AWS SUMMIT ONLINE

아마존 혁신의 배경 및 Digital Innovation Program 소개

김중수 사업개발 담당 AWS Korea 김성락 책임 LG 인화원



Agenda

아마존의 혁신 핵심 역량

Hallmark Mechanism - Working Backwards

AWS Digital Innovation Program

고객 사례

Digital Innovation Program 을 통한 LG 의 DX 전략 사례

아마존의 혁신 핵심 역량



• Founded

• Amazon.com

1998 CDs and DVDs

AWS

• Video

• Groceries

2014 Alexa/Echo

• Bookstores

• Go





Customer delight is our ultimate goal



We enable everyone to innovate



Culture

Customer obsession, hiring builders, letting them build, supporting them with a belief system



Organization

Small, empowered teams that own what they create



Architecture

Structure that supports rapid growth and change



Mechanisms

Encoded behaviors that facilitate innovative thinking

Hallmark Mechanism Working Backwards

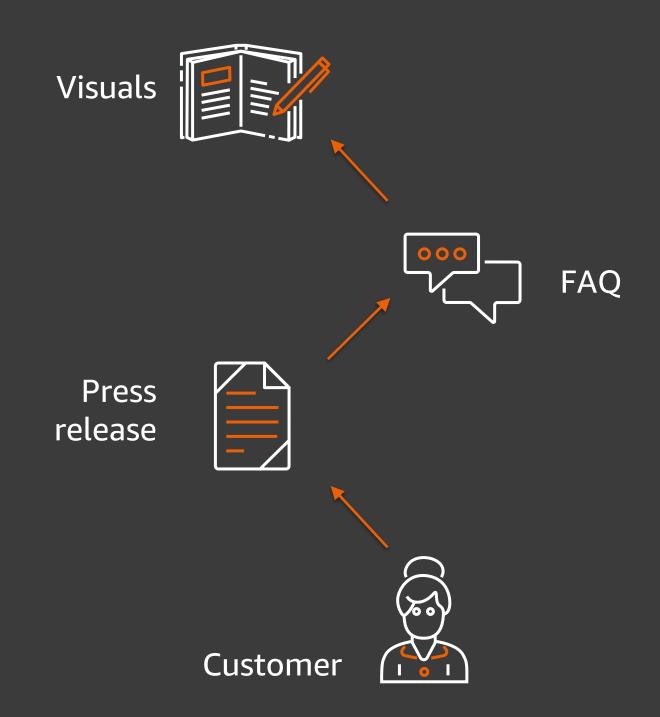


Working Backwards: 5 customer questions

- 1. Who is your customer?
- 2. What is the customer problem or opportunity?
- 3. What is the most important customer benefit?
- 4. How do you know what your customer needs or wants?
- 5. What does the experience look like?

Working Backwards is a process

Use it to get clarity, not to document what you've already decided to do



Artifacts: Working Backwards document

Press release



Amazon Campus

Amazon.com confidential

Amazon Campus Launches First Multi-Channel Student Store at the University of California Berkeley www.amazon.com/Campus & berkeley.amazon.com

SEATTLE-(BUSINESS WIRE) - August 31st, 2014 - Since returning to school for the Fall semester, Berk experienced a fresh take on the college bookstore as the new Berkeley Student Store opened at an or berkeley.amazon.com.

The Amazon-run online Student Store brings Amazon's broad selection, low prices, and convenient sh of Berkeley's campus and offers a number of additional student-focused features. With the launch of students can now pay for any purchase on Amazon with their Cal1Card, buy course materials in any for Learning Management System or directly on Amazon.com, pick up orders at convenient locations acro One-Day Shipping on textbooks sent to the campus area. Amazon Student members at Berkeley are e Shipping to campus on millions of additional products plus FREE Two-Day shipping on millions more.

"I've been an Amazon Student member for two years," explained Senior Aubrey Primason, "Getting ti was huge. I've been ordering everything from Amazon since I got back to school. I may never have to

Students can access these campus-specific payment methods and shipping benefits, along with the fu textbooks - typically available only through the university's licensed bookseller - by activating the Berl experience when they visit berkeley.amazon.com, sign up for Amazon Student and select 'Berkeley' as to Amazon within the Berkeley Learning Management System.

In place of a traditional campus bookstore, Amazon has deployed Lockers across campus and built the a space that features a package pick up desk, technology showroom, and lounge area for students to



Amazon.com confidential

Visuals



Amazon Campus

II: Student Customer FAQs

Q4: What do I get when Amazon is on my campus? Students get a number of benefits when Amazon is

the co-branded experience on Amazon, students receive Free One Day shipping on textbooks to campus textbook selection, the ability to pay with their university ID card, and the ability to pick up Amazon.com campus. On campus, all students will have access to an Amazon Student Lounge.

