

BURGER LABORATORY

DIGITAL EDUCATION CONTENTS

SMART SENIOR EDUCATION

NDS SOLUTION

가다리지 않고 간편하게
여기에서 주문하세요!

롯데리아 AZ
순돌
바베크버거

CAUTION



WET
FLOOR

CONTENTS



- 01 PROBLEMS IN DIGITAL ERA
- 02 SMART SENIOR EDUCATION
- 03 NDS's SOLUTION



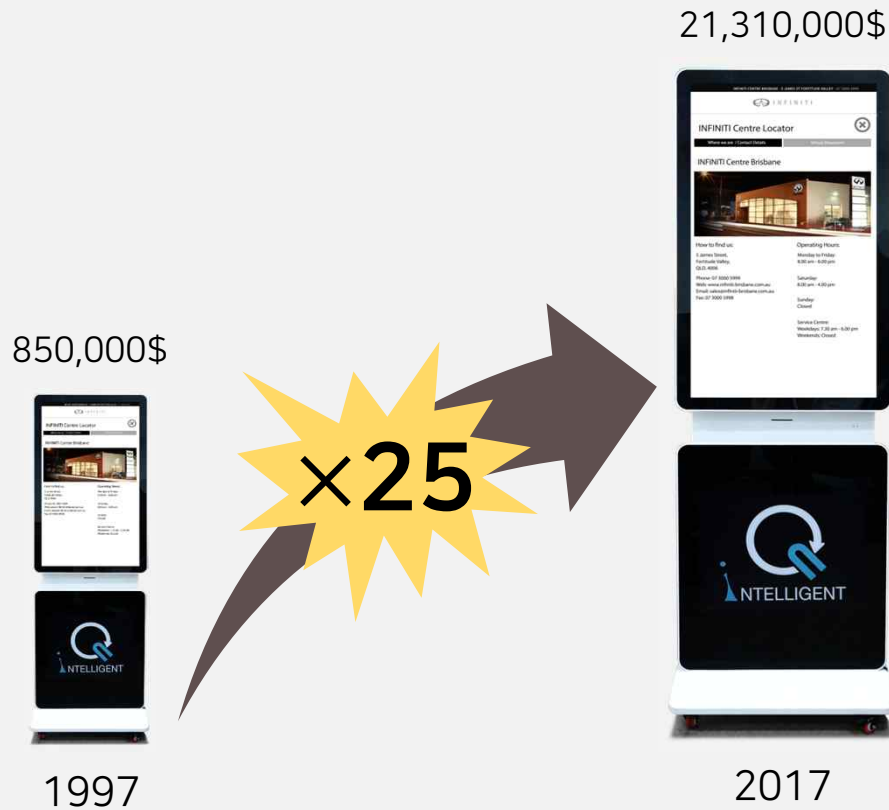
01

PROBLEMS IN DIGITAL ERA

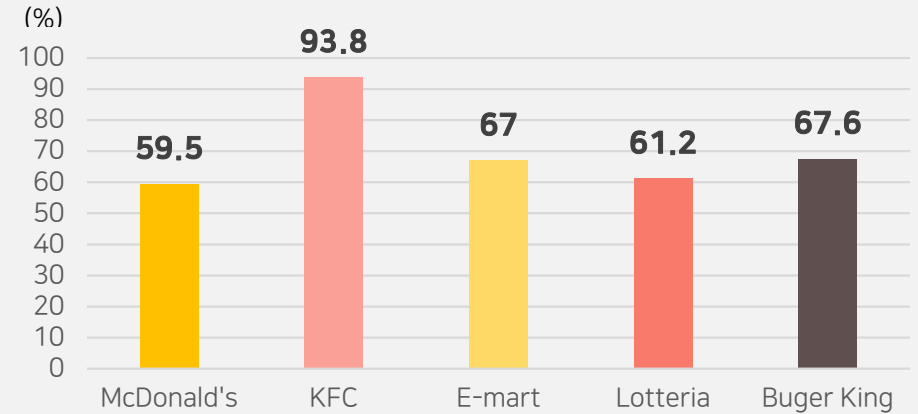
01 PROBLEMS IN DIGITAL ERA

Kiosk Market in South Korea

Source : Shinhan Investment

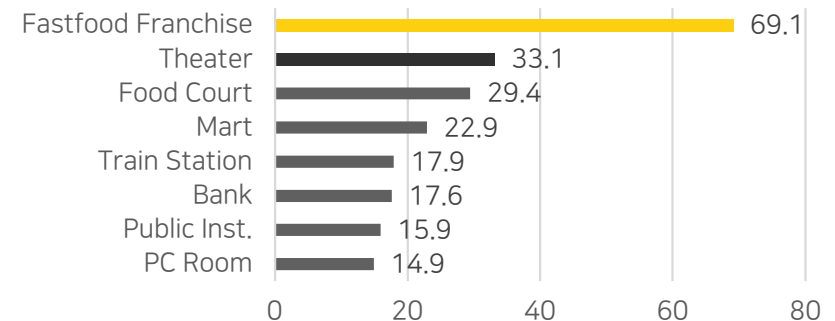


Kiosk introduction status of franchise store in 2018



Source : Food and Dining Economy of Franchise Industry Total Settlement in 2018

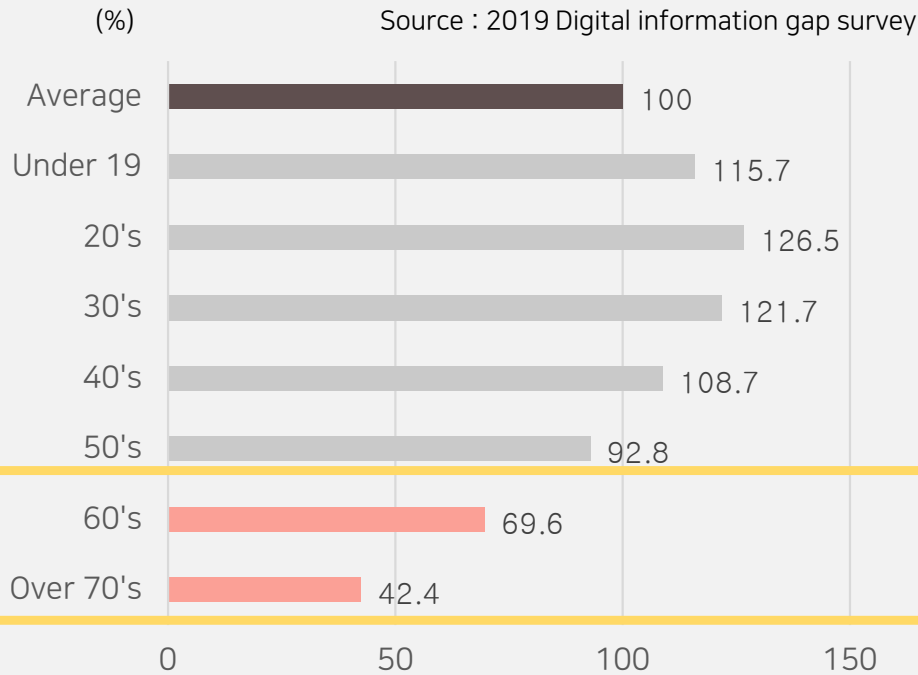
Store/Distributor that increase introduction of unmanned services recently



The domestic kiosk market was worth 850,000\$ 20 years ago, exceeded 21,310,000\$ as of 2017. Kiosk and other unmanned services have been introduced in most public facilities. After since Covid-19 pandemic, untact(Not+Contact) is preferred.

01 PROBLEMS IN DIGITAL ERA

DIGITAL INFORMATIZATION LEVEL BY AGE



F Forbes

Grandma Wants Digital Banking Too — Don't Ignore Her Needs

A study by the Financial Health Network found that 81% of customers 60 to 69 own a smartphone, as do 62% of customers older than 70. Of those ...



The New York Times

Seniors Seeking Vaccines Have a Problem: They Can't Use the Internet

The digital divide between generations has always been stark, ... Older Adults Technology Services has taught 48,000 people how to get ...



BBC

The South Koreans left behind in a contact-free society

Digital technology has helped South Koreans cope with the pandemic. ... minimal-contact society has left a swathe of elderly people behind.

