# K-Safety Expo 2021

# Widico inc Gas Safety System





## CONTENTS

# widico is

Company instruction Series Innovation and Organiztional System

# PRODUCT

- Product overview
- Product competitiveness
- Major Product Functions
- new product development plan

# **BUSINESS**

- business background
- Business goal
- Business strategy
- Distribution Strategy and Sales Objectives

# Company introduction



주식회사 위디코 (WIDICO Inc.)

Establishment of Com

30-Oct 2015

Major project

Manufacture, wholesale and retail and export of gas safety breakers

Headquqters adderess

741. Taejang-ro, Gimpo-si, Gyeonggi-do Republic of Korea

Arepresentatiativ e teleph one T: 1588-9814 F: 031)985-9865















# Current statusof intellectualproperty (based on registration)

> 1 Trademark



#### 16(12) 16(12) 16(12)

19 patent registrations





# Company Transformation and Organization System



#### **Company history table**

2019/20

lŀ

2017

2016

2015

- 2019 6: 700 million capital increase
- 2018.6: 500 million capital increase
- 2017. 10 KC Certification Acquisition (WGC-N1001)
- 2017: 06 Specifying the Procurement Agency's Shooting Company
- 2017: 05 Certification in the Management of Intellectual Property of Small and Medium Enterprises
- 2017-05 Venture Business Certification
- 2017-04 Accreditation of Women's Enterprise
- 2017 Obtain ISO 9001, 14001
- 2017: 02 Accreditation of Corporate Instituto Nacional de Estadística

2016 10 Registered Export (Korea International Trade Association)

2016 12 100 million capital increase
2016 10 R&D Department Accreditation
2016-09 Headquarter relocation (Moonjeong-dong, Seoul)
2016. 08 Government R&D Task Selection
(Korea Institute of Technology Information Promotion
Agency)

10 Established 10 Widico Corporation
11 Starting to develop gas safety shutdown system

Organization chart

Corporate subsidiary

Research institute

Management support

- Managemen t planning
- personnel affairs
- Accounting tax
- money managemen
- Operation support

Sales/marketing

CEO

- Marketing Planning
- Marketing operation
- domestic operation
- Overseas sales
- Sales support

- Production management
- Production management
- Product management
- Quality control
- System management
- Delivery management











Sortation	Product standard specification
Name of the product	Widico Gas Safety Shutoff System
Model name	WGC-N1001W / N1001B / N1001V
driving method	motor drive system
Usage voltage	DC 6V / AA건전지 4EA
quality of the material	ABS(본체), 알루미늄(브라켓)
Weight	350g (건전지 제외)
Size	70 × 138 × 78 mm
Selection specification	Basic, Remote Control, Gas Range Interworking Module
a manufacturing bureau WIDICO Inc.	Republic of Korea

Traditional passive and postcontrolled Change the concept of a gas safety breaker.

Patent-registered new concept



#### WIDICO IS

## Third-party Gas Safety Breaker Products



Sortation	Main contents
current situation	✓ 20different brands of similar performance products
Main function	<ul> <li>✓ Timer-tipe Gas Time Setting</li> <li>✓ Shut off gas valve when the temperature is overheated(excluding some products)</li> <li>✓ Gas leakage and fire prevention(excluding some products)</li> <li>✓ Voice notification(excluding all products)</li> </ul>
principle of motion	✓ Control of gas valve by motor in case of event
market reaction	<ul> <li>Low awareness due to poor product functionality and publicity</li> </ul>



3rd party product	category	one's own product	
×	human body detection	0	
0	temperature detection	0	
Δ	gas detection	0	
Δ	IoT Function	0	
×	gas stove interlocking	<b>○(Optional)</b>	
×	Remote Control Provided	<b>○(Optional)</b>	
×	valve automatic opening and closing function	0	
Δ	Procurement Service Delivery	0	
Δ	Patent registration	0	



equipped with artificial intelligence Automated Safety System

Human, temperature, gas detection. three-stage safety system

Smartphone real-time Safety check andControl

> gas-lange interlocking User-centered safety functions

For the visually and hearing impaired.

