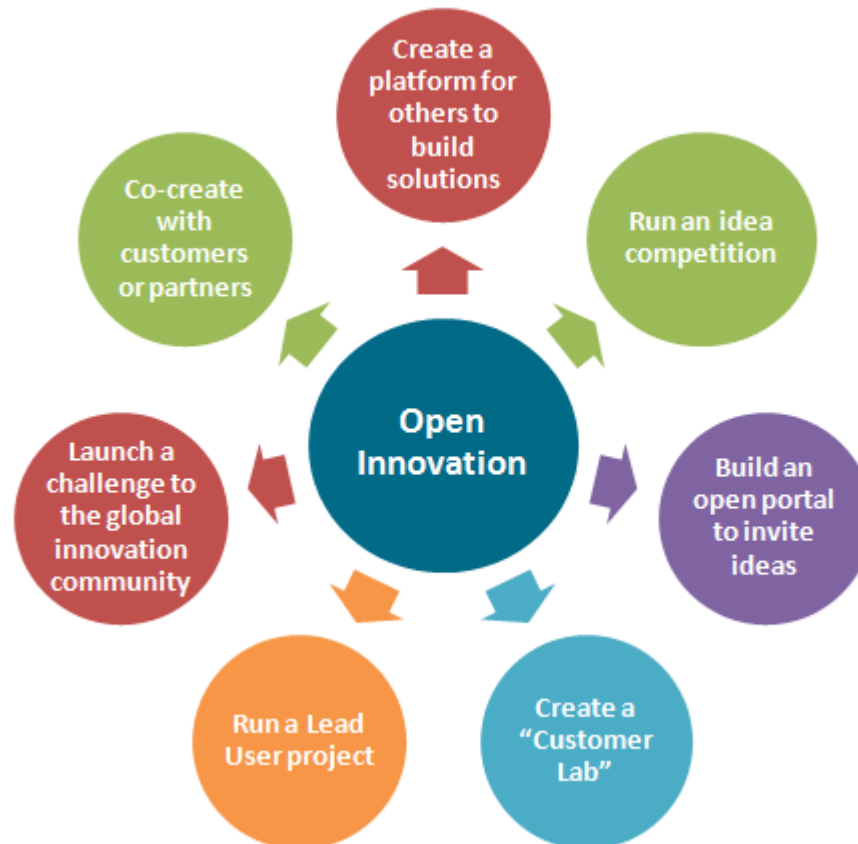
Developing or modifying product for their own use

- Industrial products
 - Printed circuit CAD software
 - Pipe hanger hardware
 - Library information system
 - Surgical equipment
 - Apache OS server software security features
- Consumer products
 - Outdoor consumer products
 - Extreme sporting equipment
 - Mountain biking equipment

Von Hippel E. (2005) p. 20

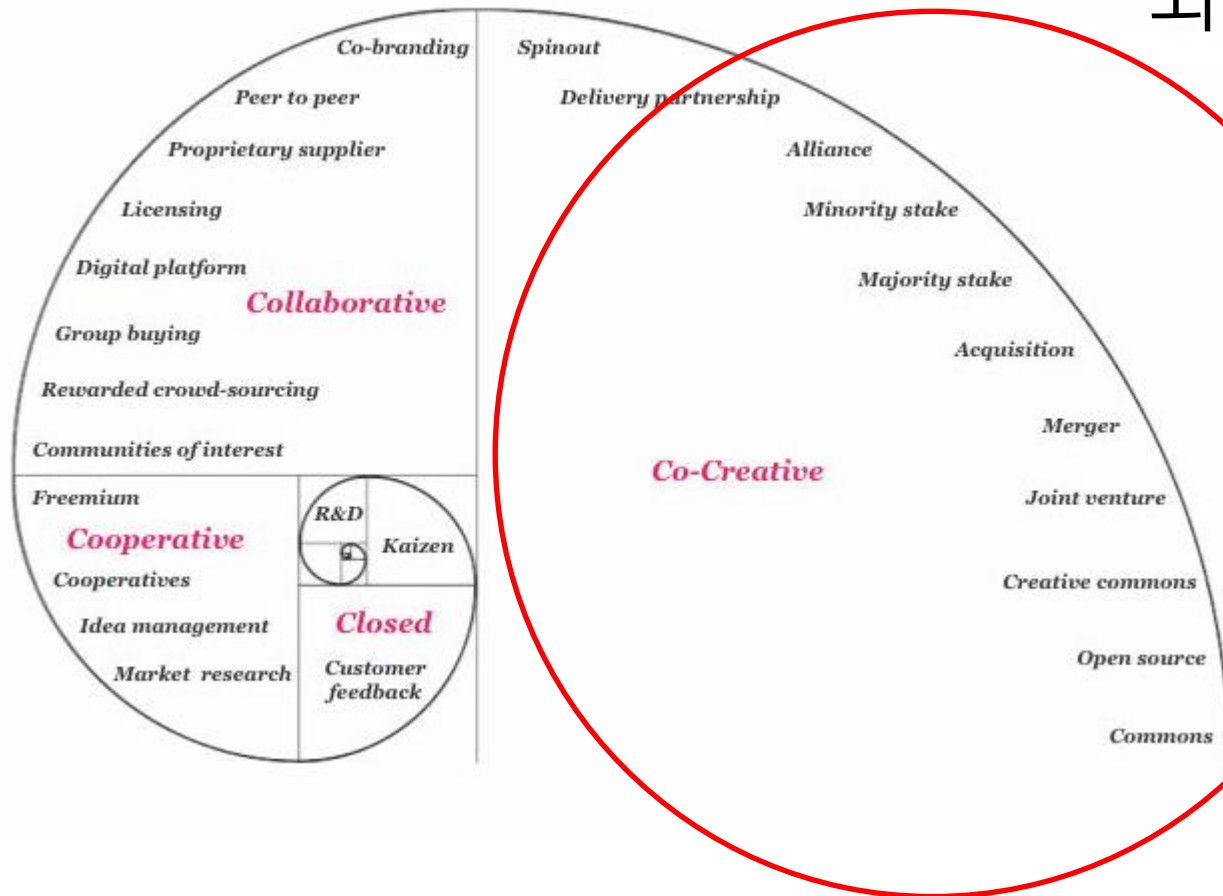
Open Innovation_(개방형 혁신)이란?

기술과 시장의 열린 관계가 만들어 내는 혁신

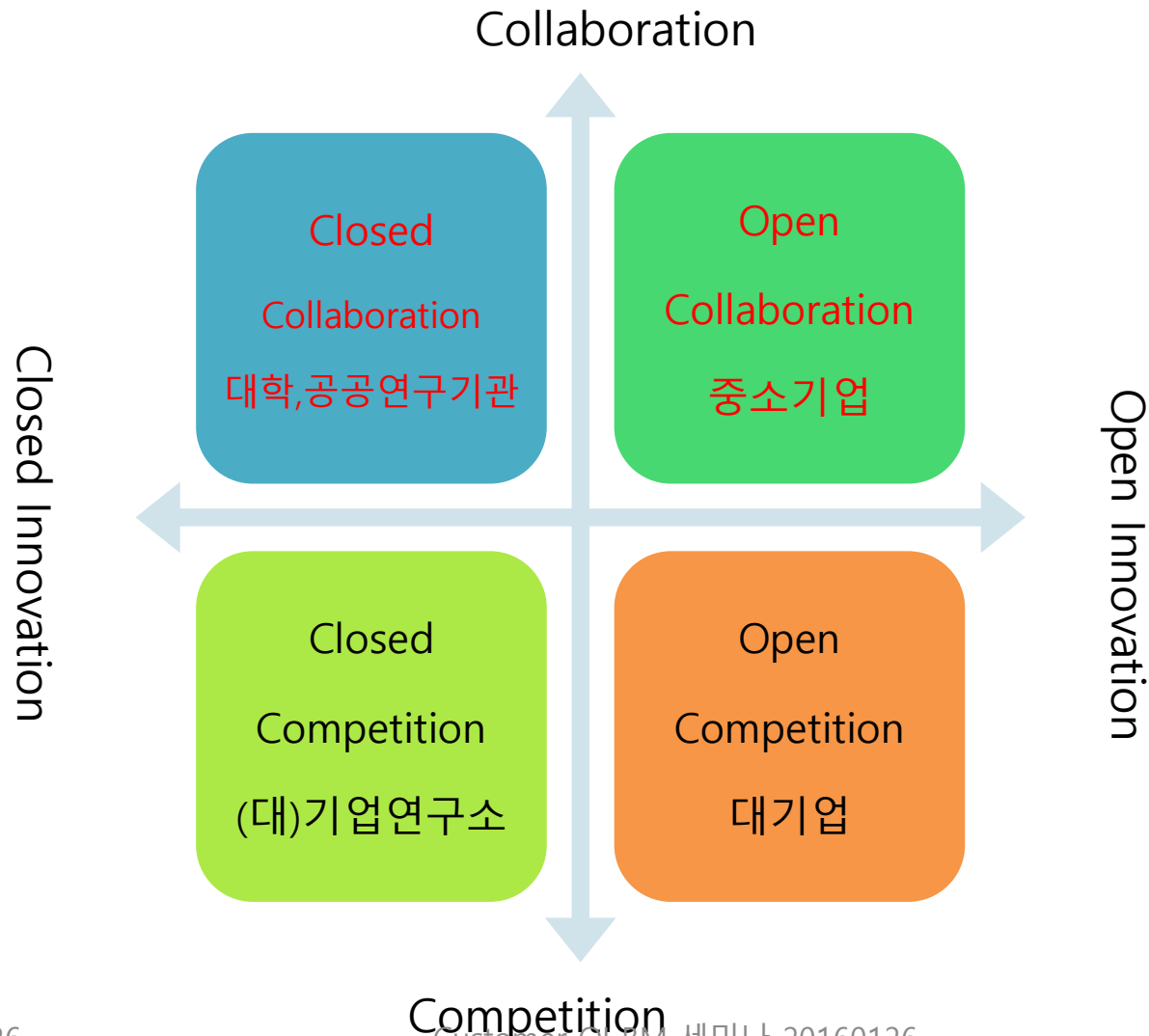


Open Innovation (개방형 혁신) 종류?