Aug 3, 2020



ZDNet

Older workers are missing from tech. That's a big problem for everyone

"We certainly have anecdotal evidence from our members at BCS that sometimes they have faced age discrimination when it comes to applying for ...



The digital informatization level of the most digital underprivileged groups, including the disabled, the low-income group, the farmers and fishermen, and the elderly, is only 68.9% of the general population. In particular, the digital informatization level of the elderly is the lowest at 63.1%.

01

Most public facilities introduce kiosk



02

Digital divide of underprivileged group gets serious.



03

Conflict with young generation and be alienated from digital society

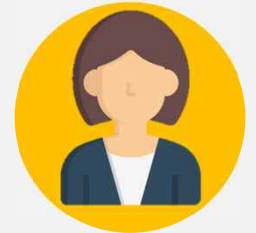
01 PROBLEMS IN DIGITAL ERA



John(29)

There was an unmanned parking fee calculator that you have to pay before come out, and I guess an old lady didn't know that. She just go back and forth looking for a person who can help her. Even though staff explained it through microphone, she didn't get it. Eventually, the staff gave up and just opened the gate. It's too bad that she had to go through these situation.

I've never even imagined about using kiosk in a movie theater. When I struggle to use unmanned ticket machine, I feel like I'm behind the times and left out. Sometimes there aren't even face-to-face ticket office. Then a part-timer from other store comes to help me, and it made me feel sorry and fraustrated.



Emma(60's)



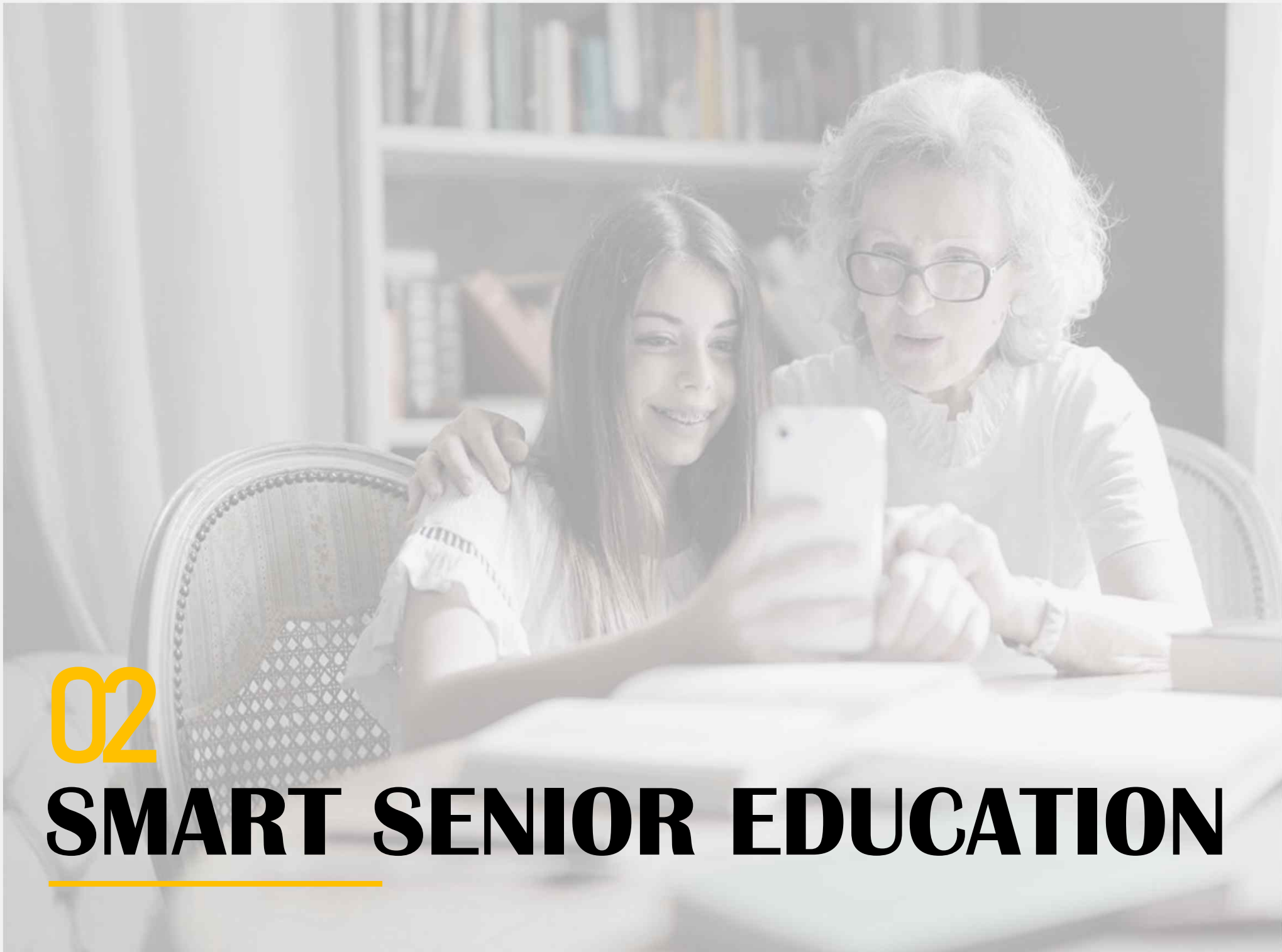
Alex(25)