Q5: How do I activate the co-branded experience? Students at client universities will have four method branded experience: 1) visiting the co-branded subdomain directly by typing the URL (berkeley,amazon clicking an external link, 2) joining the Amazon Student program and selecting their school, 3) shopping their school's Learning Management System, 4) clicking on a Student Store merchandising placement of customers have opted in, they will see a persistent co-branded toolbar on the top of the page whenever Customers can turn the experience off at any time by navigating to the 'Account Settings' menu in 'You

Q6: What do I get if I sign up for Amazon Student when Amazon is on my campus? Amazon Student m the standard benefits of the program plus Free One Day shipping to the campus area on millions of top benefits include Free Two-Day shipping on Prime eligible items, unlimited instant streaming of Prime Ins access to the Kindle Owners' Lending Library. The cost of a Student membership will remain \$39/year.

Q7: Why aren't there any 'grab and go' items available for purchase at the Student Lounge? At launch products to customers "on demand" at the Student Lounge because we do not have a Point of Sale syst inventory for sale on site. However, we intend to offer this in the future for a small selection of top-selli meantime, customers may order items displayed in the Lounge by using the bar code scan feature in the

Q8: Why is Free One Day shipping limited to campus addresses? Why don't I get Free One Day shipping By working directly with a university, Amazon is able to reduce costs associated with shipping orders to to pass on to all students at the school via Free One Day shipping for textbooks, and to our Amazon Stud Day shipping on millions of other eligible products. However, in order to provide these benefits at no ad the geography in which we offer this benefit to those zip codes served from our on campus delivery state members always receive Free Two-Day shipping on Prime eligible items, to campus or most other address



Josh is at Amazon@ASUC Student Union picking up his textbooks. He opens his email notification and chooses to "Get Pickup Code".



3 Josh gets hungry browsing all the great snacks available and decides to add a bag of Cheetos to



The link automatically opens the Amazon app where Josh sees that his order will be ready in 2 minutes and that he can add snacks to his order and pick them up instantly Anna, the backroom associate, gets a pick task for Josh's boxed textbooks and scans it



Josh waits while his textbook and Cheetos are being prepared for pickup. Anna gets another pick task. She scans the Cheetos, bags them, and places them into the same locker as Josh's box

Press release



- Leap into the future: Think BIG
- Focus on the customer need
- The customer quote is key
- Avoid jargon
- Say it simply and clearly

Amazon Campus Amazon.com confidential

Amazon Campus Launches First Multi-Channel Student Store at the University of California Berkeley www.amazon.com/Campus & berkeley.amazon.com

SEATTLE-(BUSINESS WIRE) – **August 31st, 2014** – Since returning to school for the Fall semester, Berkeley students have experienced a fresh take on the college bookstore as the new Berkeley Student Store opened at an online address: berkeley.amazon.com.

The Amazon-run online Student Store brings Amazon's broad selection, low prices, and convenient shopping experience to the heart of Berkeley's campus and offers a number of additional student-focused features. With the launch of the Student Store, Berkeley students can now pay for any purchase on Amazon with their Cal1Card, buy course materials in any format via links in Berkeley's Learning Management System or directly on Amazon.com, pick up orders at convenient locations across campus, and receive FREE One-Day Shipping on textbooks sent to the campus area. Amazon Student members at Berkeley are eligible for FREE One-Day Shipping to campus on millions of additional products plus FREE Two-Day shipping on millions more.

"I've been an Amazon Student member for two years," explained Senior Aubrey Primason, "Getting the extra free one day shipping was huge. I've been ordering everything from Amazon since I got back to school. I may never have to leave campus again."

Students can access these campus-specific payment methods and shipping benefits, along with the full selection of custom textbooks - typically available only through the university's licensed bookseller - by activating the Berkeley co-branded Amazon experience when they visit berkeley.amazon.com, sign up for Amazon Student and select 'Berkeley' as their school, or click on links to Amazon within the Berkeley Learning Management System.

In place of a traditional campus bookstore, Amazon has deployed Lockers across campus and built the first Amazon Student Lounge, a space that features a package pick up desk, technology showroom, and lounge area for students to study, meet, read or just relax in between classes. "Getting my textbooks was way easier this year. Instead of making the trip to the store to pick out my books and wait in line, I simply went to berkeley.amazon.com, paid for my books with my Cal1 Card, and came down to the Student Lounge to pick them up the next day," said Gloria Min, sophomore, "I spent less than 10 minutes on the entire process." Inside the Student Lounge, Amazon offers students free access to Prime Instant Video and Prime Music streaming. "It's my new favorite spot to crash in between classes," said John White, Junior, "I didn't even know Amazon had so much streaming video until I logged on to the Wi-Fi network in the lounge, and I definitely didn't know you got it for free with Amazon Student. I just cancelled my Netflix subscription."