최근 이의 초점



Open Innovation (개방형 혁신)의 초점?

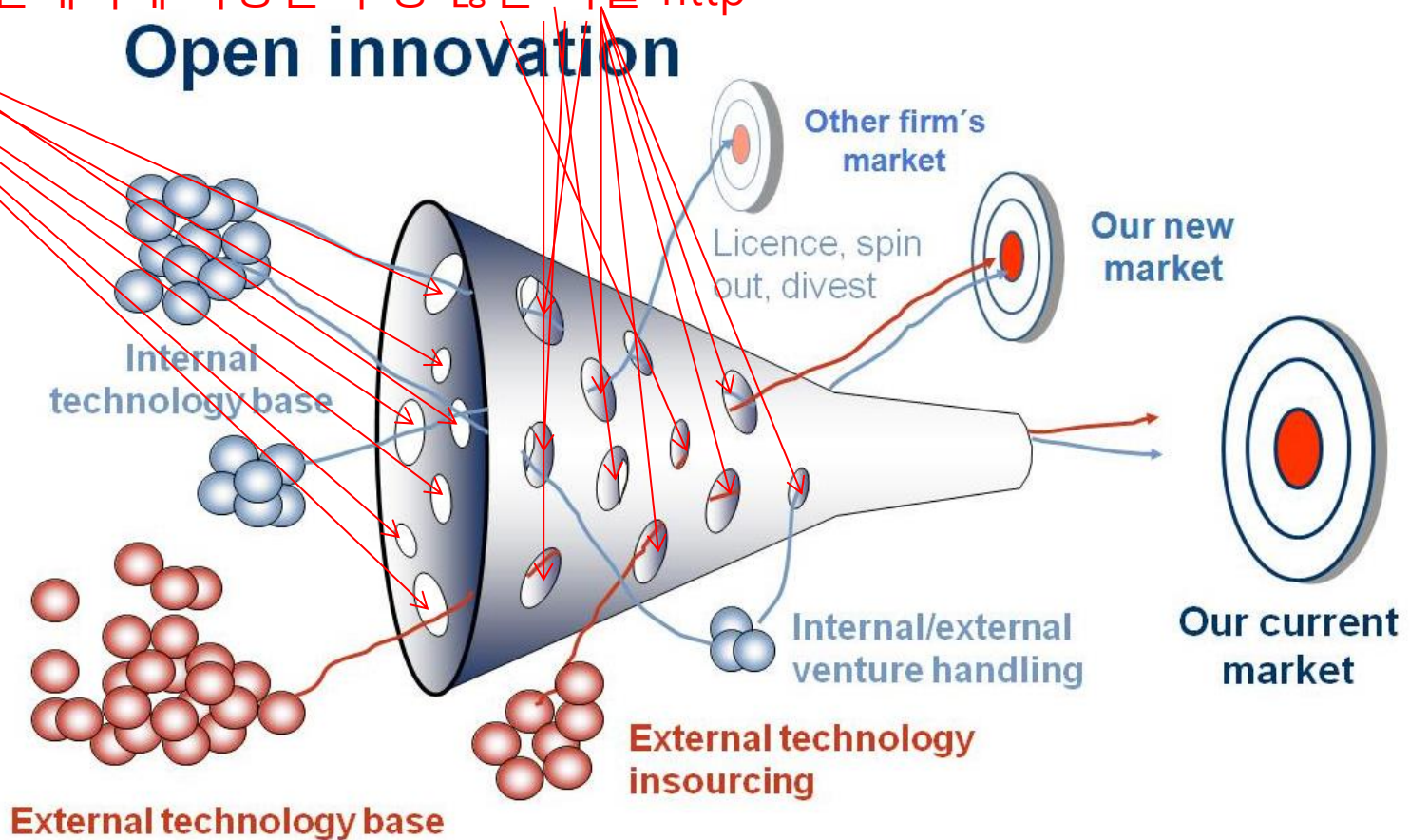


왜 IT기반 Open Innovation인가?