An old lady was sitting in my seat on the train. So I told her I booked this seat, but she didn't quite understand. I had to call a station attendant to solve this situation. Although she had to stand while the travel and I felt sorry about it, but since I paid for the ticket I couldn't let her sit. I hope the elderly also learn how to book on online.

I visited a burger franchise for the first time in a while and tried to order take-out. However, there was a strange machine called a kiosk that I've never seen before. In the process of ordering, I had a lot of trouble, and in the end, I asked another customer to help the order. It was an order that would have been easy face-to-face, but it was like a complicate quize with a machine.



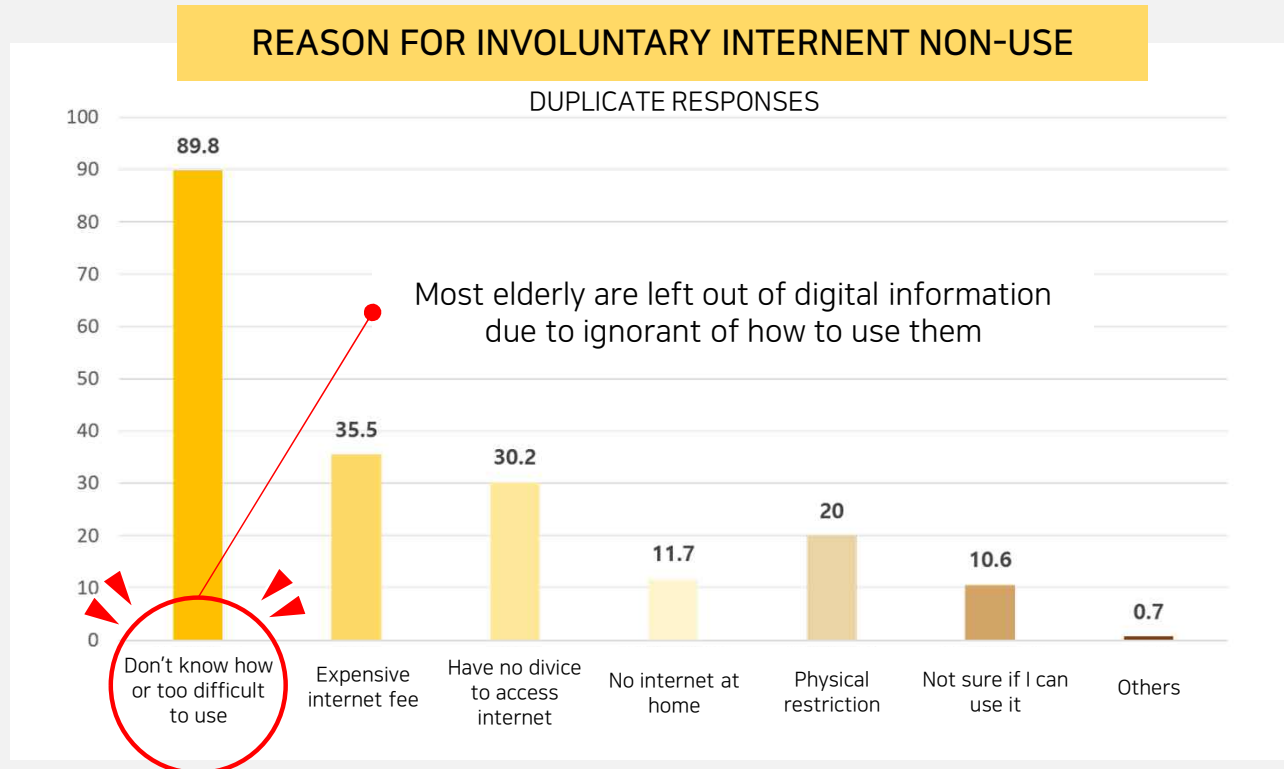
Joe(64)