Kelsey Finn, Director of the ASUC Auxiliary & Student Union says Amazon brings a combination of great prices, great service, and innovation that is unique in the college bookstore industry: "When we issued our RFP, we specifically asked for innovative ideas that combined the best of online and physical retail. Amazon's combination of online shopping, integration with our Learning Management System, free next day shipping, and ability to offer in person pick up was a game changer. Plus, they are the only partner that can offer a unique physical and digital solution, and that is important to us as learning goes digital. But what mattered most was value for our students – Amazon textbook prices are 25% lower on average than our previous bookstore and none of the traditional leasing companies could match that. Amazon's model aligns perfectly with Berkeley's strategic priorities of affordability and cutting edge services."

The opening of the Student Store marks the launch of Amazon Campus, a new service aimed at providing universities with a low cost alternative, or supplement, to the traditional bookstore while simultaneously making shopping for textbooks and other college essentials more convenient and affordable for their students. The Amazon Campus service provides universities with a co-branded shopping experience, an on campus delivery operation, and the Amazon Student Lounge, which includes a pickup desk, technology showroom, and meeting/study space. For more information on Amazon Campus, visit www.amazon.com/campus.

1



- Include both customer FAQs and stakeholder FAQs
- Include the hard questions
- Share your Press Release early to gather questions

Stakeholder FAOs

Here are some questions that your internal stakeholders might like to know about. There will be unique FAQs to your project, here are some examples of Stakeholder FAQs to get you started.

- Why is this customer problem or opportunity important right now?
- How will we know if this raises the bar on customer experience?
- How do we know if we're succeeding?
- What's provoking the most internal debate?
- What if this product/service is a runaway success? Is it scalable over all our customers?
- What if this product/service is a failure? Is it simply lost resources? Or more?
- Are there trust busters
- How does it work? (i.e.
- What is your plan for I
- How does the solution
- What is the estimate c
- How will customers' q notification)
- What is the timeline for
- What are the similariti
- What other solutions

Customer FAOs

Put yourself in your customers' shoes with these sample FAQs. There will be unique FAQs to your project or program, but here are some What is the problem y Customer FAQs examples to get you started.

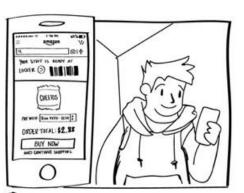
- How do I find this? How do I get started?
- How do I [complete the main task e.g. Return an item]?
- How can I get help, if I have a problem?
- Can I use this on my mobile device?
- How does it work? (i.e., features and functionality)
- How is this different than what <insert a tool> offers me today?
- Can I use this on all of my devices?
- What do I need to know? (i.e., policy change)
- What do I need to do before I can use it? (i.e., sign-in)
- Does this cost money? If so, how much does it cost and how will I be billed?
- Are there things I need to manage or keep track?
- Which features will I care about the most?
- Which features will I care the least about?
- I'm expecting to be able to do <insert a task>, why can't I do that?
- What happens if I use it the wrong way?
- What if I change my mind and no longer want to use this?
- Why wouldn't I just use this/do this on <insert a tool>?
- Where can I learn more about how to use this?
- Who do I contact if I have a problem?
- What if I have suggestions about how to make it better?



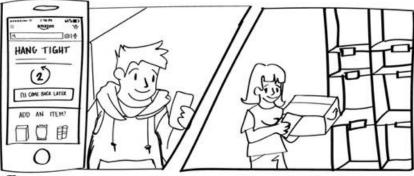
- Show the customer experience
- Rough idea rough drawing
- Match fidelity of visuals to maturity of your idea
- Most beneficial experience



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Josh gets hungry browsing all the great snacks available and decides to add a bag of Cheetos to his order.



The link automatically opens the Amazon app where Josh sees that his order will be ready in 2 minutes and that he can add snacks to his order and pick them up instantly. Anna, the backroom associate, gets a pick task for Josh's boxed textbooks and scans it into a locker.



Josh waits while his textbook and Cheetos are being prepared for pickup. Anna gets another pick task. She scans the Cheetos, bags them, and places them into the same locker as Josh's box We read...
discuss...
debate...
& question.

knowing that Amazon will send them the right sized diaper at the right time.