다양한 IT기반의 이 플랫폼 및 SW 폭발적 증가

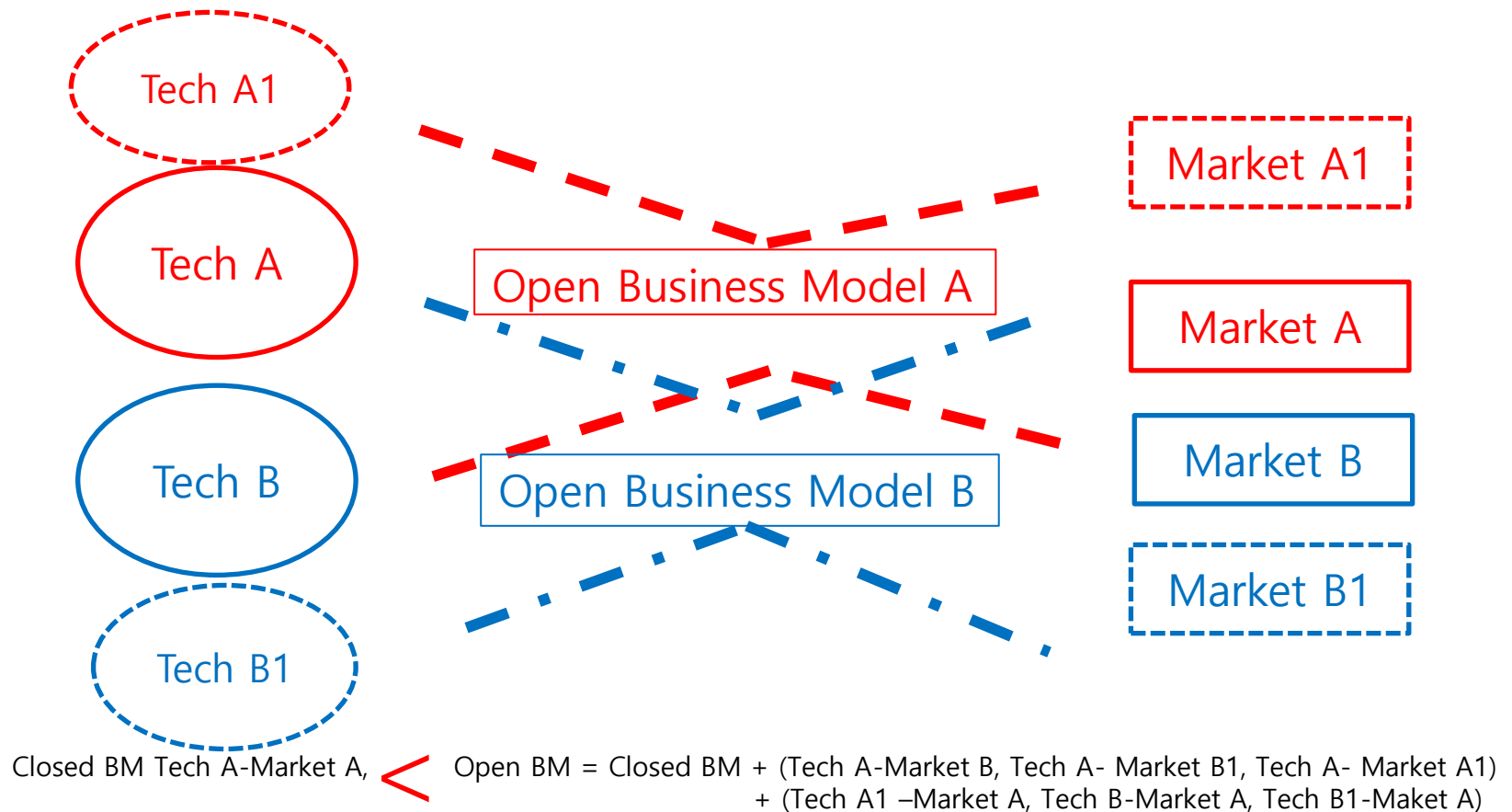
:IT가 지식 갈대기에 다양한 구멍 뚫는 역할 <http>

Open innovation



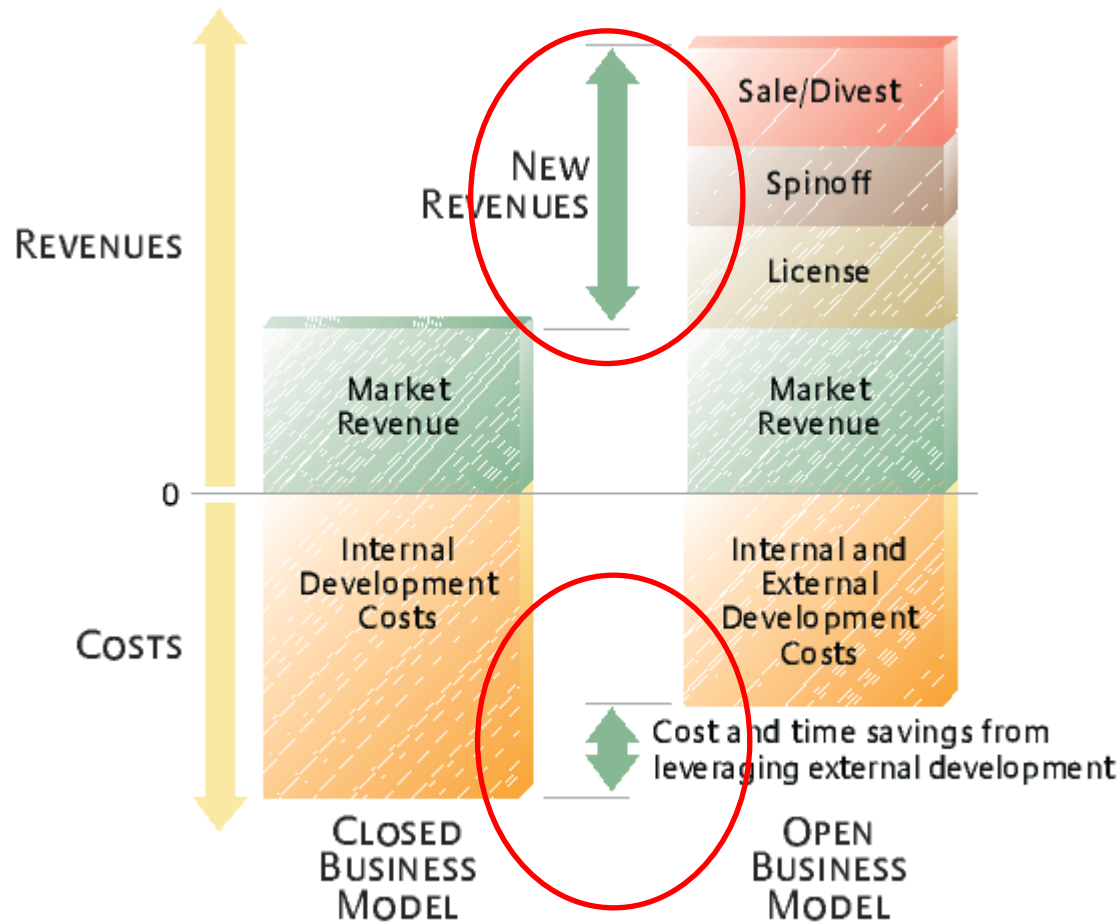
Open Business Model (개방형 비즈니스 모델) 이란 ?

기술과 시장의 열린(갈대기형) 결합을 통한 창조적 신규 가치 창출



Source: Yun JinHyo Joseph (근간): *From Open Innovation To Developing Circle of Creative Business Model*. Frankfurt: Springer Press

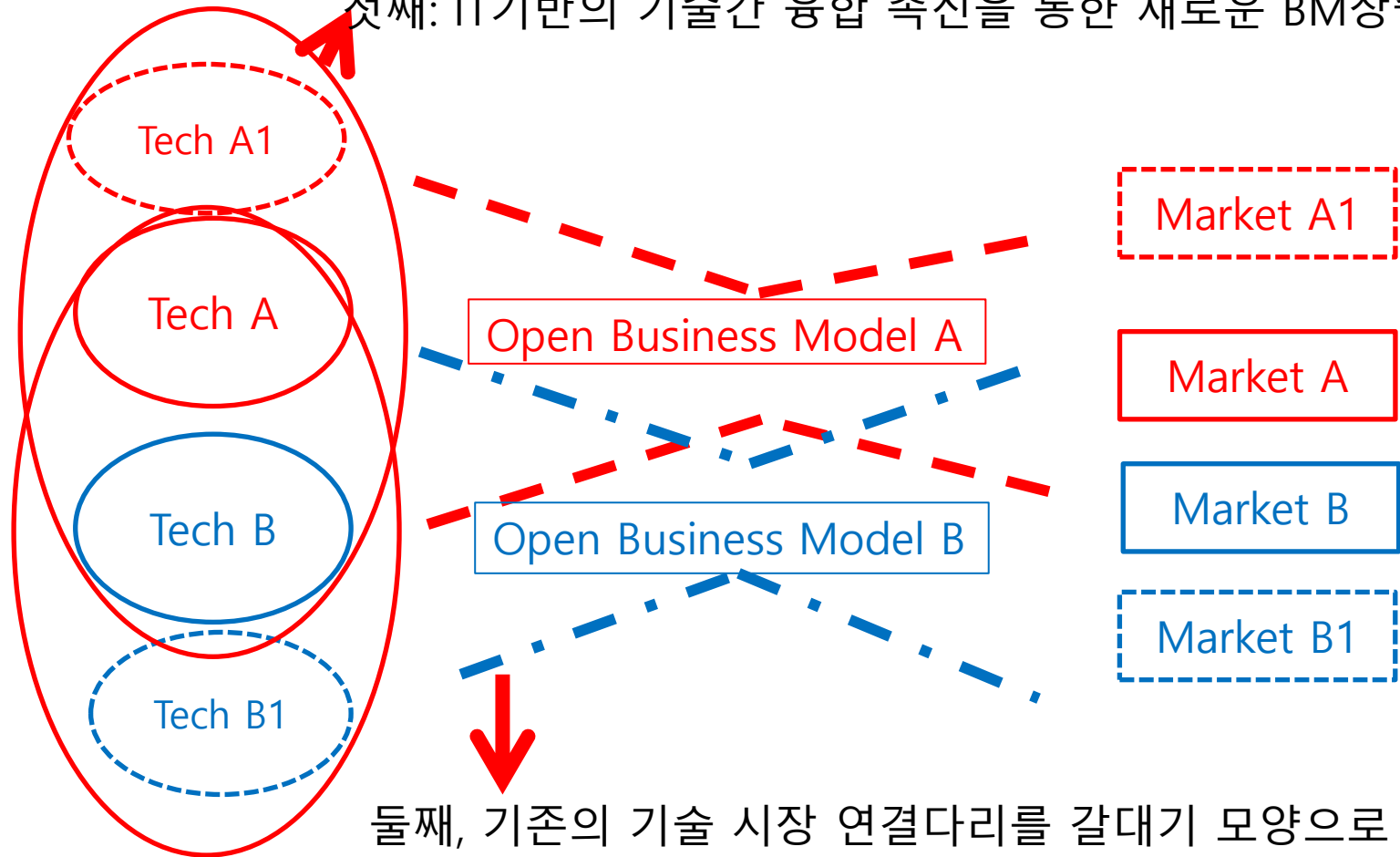
Open Business Model (개방형 비즈니스 모델)의 이익



Source: Chesbrough(2006): *Open Business Model: How to Thrive in the New Innovation Landscape*, Boston: Harvard Business School Press, p.17.

왜 IT기반 Open Business Model인가?

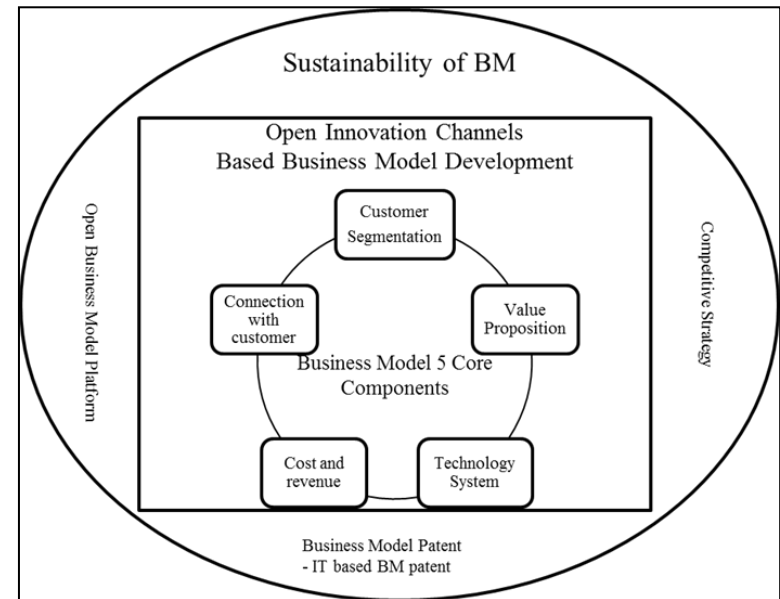
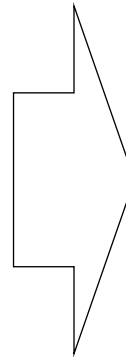
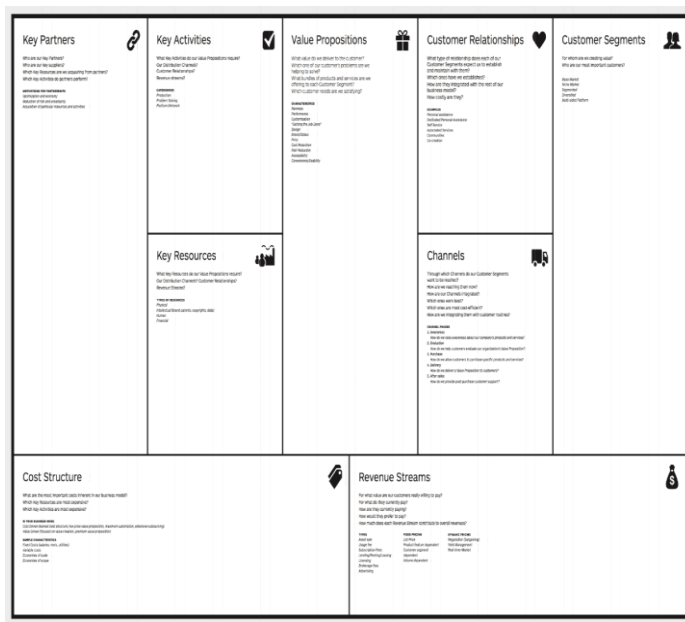
첫째: IT기반의 기술간 융합 촉진을 통한 새로운 BM창출 급증



둘째, 기존의 기술 시장 연결다리를 갈대기 모양으로 양쪽으로 확대해 기술과 시장의 다양한 결합을 가능하게 함.