02

SMART SENIOR EDUCATION

02 SMART SENIOR EDUCATION



Source : 2019 Digital information gap survey

01 Seocho District Office

- Developed a digital signage education program for elderly for the first time in South Korea by local governments.(Program developed by NDS.)
- About 1500 students had taken this program by Jan, 2020

02 Digital New Deal

- South Korea government confirmed and announced the Digital New Deal policy on July 14, 2020.
- Government supporting an additional budget of 50 billion won for digital competency education for not leaving out the elderly.

Narrowing 'digital divide': China steps up efforts to better serve the elderly in digital age






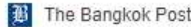



By Huang Lanlan, Li Qiao and Lu Yameng Source: Global Times Published: 2020/12/2 19:33:40



Volunteers in Beijing teach elderly people how to use smartphones. Photo: Xinhua

A video of a 94-year-old grandma being carried to a bank for face recognition to activate her social security card in Guangshui, Central China's Hubei Province, has sparked heated debate on the internet, once again drawing attention to the difficulties elderly people face in using smart technology.

Various smart technologies emerging in the digital era have brought major convenience to many people's daily lives, but have also excluded the elderly from the modern world to a certain extent. The latest incident reflects the "technological intelligence dilemma" affecting millions of elderly people in China.

-   **Fears for fate of China's elderly after pandemic's digital boom**
Old people in China have suffered as services and facilities have digitised after the coronavirus outbreak, with some unable to work out how to ... 
-  **Technology for seniors can improve life quality**
This already improves life for older people regarding private finances. ... Figure 2, below, shows how digital seniors aged 65-74 years have ... Mar 4, 2021 
-  **Bridging the digital divide in Asia-Pacific - Bangkok Post**
As an ICT enabler and partner in bridging the digital divide, ... and Internet of Things (IoT) to help people prepare for the digital age. 3 weeks ago 
-  **How to close the digital gap for the elderly**
Her words speak to the difficulties many elderly people face. "By using this machine, I have not only experienced advanced technology, ... Jan 19, 2021 



03

NDS's SOLUTION

Kiosk education program in Seocho district office

NDS
Own developed software
Q-Sign / Q- Wayfinder



More than 30 experience
of touch contents creation



Reasonable price
High quality and design



Intro page with ads



Option page

9 apps that we frequently encountered in daily life

Similar design as the original one




Real train booking app




NDS design

Kiosk education for the elderly - Train booking


KIOSK EXPERIENCE




UNMANNED MACHINE




RESTAURANT




MOVIE THEATER




CAFE




BUS TERMINASL




ATM



TRAIN STATION




AIRPORT



HOSPITAL

Secho-gu Train Travel



Touch the screen to switch to the ticket purchase screen.