Babies need an average of about 3,800 disposable diapers across seven sizes in three years, and remain in a size anywhere between a few weeks to several months. A baby might need just one box of size 1 diapers but need as many as eight boxes of size 4 diapers. To complicate matters, weight – and not age – is the best predictor of a baby's diaper size.

With Amazon's Subscribe & Save program, customers previously created diaper subscriptions in a specific size which was replenished until the customer decided it was time to move up a size. This meant that parents needed to anticipate the change in diaper size and either cancel their existing subscription to create a new one, or go to the Manage Your Subscriptions page to update the existing diaper subscription with the new size. This caused endless frustration for parents, added to the stress of having a new baby, and the experience ran counter to the concept of a subscription that should run smoothly with minimal touch points.

With the introduction of the new auto-sizing feature, customers who subscribe to diapers will be asked to provide their child's weight, in addition to the existing child info. They will then be able to set up a single subscription that will take them through the various sizes at the right time. Customers will be notified before the next box of diapers is due to ship that it has automatically sized up — if it's too soon, there will be a simple one-click process to keep the current size.

"I love using Subscribe & Save. But for my older child, I have had to return boxes that were one size too small, which actually increased my work load," says Mara Steiner, who has used Subscribe & Save for her baby needs for several years. "As I expect my second child, I am very excited at the thought of having the right size diapers show up at my door each month. New parents have enough to do without having to keep calculating which size of diapers they should be buying for their baby."

"We want parents to always have the right sized diaper for their child at the right time," said Greg, director of Subscribe & Save. "This single subscription experience for diapers will ensure that customers can depend upon Subscribe & Save to do the work for them, and never have to worry about changing size as their children grow."

Amazon's Subscribe & Save ships thousands of items to their customers on a regular basis additional discounts. With the diaper subscription service, the program has simplified the canew parents.

To learn more about Subscribe & Save's diaper subscriptions auto-sizing, go to www.amaz.

subscription

Light Blad Mabile 7



What is it?

The Digital Innovation program, built around Amazon's distinctive 'Working Backwards' mechanism, is designed to help our customers build new capabilities on the AWS platform to address their most pressing customer needs.

Our Customer













The following are additional selected examples of recent Digital Innovation engagements.





















































The principles behind our organization, architecture, mechanisms, and culture



DEFINE a new product, service, or experience that will delight your customers; start with the customer and work backwards



BUILD your new digital offering to life; test it with your customers

Let's partner to invent something your customers will love.

You bring:

Senior executive business sponsor

Specific customer problem or opportunity

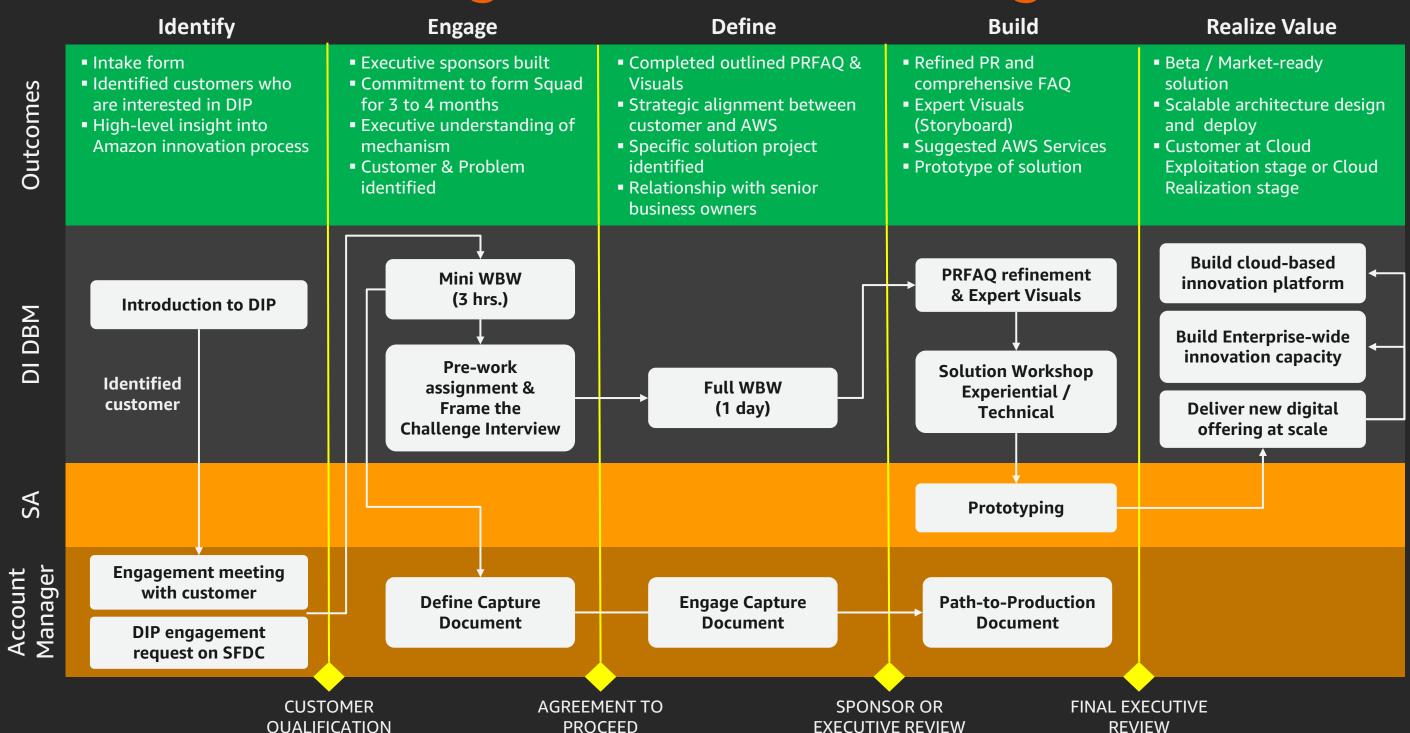
Investment in workshop and prototype

Amazon brings:

Innovation expertise

Executive workshop facilitation

Prototyping capability and credits



고객사례



AI enabled bank of the future

Industry: FSI



Emirates NBD is Dubai government-owned bank and is one of the largest banking groups in the Middle East in terms of assets.

Building personalized retail customer banking experience



L to R: Vinod Krishnan, Head of Commercial Sector, MENA at Amazon Web Services (AWS); Paul Misener, VP, Global Innovation, Policy and Communications at Amazon; Suvo Sarkar, Senior Executive Vice President and Group Head – Retail Banking & Wealth Management at Emirates NBD; and Ahmed Al Marzouqi, Executive Vice President and General Manager of Retail Distribution at Emirates NBD

Enhanced Field Service Engineers quality outcome

Industry: Oil & Gas



Baker Hughes is an energy technology company with operations in over 120 countries, developing and deploying the technologies to take energy and industry forward.

New web-based application, 'Soluionizer', empowers FSE (Field Service Engineers) to provide a fast and thorough resolution on recurring simple site issues.

Automatic solution and issue tracker with reducing issue resolution time

Personalized Fertility Consultation at Your Home

Industry: Pharmaceuticals



Ferring Pharmaceuticals is a private multinational biopharmaceutical company specialising in areas such as reproductive health, maternal health, gastroenterology and urology. Ferring has been developing treatments for mothers and babies for over 50 years.

Launched in Great Denver metro area, a new service of a simple, convenient way to explore fertility treatment options from your home

Collaborative Innovation

Industry: Logistics



Portbase was founded in 2009 by Port of Rotterdam and Port of Amsterdam and it has the broad support of the business community. Its ambition is to make Dutch ports the smartest in Europe by facilitating data sharing between companies and governments, resulting in more efficient information exchanges at a lower cost.

Established model and methodology to drive collaborative innovation with advanced data analytics and improved business agility

Deliver digital media content on personalization

Industry: Media



RCS MediaGroup, with 1B turnover in 2018 and over 3,000 employees, is one of the main European publishing groups. It is a leader in newspapers in Italy and Spain and active in magazines, television, radio and new media. In Italy, the RCS Group publishes Corriere della Sera and La Gazzetta dello Sport, leaders among national and sport dailies.

Prima Edicola App allows readers to easily receive on their smartphone personalized updates on the latest editorial news.

Improved customer experience of digital media content with upselling correlated products to newspaper

Visualize connection on Al-powered graph DB

Industry: Publishing



The Globe and Mail is Canada's foremost news media company, reaching more than 6 million readers across print and digital every week.

Developed AI-powered graph database with visualizing connections across people, events, organization and etc. to help journalists see relationships easily and visually

Readers are able to examine data behind the stories on a higher level of transparency.

Enterprise Transformation

Industry: Manufacturing



Whelen Engineering is a family business with global impact. The company has been a leader in manufacturing automotive, aviation, and community warning systems since its founding in 1952.

Developed an advanced data analytics platform enabling customers easily manage their devices, fleet and personnel which delivered improved customer experience.