IT convergence OI & BM_팀 축적된 BM 개발실적

- 기존의 Business Model Canvas(Alexander의 BM 분석론)를 대체하는 창조적인 새로운 **BM Developing Circle** 개발



BM 개발실적

- BM 단독출원 특허 -> 등록 (기업이전가능)

- 부동산 개발 정보 중계 방법 및 시스템(Real estate development Information intermediate method and system)

<http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame>

이전대상: 건설사, 건축설계 회사, 부동산 중계 회사, 부동산 개발 컨설팅 사

- 스마트 주말농장 거래 시스템 및 방법(Smart weekend farm trading system and method for thereof)

<http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame>

이전대상: 농협, 농기계회사, 스마트폰 및 스마트TV회사, 포탈 회사, 농촌사회적기업 등

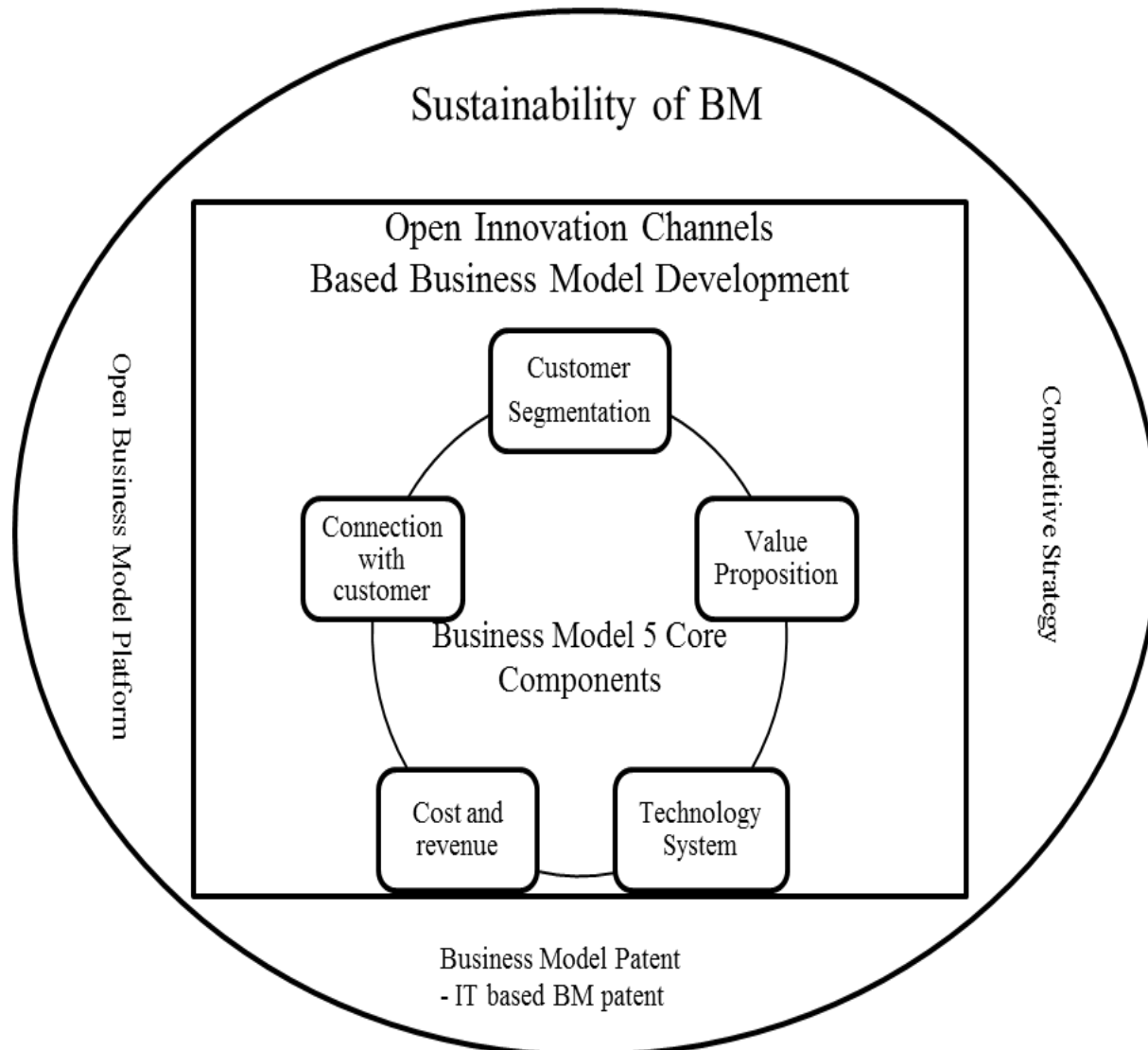
- 스마트 실시간 공연 시스템 및 그 방법(SMART REAL TIME CONCERT SYSTEM AND METHOD THEREOF)

<http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame>

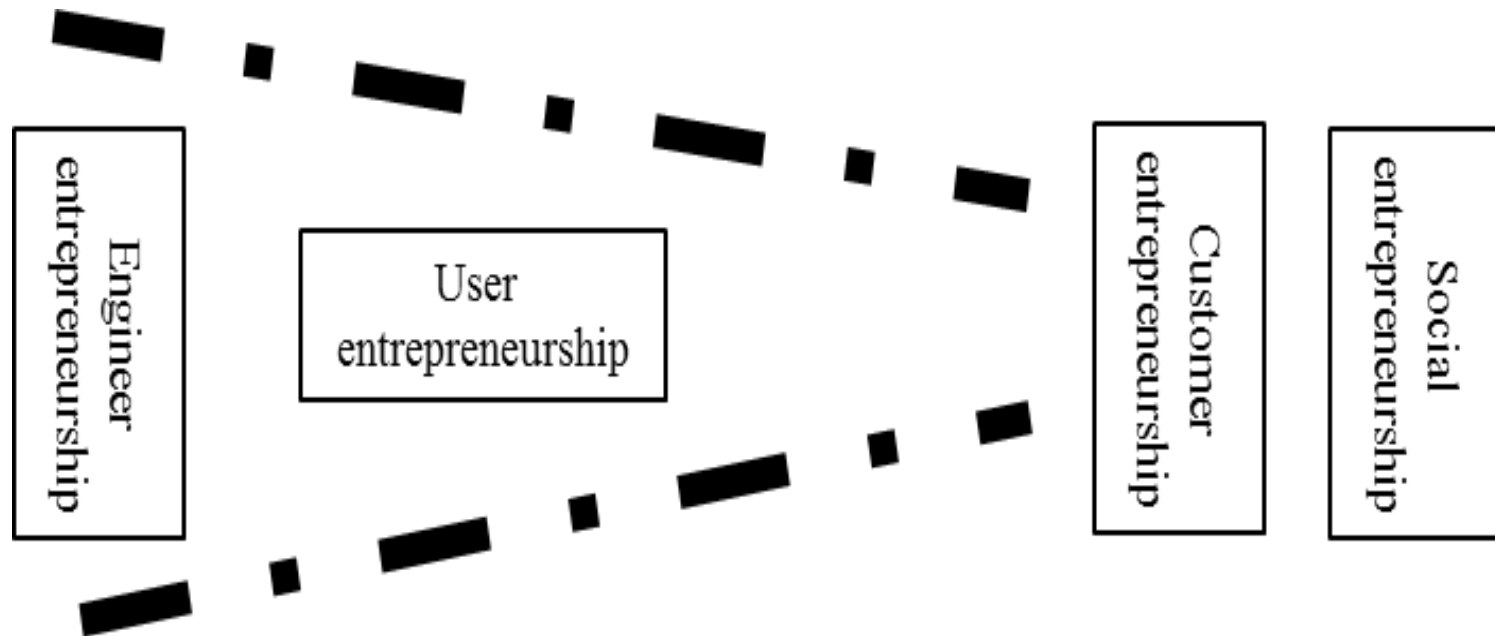
이전대상: 음악SW 회사, 엔터테인먼트 회사, 공연전문기업, 지역민방, Cable TV 회사