Ads / Screen saver

Ticket reservation

departure Seoul → Arrive Osong

Confirm

Please select the station and press the Confirm button.

station	
Seoul	Yongsan
Gwangmyeong	Yeongdeungpo
Suwon	Haengsin
Cheonan-Asan	Guman
Osong	Incheon Airport
Daejeon	Singyeongju
Kimchun-Gumi	Gyeongsan
Dongdaegu	Minyang
Ulsan (Tongdosa)	Pohang
Gupo	Busan

Choose Destination

Ticket reservation

Passenger age and number of seats

2 adults
1 children
1 Old age

At least 1 person - Up to 1 person

Adult(over 13 years of age) [-] 2 [+]

Children(under the age of 12) [-] 1 [+]

Old age(over 65 years of age) [-] 1 [+]

Passenger

Ticket reservation

KTX 802
Residual 6 seat / Total 56 seat

● Unable to choose ○ Selectable

Window side	Inside		Inside	Window side
14A	14B	▲	14C	14D
13A	13B	▲	13C	13D
12A	12B	▲	12C	12D
11A	11B	▲	11C	11D
10A	10B	▲	10C	10D
9A	9B	▲	9C	9D

Select seats

Payment

XXXX년 XX월 5일 (Fri)
KTX 802

Payment


Credit card
(Domestic issued credit card)

Overseas Credit Card
(International issued credit card)

Installment Period Lump sum

Payment

Payment



Billing Information

Card number 123456*****7890(Lump sum)

Date of Approval XXXX.XX.1


Approval number 09876543

Total Receipt Amount 800₩


All done

Kiosk education program for the elderly in Seocho district office – Self-check-in at the airport


KIOSK EXPERIENCE




UNMANNED MACHINE




RESTAURANT




MOVIE THEATER




CAFE




BUS TERMINAL




ATM



TRAIN STATION



AIRPORT



HOSPITAL

AIRPORT

Self Check-In
Airport Self Check-In

Please check again for countries that need a visa!

How to use self-check-in

① Airline Selection

② Passport recognition

③ Boarding pass

④ Luggage consignment

Please select an airline.

✈ Seocho Air

Seocho Air

Aviation Dangerous Goods

폭발물 (Explosives)

인화성 액체 (Flammable Liquids)

산화성 물질 (Oxidizing Materials)

부식성 물질 (Corrosive Materials)

가스류 (Gases)

인화성 고체 (Flammable Solids)

독성 물질 (Toxic Substances)

기타 위험성 물질 (Other Dangerous Goods)

You have read the Dangerous Goods Guide.

Continue

Information

Seocho Air

Reservation inquiry-Choose how to use

Choose how to use.

Reservation number

Electronic airline ticket Number

Membership Number

Passport

Menu

Seocho Air

Reservation inquiry-number input

Please enter the passenger's reservation number, electronic ticket number and membership number.

Passenger's name Number

Hong Gildong 1 2 3 6 4 8

1

2

3

4

5

6

7

8

9

C

0

Confirm

Booking No.

Seocho Air

Change seat

Please select passengers and available seats

HJ860 Seoul(ICN) Singapore(SIN) YYY.Y. MM. DD.

12:30 17:30

	A	B	C	D	E	F
① Hong Gildong Seat: 35A	X	X	X	32	X	X
② Kim Seocho Seat: 34B	X	X	X	33	X	X
③ Kim Chulsoo Seat: 37C	X	X	X	34	X	X
	X	X	X	35	X	X
	X	X	X	36	X	X
	X	X	X	37	X	X

Passengers ① and ② Please change to the seat next to Passenger ③

Seat selectable Unable to select seats

Continue

Select Seats

Seocho Air

Passenger List and Flight Details

The seat you changed has been properly reflected.

Passenger's Name

Passenger 1 Hong Gildong

Passenger 2 Kim Seocho

Passenger 3 Kim Chulsoo

Flight	Starting point	Destination	Start	Seat Info.
HJ860	Seoul(ICN)	Singapore(SIN)	YYY.Y. MM. DD.	35A 35B 35C
	12:30	17:30		

Continue

Confirm

Kiosk education program for the elderly in Seocho district office – Train reservations

KIOSK EXPERIENCE

- UNMANNED MACHINE
- RESTAURANT
- MOVIE THEATER
- CAFE
- BUS TERMINASL
- ATM
- TRAIN STATION
- AIRPORT
- HOSPITAL**

SeochoXXXhospital

Hello. Thank you for visiting Seocho XX Hospital.

To receive / Receipt
Please select the button below!