Transformed to Enterprise-wide organization and upskills for cloud innovation

Digital Innovation Program 을 통한 LG 의 DX 전략



Agenda

LG & LG Leadership Academy Overview

LG Key Initiatives

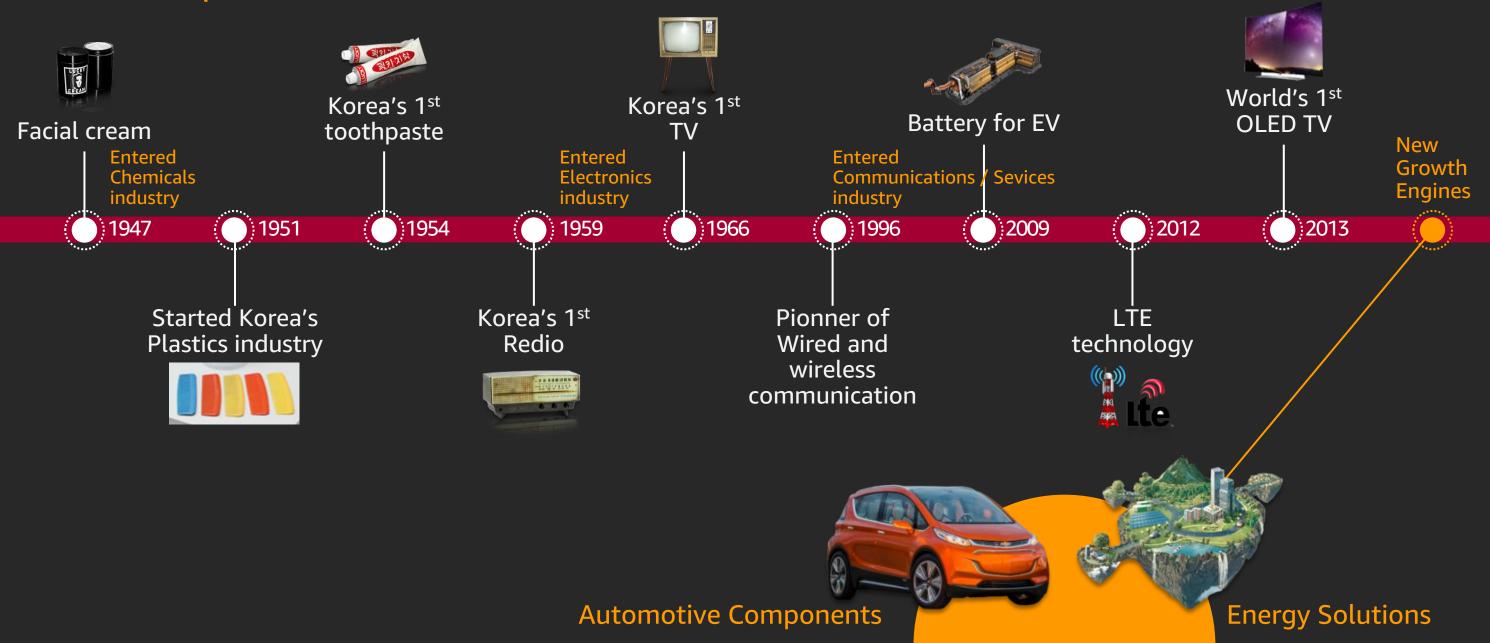
Activity with AWS (2019~)