- BM 공동출원 -> 등록(일부 기업이전 가능)
 - 모바일 단말 기반 퍼팅 자세 교정 장치 및 그 방법
(APPARATUS AND METHOD FOR PUTTING POSE CORRECTING ON MOBILE TERMINAL THEREOF) <http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame>
출원 단계에서 공동출원 기업에 이전 완료 톡톡골프 <http://www.talktalkgolf.com/>
 - 시간 및 위치 기반의 설문 마케팅 서비스 제공 서버 및 그 방법
(TIME AND LOCATION BASED SURVEY MARKETING SERVICE PROVIDING SERVER, AND METHOD THEREOF) <http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame>
등록 후, 공동출원 기업에 이전 완료, 네오경제사회연구소 <http://enes.or.kr/main>
 - 스마트 소셜 도서관 서비스 방법 및 시스템
(Smart social library service method and system) <http://kpat.kipris.or.kr/kpat/biblioa.do?method=biblioFrame>
등록 후, 공동출원 기업에 이전 추진 중(잠정)
이전대상: 노령 인구 대상 사회적 기업, 도서출판업, 중고도서 거래업, 콘텐츠업 기업 등

Framework of Business Model Developing

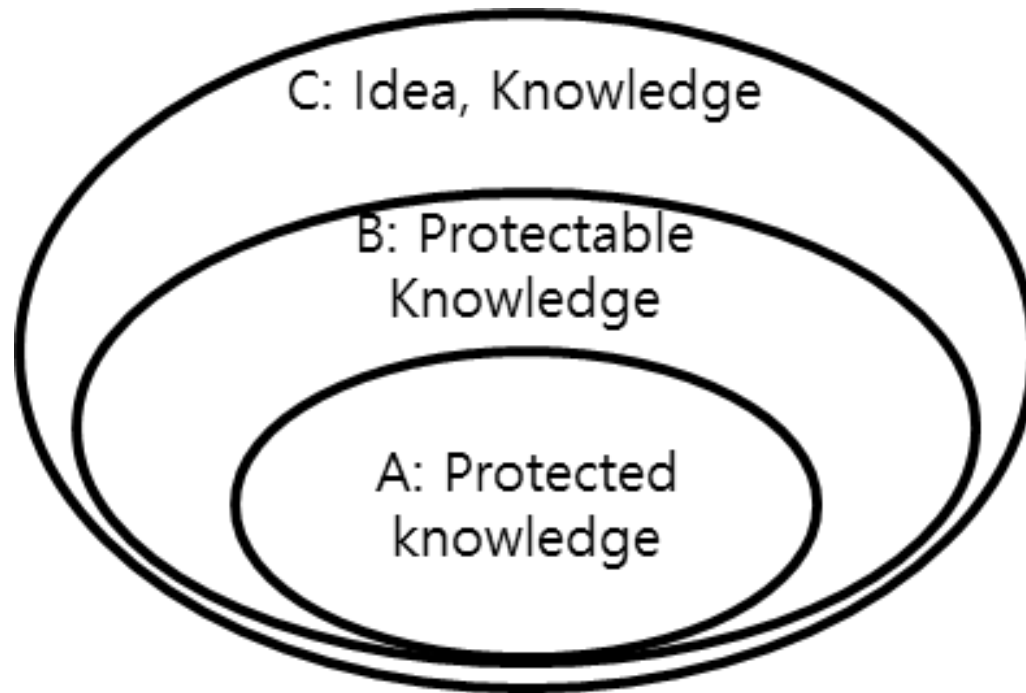


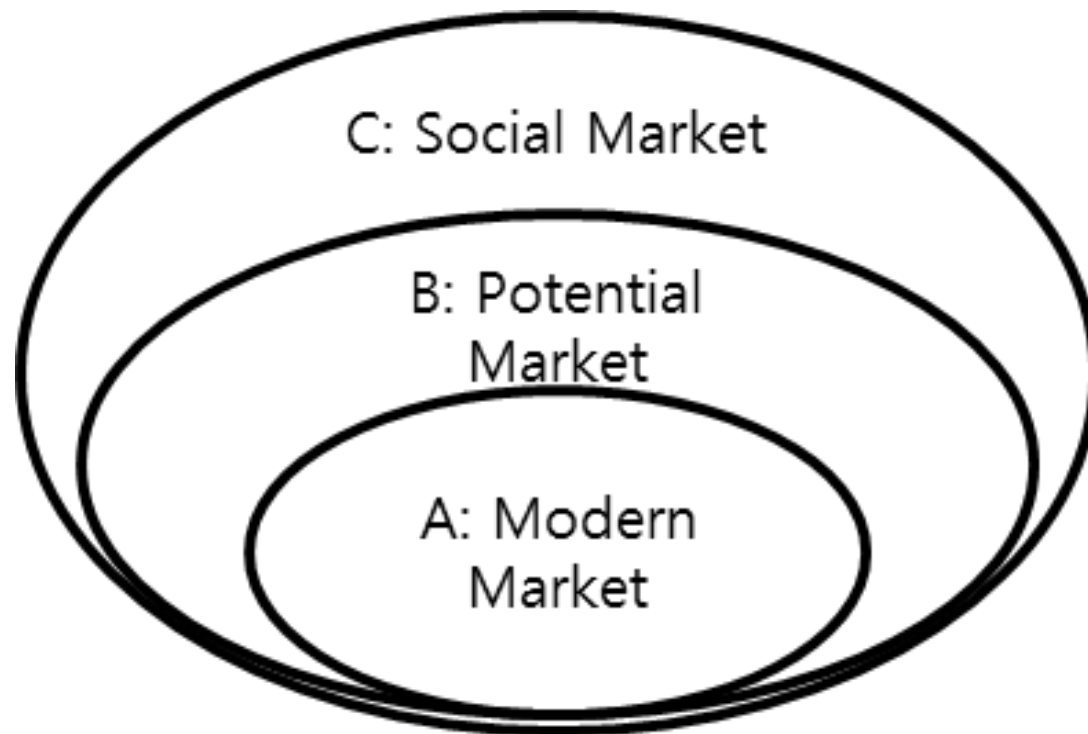
Channels for Developing BM in OI Knowledge Funnel



Type of Business Models between Technology and Market

New Technology * C Existing Market	New Technology * D New Market
Existing Technology * A Existing Market	Existing Technology * B New Market





Market Search

- Global Market Research
 - HUFF POST: U.S. and America + Global
 - Financial Times: U.K. and EU + Global
 - Guardian: U.K. and EU and +Global
- Domestic Market Research
 - 전자신문 + ∞
- 시장관련 국내 및 글로벌 학회 참석
 - Society of Open Innovation: Technology, Market, and Business Model + ∞

www.openinnovationtmc.org

- 시장 관련 국내 및 글로벌 저널 탐색
 - Journal of Open Innovation: Technology, Market, and Complexity + ∞