Receive

Receipt and Prescription

View nearby pharmacy

Menu

SeochoXXXhospital

[Receive]

1. Enter patient info. 2. Medical Course Selection 3. Reception completed

Enter medical card number or ID card number

Agree to collect personal info. [View Terms](#)

- xxxxxxxx

1 2 3

4 5 6

7 8 9

C 0 Con-firm

Enter number

SeochoXXXhospital

[Receive]

1. Enter patient info. 2. Medical Course Selection 3. Reception completed

Application completed
Please wait in the waiting area.

Respiratory Medicine
Waiting num.: 5

YYYY. MM. DD.
Registration num.: XXXXX
date of birth: XXXXX
Name: Hong Gildong

Receipt output

Receipt print

SeochoXXXhospital

[Receipt and Prescription]

1. Enter patient info. 2. Check amount & select storage 3. Output

Barcode of the receipt or medical guide Please put it on the leader below.

<Example barcode>

If you don't have a medical bill or a medical guide, After entering the **medical card number** or **resident registration number** Please press OK.

08596 - xxxxxxxx

1 2 3

4 5 6

7 8 9

Scan QR code

SeochoXXXhospital

[Receipt and Prescription]

1. Enter patient info. 2. Check amount & select storage 3. Output

Credit card payment

With the card IC chip facing up, as shown below. Put it in the slot in the direction of the arrow.

Card slot

CARD

0000 0000 0000 0000
HONG GIL DONG 00/00

Total storage: 16,800 Won Installation months: Lump sum

Payment

Payment

SeochoXXXhospital

[Receipt and Prescription]

1. Enter patient info. 2. Check amount & select storage 3. Output

Card payment completed

Total storage: 16,800Won Installation months: Lump sum

Output is in progress. Please wait.

Patient name **Hong Gildong**

Output Status

Confirm

Kiosk experience program for the elderly

마음을 담다~ kt



KT IT 서포터스는 어르신 대상으로 키오스크를 원활하게 이용할 수 있도록 실감형 교육 콘텐츠를 제공합니다.



키오스크 체험 교육

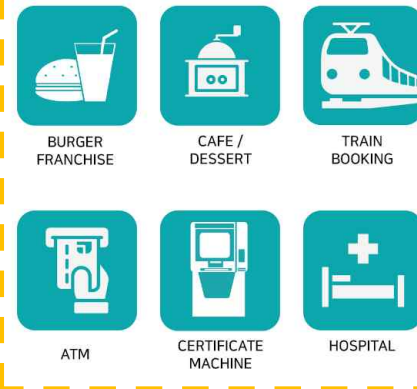


체험을 원하시는 키오스크를 선택해주세요.



수도권사회공헌팀

CHOOSE KIOSK APPLICATION



Voice guide for each menu



NDS Solutions Co.,Ltd.

- Contents that we encountered in daily life.
- Designed as similar as the real one so that elderly won't have a problem to adopt it in real life.
- Customized design and contents menu.
- ATM, Transportation booking, restaurants, cafes, movie theater, etc.

Kiosk experience program for the elderly – Certificate machine

CHOOSE
KIOSK APPLICATION



Menu



Select option



ID Check



Finger print check



Select option



Print option

Kiosk experience program for the elderly - ATM

CHOOSE KIOSK APPLICATION



BURGER FRANCHISE



CAFE / DESSERT



TRAIN BOOKING



ATM



CERTIFICATE MACHINE



HOSPITAL

K bank

오만원권 출금가능/입금가능

현금만 출금가능
현금/수표 입금가능

거래 선택

금융사가 예방 유의사항
국제청,권장보통국민은행
현금 입,출금기를 통하여
환급하는 경우는 없습니다.

통장정리
신용카드
저축/공과금
지방세/국세 납부
해의송금

입금

(현원권/오천원권 입금불가)

화면확대
저시력 고객용

그 비용을 차라리
고객의 이익으로 돌려라

Withdrawal

K bank

거래 선택

카드출금 | 통장출금 | 무통장/무카드출금 | 스마트앱출금

통장출금 은

창구에서 신청한 경우만 가능합니다.

스마트앱출금 은

스마트앱에서 등록한 경우만 가능합니다.

취소

그 비용을 차라리
고객의 이익으로 돌려라

Select option

K bank

카드 비밀번호 (4자리)를 눌러주십시오.