Business Results

Next Step

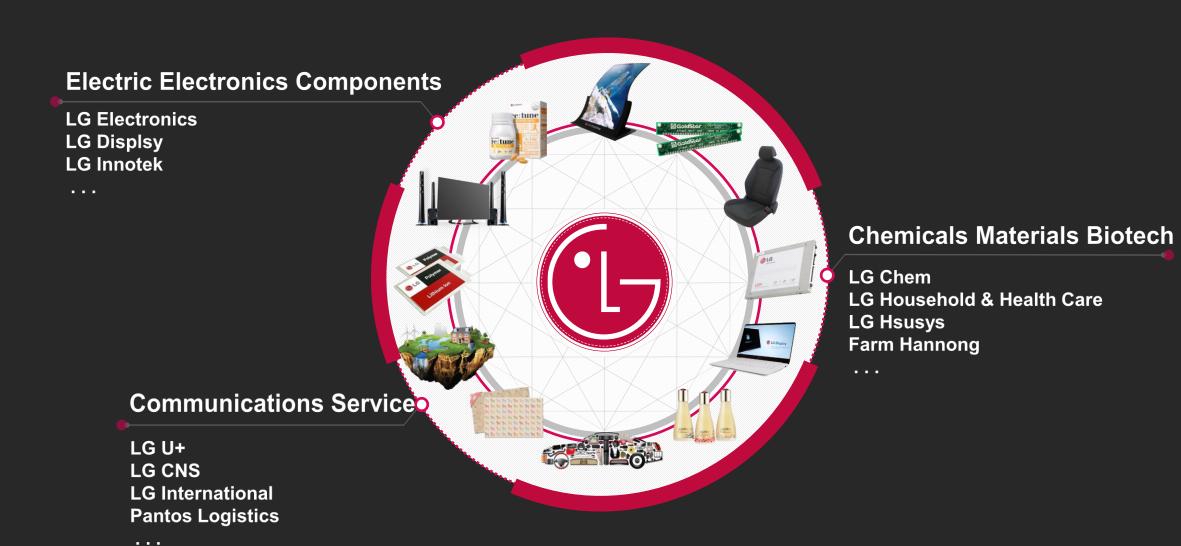
LG Overview

Pioneering Korea's chemicals and electronics industry since 1947, LG is now moving forward with innovative products and services.



LG Overview

Business Best Optimized for Convergence



LG Overview

Global Business Status: With 230,000 employees worldwide, LG's annual revenue reaches about 142 USD billion.





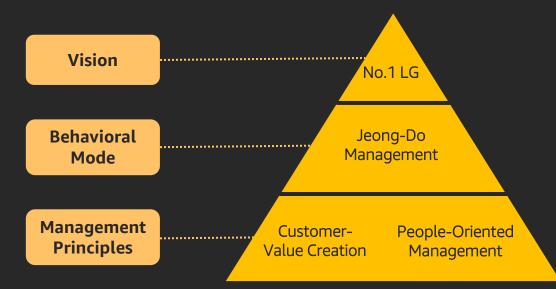
LG Academy overview

LG Leadership Academy has a role as culture and Communication Center in LG Group



- Established : 29th-November, 1988
- Faculty (Average per Year)
 - Internal: 900 (LG Executives: 80)
 - External: 300
- Programs (Average per Year)
 - In-Class 80, On-line 330
- Attendance (Average per Year)
 - In-Class 24,000, e-Learning 130,000

- Customer Value Creation
 - 「Challenge to do something for the world no one did」 Founder Chairman Koo
- Respect for People (People-Oriented Management)
 - People are the ones who create the value
- Management by Principle (Jeong-Do Management)
 - Fair, honest, abide by law, transparent
- LG Way



LG key Initiatives

2020년 LG그룹은 '고객가치실행', 'DX'를 Key Initiatives로 가져가고 있음.



Culture of Innovation 세미나를 통해 아마존의 혁신문화를 그룹 내 구성원들에게 소개하고, 그룹의 고객 중심 일하는 방식에 시사점을 제공함.

Amazon Culture of Innovation 세미나 진행

●2019년 9월(상품기획직군 대상, 386명), 11월(Online관련 직군/HR직군/고객접점부서 대상, 873명) - 경영진 ~ 실무자까지 참석







상품기획직군 임원 대상 맞춤형 EBC 프로그램을 진행하며 업무현장에서의 DX 활용 가능성을 확인하고, 사업부 별 니즈에 따라 아마존 현지 팀과의 Business 미팅을 진행함.

상품기획직군 임원 대상 Amazon EBC 프로그램

- 2019년 10월 상품기획직군 임원 7명, 동행 실무자 17명 : LG전자, LG디스플레이, LG이노텍, LG U+, LG CNS 5개사)
- 고객 경험 설계, ML(Machine Learning) 기반 Forecast, Personalize Solution 등 상품기획 측면에서 아마존의 DX 활용의 가능성을 확인
- 각 사업부 니즈 별 맞춤형 Business Meeting 진행하며 양사간 Win-Win 관점의 사업기회 발굴 (Ex. LG전자 TV사업부 Amazon.com 팀 미팅 / LG이노텍 Amazon Go 팀 미팅)
- Working Backward WS을 통한 사업기회 발굴/개선 영역에 대한 Working Backward 적용 방식 이해

그룹 내 상품기획 프로젝트 팀과의 Working Backward 실전 WS을 통해 Digital Prototyping 활동까지 범위를 확장함.

LG전자 3개 사업부 내 프로젝트 팀 대상 Working Backward WS

- 사업부 담당 임원의 적극적 지원 속에 프로젝트 팀원 전원이 WS에 참석하여 실전 과제를 Working Backward 방법론을 활용하여 신상품 기획 프로젝트 진행 ('19년 11월 ~)
- 3개 프로젝트팀 중 1개팀은 현재 Digital Prototyping 활동을 AWS와 논의 중임.
- Working Backward를 통해 고객 중심의 사업 기회 요인을 발굴하고, DX를 활용하여 솔루션의 가치를 극대화하는 메커니즘을 사업 현장에 적용/실험 중인 단계임.