www.jopeninnovation.com

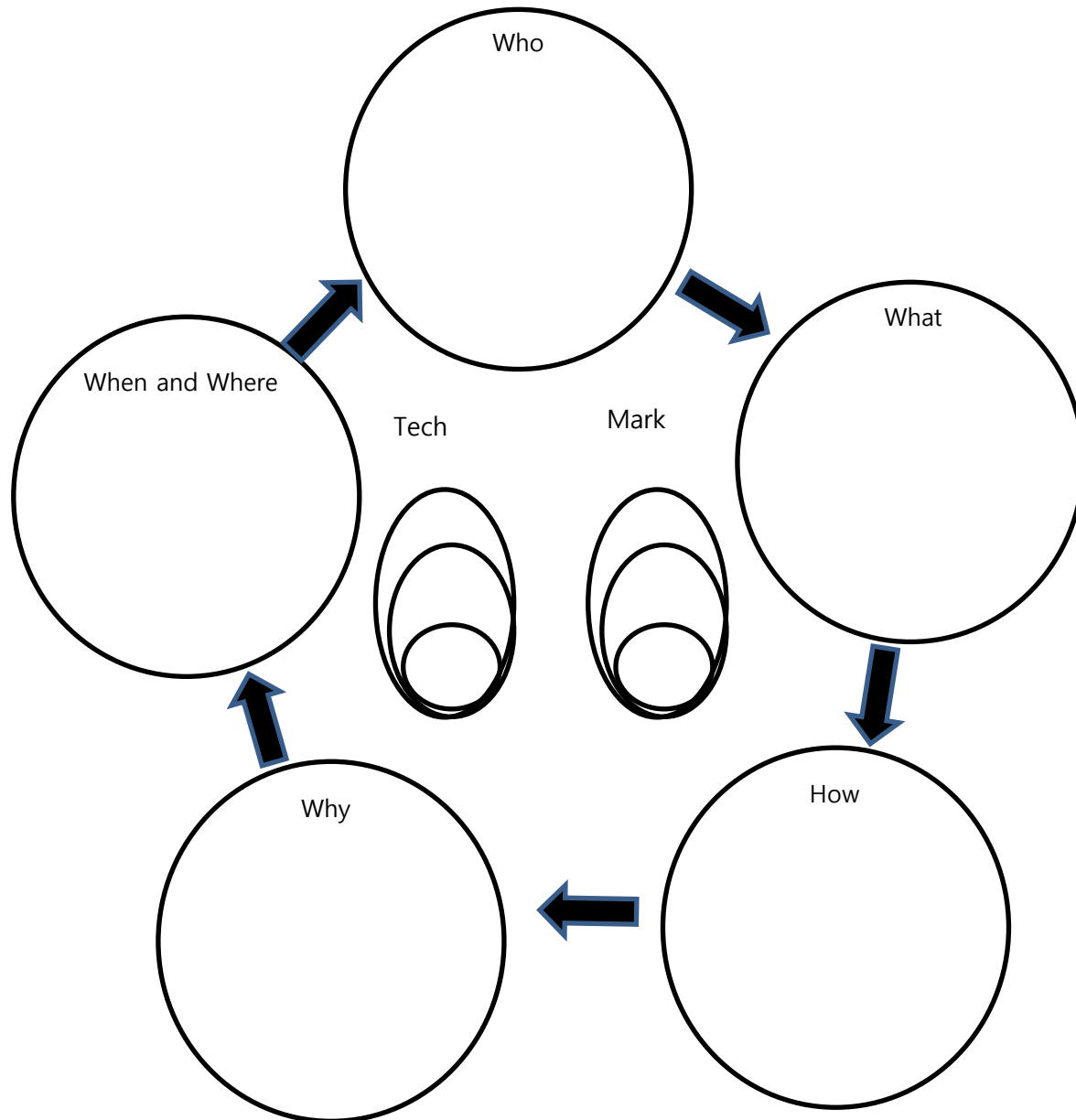
Technology Search

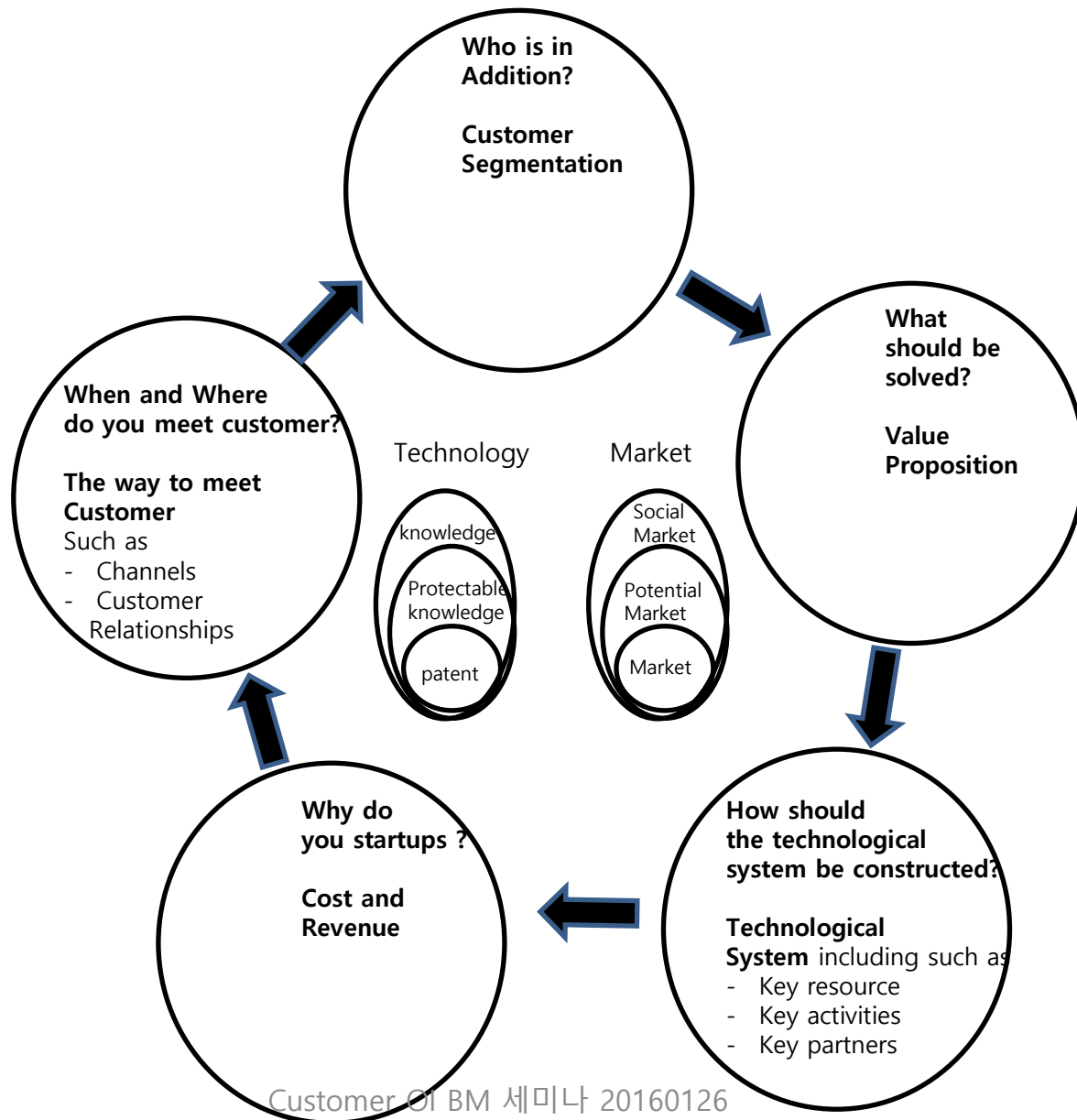
- 특허 검색 – 특정특허, BM 특허(G3,G4)
(발명자 -> 연계 특허 검색 -> 해당 발명자 탐색)
(출원인 -> 연계 특허 검색 -> 해당 출원인 탐색)
- 한국특허청(특허검색앱: 특허)
- USPTO(미국 특허청)
- Google 특허검색
- 기술관련 국내 및 글로벌 학회 참석
- 정보통신, 기계,자동차, 로봇, 의료기기, 신물질, 비즈니스 모델 관련 학회
- 기술관련 국내 및 글로벌 저널 탐색

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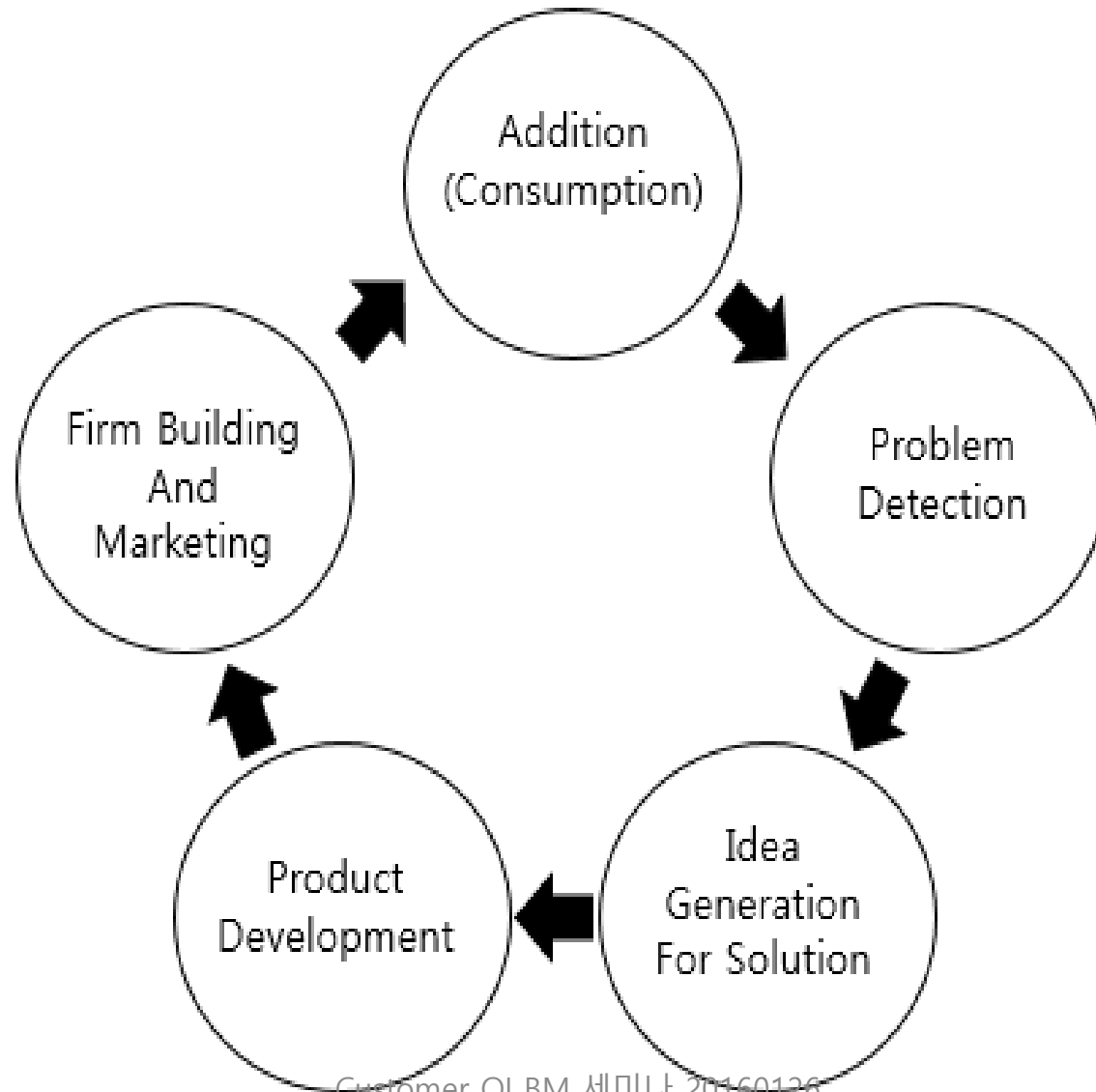
Yun's Business Model Developing Circle