비밀번호:

[주의]
반드시 비밀번호는 타인이나
카메라 등에 노출되지
않도록 손이나 책 등으로
가린 후 입력하십시오.

1 2 3
4 5 6
7 8 9
삭제 0 정정

취소

그 비용을 차라리
고객의 이익으로 돌려라

Type PW

K bank

출금 금액 선택

1만원 | 20만원
3만원 | 25만원
5만원 | 30만원
10만원 | 기타

찾으실 금액의
버튼을 하나만
눌러주십시오.

<ATM 인출한도>
전액 현금: 100만원
전액 수표: 500만원
현금+수표: 500만원

취소

은행이 줄 수 있는
단 한원의 빚도
당 하나의 지점도 없습니다

Select amount

K bank

금액 확인

찾으시는 금액의 내용입니다.

현금: 1만원
수표: 0만원

합계금액: 1만원

취소 | 확인

단 한원의 빚도
당 하나의 지점도 없습니다

Check page

K bank

명세표 선택

명세표를 받으시겠습니까?

거래 금액: 10,000 원
거래후잔액: 34,989,300원
수수료: 0 원


아니오 | 예

그 비용을 차라리
고객의 이익으로 돌려라


Receipt option

Kiosk experience program for the elderly - Franchise


CHOOSE KIOSK APPLICATION




BURGER
FRANCHISE




CAFE /
DESSERT




TRAIN
BOOKING




ATM




CERTIFICATE
MACHINE



HOSPITAL






NDS Solutions Co.,Ltd.

kt 패스트푸드

기다리지 않고 간편하게
여기에서 주문하세요!!

화면을 터치해 주세요




Main page

식사하실 장소를 선택해 주세요.



매장에서 식사



테이크 아웃

Here / To go

주문을 확인해 주세요.

메뉴 1	통새우 버거	₩4,500
메뉴 2	통새우 버거 세트	₩6,500
메뉴 3	더블 베이컨 버거	₩4,500
메뉴 4	더블 베이컨 버거 세트	₩6,500
서브 메뉴	감자튀김	₩4,500
	오렌지주스	₩4,500

Check page

주문을 확인해 주세요.

메뉴 1	통새우 버거	₩4,500
메		₩6,500
메		₩4,500
메		₩6,500
메		₩4,500
서브		₩4,500

신용카드 결제 전용.
현금결제는 카운터에서 가능합니다.

확인

Payment

kt 패스트푸드

서브 메뉴를 선택해 주세요.



₩4,500
통새우 버거



₩6,500
통새우 버거 세트



₩4,500
콜라



₩4,500
감자튀김

1 사이드 메뉴를 선택해 주세요.



₩4,500
감자튀김



₩4,500
치킨랩

2 음료를 선택해 주세요.




₩4,500
콜라




₩4,500
오렌지주스

Menu / Set option

신용카드를 투입구에 끝까지 넣어주세요.



신용카드




Credit Card

결제 중입니다. 잠시만 기다려 주세요.


Confirm

Kiosk experience program for the elderly - cafe


CHOOSE KIOSK APPLICATION




BURGER
FRANCHISE




CAFE /
DESSERT




TRAIN
BOOKING




ATM



CERTIFICATE
MACHINE




HOSPITAL




NDS Solutions Co.,Ltd.




Main page




Menu



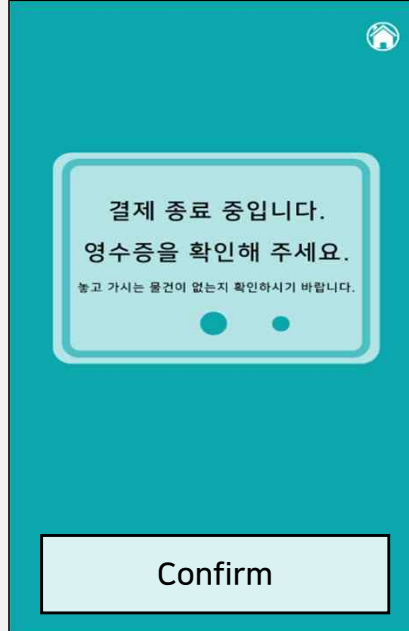
Option



Pay with card



Payment



Confirm



THANK YOU