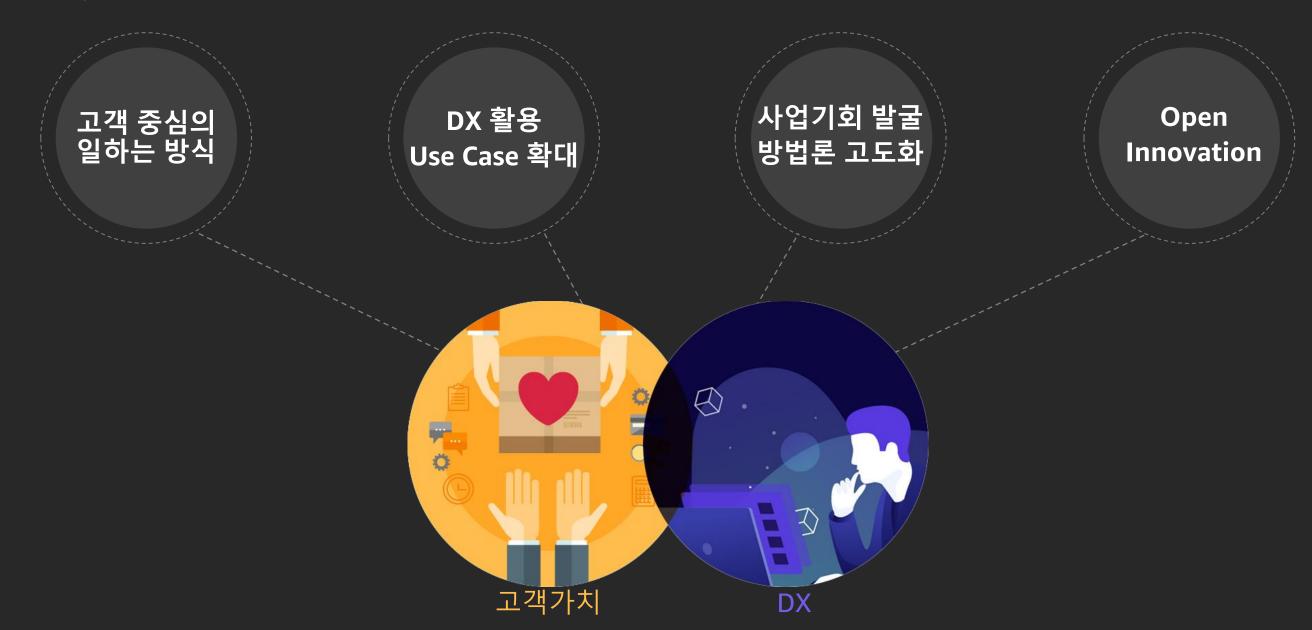
상품기획 Function 중심의 활동을 넘어 계열사 별 임원 대상 WBW, Col 세미나, DX적용 활동 등 그룹의 Key Initiatives를 실행하는데 있어서의 핵심 파트너로 아마존과 협력을 가속화하고 있음.

계열사 단위 맞춤형 지원협력, 교육 과정 형태를 통한 지원협력

- o LG인화원을 통한 그룹 차원의 지원 협력 Case 30건 ↑
- 계열사 단위 임원 대상 WS, 세미나
- 그룹 핵심 인재 대상 WS, 세미나
- DX 적용 관련 컨텐츠 공동 제작

Business Results

아마존과의 다양한 협력 활동을 통해 '고객가치실행', 'DX'라는 2가지 Key Initiatives를 달성하는데 있어 필요한 토대를 구축할 수 있었음.



Next Step

고객가치로부터 시작하여 고객 중심의 사업기회를 발굴하고, DX를 활용하여 솔루션을 가치를 극대화하는 시도를 아마존과의 파트너십을 바탕으로 더욱 가속화해 나갈 계획임.

(~20년 4Q)

PHASE II

- Full Working Backward WS 확대
- Digital Prototyping 활동 가속화
- Value Chain 별 DX 적용 구체화
- Function 단위 EBC 프로그램 (Ex. R&D)

(~20년 40

PHASE I

(~20년 1Q)

- Culture of Innovation 소개/벤치마킹
- Working Backward WS 실행
- DX 이해

PHASE III

- LG만의 일하는 방식 정착, 고도화
- DX 활용 고도화를 통한 사업경쟁력 강화
- 고객에게 사랑 받는 NO.1 LG

여러분의 소중한 피드백을 기다립니다!

강연 평가 및 설문 조사에 참여해 주세요.



감사합니다