BM Title: _____





Customer OI-based business model development



Customer segmentation Templet-for Customer OI BM Circle

- 1)Describe yourself Who are in charge of this problem.
- 2)Describe the objective customers who are in charge of this problem.
- 3)측정가능하고 인지가능한 형태, 예를 들어, 현실의 사례를
들거나, Persona 를 만들어 구체적인 고객 집단을 교사 하라

Components of creative performance

Domain-relevant resources

- Product related knowledge and use experience
- Technical skills required

Creativity-relevant resources

- Appropriate cognitive style
- Implicit or explicit knowledge of heuristics for generating novel ideas

Motivation

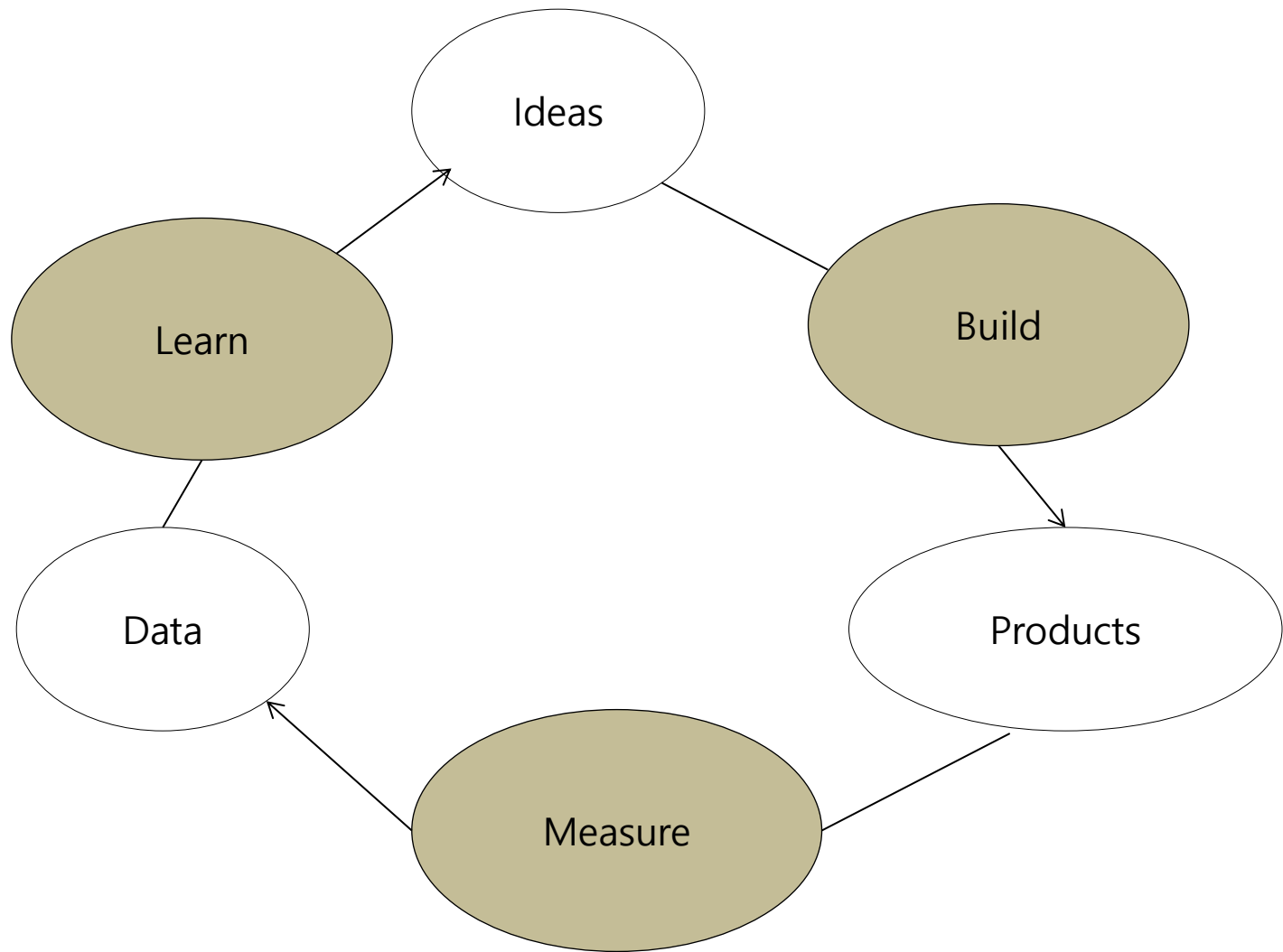
- Attitudes and motivation toward the task

**Creative
response
Lead userness**

**Creative
Creation**

Value Proposition Templet-for Customer OI BM Circle

- 1) Describe your own problem which should be solved, and arrive at concrete value proposition.
- 2) Describe your own requirement which should be realized, and arrive at concrete value proposition.
- 3) Value proposition의 양적 개선, 질적 개선, 기능적 개선, 디자인 개선, 브랜드 지위 향상, 가격 측면의 개선, 비용 절감 측면의 개선, Risk 절감 측면의 개선, 해당 가치에 대한 접근성의 개선 등 상당할 수 있는 모든 측면의 구체적 개선을 묘사하고 구체화하여 전체적인 하나의 개선의 형태를 정리하라.



Technological System Templet-for Customer OI BM Circle

- 1) Technological system을 key resource, key activities, and key partners를 포함해서 구성하되, 기술과 시장의 창조적 결합이라는 방식으로 구성하라.
- 2) Technological system, 즉, 구체적이고 직접적인 기술과 시장의 창조적 결합은 그것이 특허나 최소 디자인 등록을 통해서 쉽게 베낄 수 없도록 구성하라.
- 3) Technological system은 Customer BM 자체가 개발자 뿐만 아니라 시스템적으로 연결된 모든 구성원의 연결을 촉진하고, Customer BM 개발자와 소비자 모두의 열정적인 참여를 촉진하고, 아울러, 현실의 점증적 변신이 아니라 획기적 변신을 고무하도록 구성하라.

- **Connect: Business model can be innovated by team sport.**

- Catalyze something bigger than yourself
- Enable random collisions of unusual suspects
- Collaborative innovation is the mantra.
- Build purposeful networks.
- Together, we can design our future

- **Inspire: We will do what we are passionate about.**

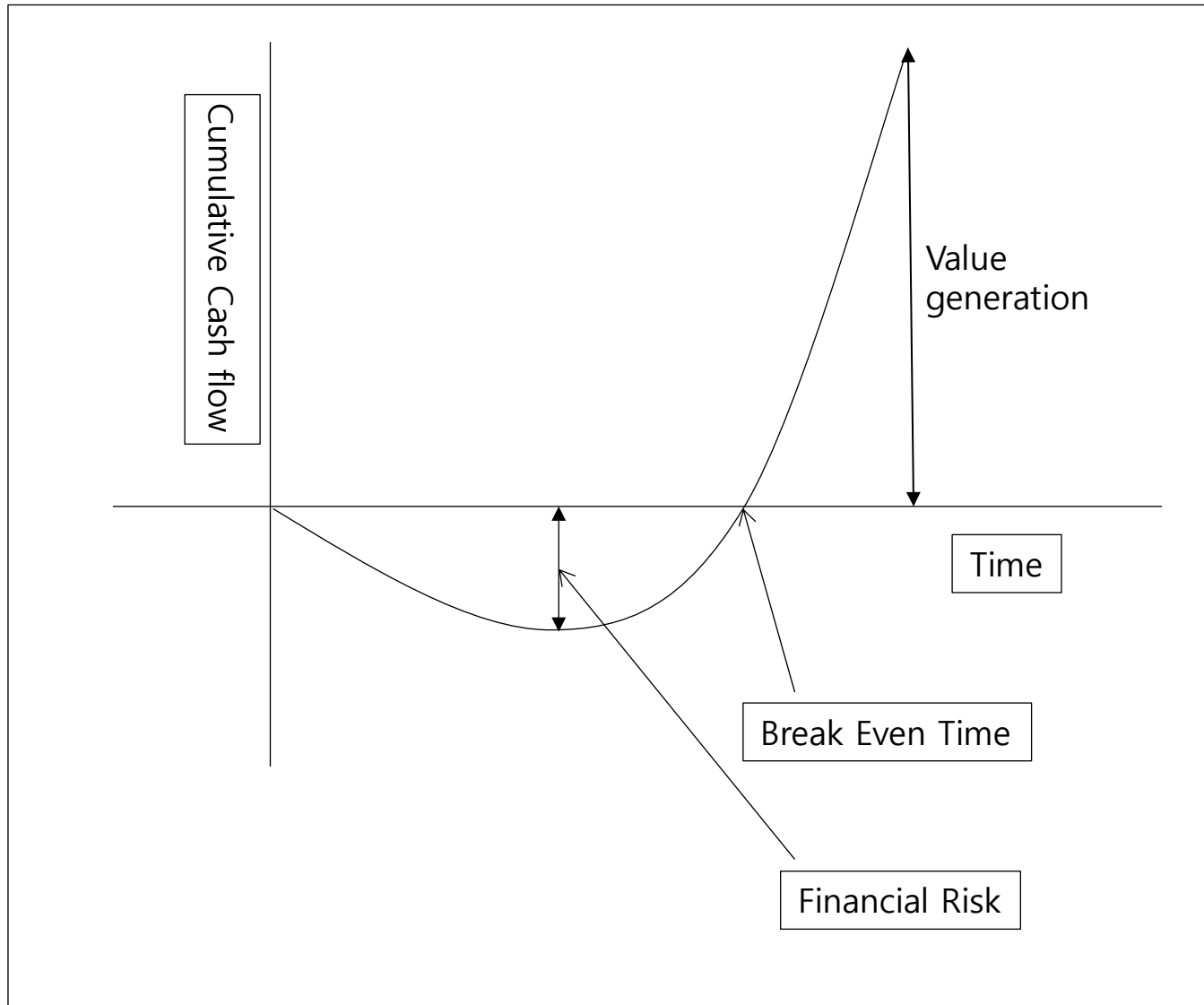
- Stories can change the world
- Make systems-level thinking sexy.
- Transformation is itself a creative act.
- Passion rules-exceed your own expectations.
- Be inspiration accelerators

- **Transform: Incremental change isn't working.**

- Tweaks won't do it.
- Experiment all the time.
- Get off the whiteboard and into the real world.
- It's a user center world-design for it.
- A decade is a terrible thing to waste.

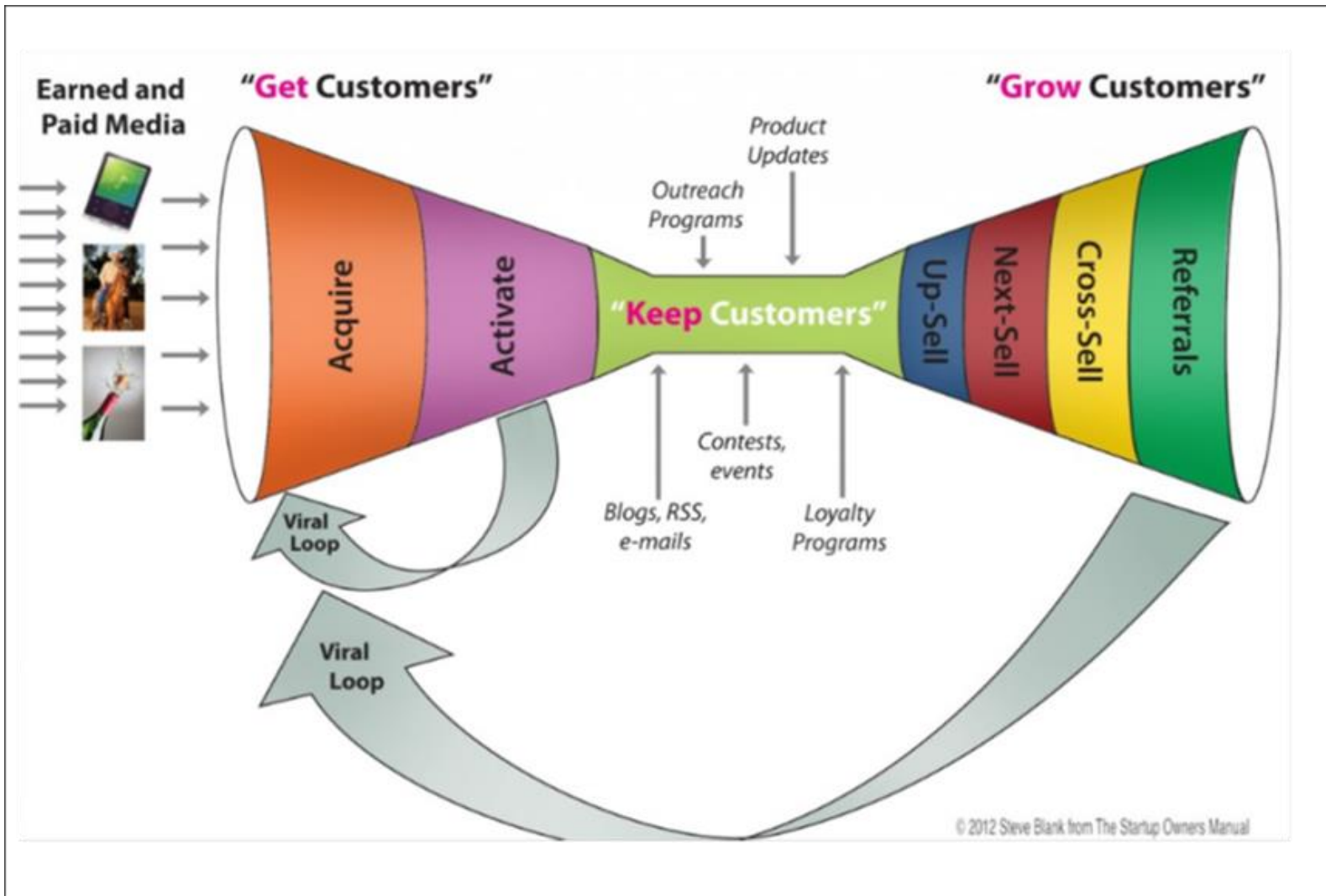
Cost and Revenue Templet-for Customer OI BM Circle

- 1) Customer BM 기반의 Startup은 더 더욱 오랜 기간수익을 창출하지 못하고 심지어는 Break-Even Time에 도달하는데도 상당히 오랜 시간이 걸린다. 이 점을 회피할 수 있는 창조적인 Cost와 Revenue 설계를 하라.
- 2) Revenue stream 설계시에 다양한 형태들 예를 들어, 물품 판매, 이용료, 가입비, 대여료, 라이선싱, 중개수수료, 광고 중에서의 선택, 그리고 Fixed Pricing 과 Dynamic Pricing 등 가격 메커니즘에서의 선택에 있어서 Revenue가 가능하면 빨리 발생할 수 있는 Revenue 형태와 가격 mechanism을 선택하라.
- 3) Cost Structure 설계시에 비용이 장기간에 분산해서 발생할 수 있는 구조를 우선적으로 설계하라.



Channels and Customer Relation Templet-for Customer OI BM Circle

- 1) Customer BM 개발자 자신의 내면의 시각에서 출발해서 주위의 잠재적 Customer를 획득하는 과정을 창조적으로 지속하라. 이를 위해서 오프라인 매장 채널, 온라인 혹은 모바일 매장 채널의 조직화에 있어서 Customer BM의 초기 비용을 최소화하되, 본인의 경험에서 구체적이고 직접적으로 고객을 만나는 방식을 개발하고 창조적으로 적용하라.
- 2) 아울러, 개발자 스스로 소비자의 입장에서 소비자들 간에 문제의식을 공유할 수 있는 가장 적합한 방식을 적용하여 Customer 들이 지속적으로 활동적으로 유지될 수 있는 방안을 강구하라. 커뮤니티, 개별 지원, 심층지원, customer cocreation 등 다양한 customer relation중에서 본인의 BM개발의 문제의식에서 출발해서 가장 실효성있고 창조적인 방식을 찾아 적용하라
- 3) Customer BM 개발 단계에서 "Grow Customers"를 위한 다양한 고객 확대 방안들을 사전에 구체적이고 직접적으로 설계하고 그것들을 가까운 형태의 미래 비전의 형태로 구체적이고 직접적으로 제시함으로써 고객이 유지될 뿐만 아니라 지속적으로 확대될 수 있는 모멘텀을 형성하라



Reference

- Burgel, H.D., Grosse, D., Herstatt, C., Koller, H., Mohrle M.G., (2013). *Consumer Innovation at the Base of the Pyramid*, Hamburg: Springer Gabler.
- Ries, E.(2011). *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. New York: Crown Business.
- Bettencourt, L. A. (2010). *Service Innovation: How to go from customer needs to breakthrough service*. New York: McGraw Hill.
- Cooper, B., Vlaskovits P., Foreword by Steven Gary Blank (2010) . The Entrepreneur's Guide to Customer Development: A "cheat sheet" to The Four Steps to the Epiphany. Sanfranscisco; www.custodev.dom
- Osterwalder's, A. (2008). Business model canvas. New Jersey: Wiley.
- Jim Muehlhausen JD (2013) Business Model For DUMMES. New Jersey: John Willey & Sons. Inc.
- Bhide A., (2008). *The Venturesome economy*. New Jersey: Princeton University Press
- Chesbrough H. (2003) *Open Innovation: The New Imperative For Creating and Profiting From Technology*. Massachusetts: Harvard Business school Press.
- Chesbrough H. (2006) Open Business Model: How to Thrive in the new innovation landscape. Massachusetts: Harvard Business School Press.
- Kaplan S.(2012). The business Model Innovation factory. New jersey: Wiley.
- Davila T., Epstein M.J., Shelton R. (2005) *Making Innovation Work: Hot to manage IT, Measure IT, And Profit from IT*. New Jersey: Wharton School Publishing
- Von Hippel E. (2005). Democratizing Innovation. Boston: MIT Press
- Blank S., Dorf B.(2012). *The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company*. K&S Ranch Inc. Publishing.