Braille Guidance

for prevention

artificial intelligence

system

Certification
Patent registration product

modern and sensual high-quality design

Certified Performance

Easy installation and battery replacement

Thorough follow-up and follow-Quality guaranteed. (A/S)



#### Safe operation function

#### Human Body Detection and Automatic Blocking

A function to shut off the valve on its own when no movement of the body is detected in the kitchen for a certain period (15 minutes)

#### Temperature Sensing and Automatic Blocking

A function to shut down the valve when the ambient temperature is higher than the reference temperature set due to overheating when cooking food in the kitchen.

#### Gas Leak Detection and Automatic Blocking Functions

A function to shut down the valve when the ambient temperature is higher than the reference temperature set due to overheating when cooking food in the kitchen

#### smartphone remote control function

Features to check gas usage and to open and close valves with a smartphone with Wi-Fi transmission and reception module

#### Automatic opening and closing of gas valve

Safety features that automatically open valves when the gas stove is used and close automatically when not in use

#### **User-friendly features**

### Emergency Voice guidance and smartphone notification

Provides voice guidance on all operating conditions and conditions of the product, as well as reassurance that the smartphone is notified.

#### Long term gas range usage mode function

Pressing the open button for 3 seconds releases the motion detection sensor, enabling mode for prolonged use.

#### Remote Control Support for Inactive Customers

Remote valve shuts off with remote control for customers who cannot cope with emergency situations due to poor movement.

#### · Displaying and guiding the use of gas stove

A function that displays the tools that are being used when using the gas stove and allows users to check the use of the machine on their smartphone.

#### Low Battery Guidance

Voice guidance on battery shortage when battery charge reaches a certain point and notification function to smartphone



product design

improveme nt

product function

improveme nt  Visual Information of Operation al Situation

 Improvement of Smart Living E nvironment Design

•Add Speech Recognition Operation

 Application of LCD information supply function

# Direction of pursuit of improvement

- √ Improved user convenience
- ✓ Consideration for the handicapped, the elderly and the disabled
- ✓ Differentiating Design for Market Competition
- ✓ Digitalized Features Upgrade
- ✓ Upgrading the user experience of a smartphone

#### A new product Concept

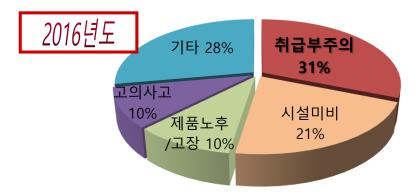




Most of the causes of gas explosions or fire accidents are user-handled carelessness. This is a typical human disaster that can be reduced through proactive prevention.

# Current status of gas leakage fire and explosion

Sortation	'11	'12	'13	'14	'15	'16	Sum
Occurrence (case)	126	125	121	120	118	122	732
Number of deaths (one)	10	20	17	13	18	12	90
Number of injured (number))	223	159	144	137	115	106	884



#### Gas Fire Case - Pohang



with a steamer cooker boiling gomtang for a long time Gas stove due to medium overheating Fire to nearby fire a built-in fire

#### Gas Fire Case - Pyeongtaek



in the stove She's got a gas fire. A neighbor's grandmother with the lights on. on one's way home a fire caused by overheating

#### Case of gas explosion – Yeongdeungpo, Seoul



For use in commercial buildings. ineligible gas meter The valve has no cause. It's open and leaking gas an accident blown up by

# Business background



market current situation

- Increased social awareness of gas accident damage
- The Appearance and Competition of Gas Safety Blocker Manufacturers
- Supply of gas safety prevention devices to the government and related agencies

On the rise gas safety shut-off device

But...



Automatic valve control after a certain period of time when using gas

**Practicality** ↓



√ How the electronic valve is shut off after a certain period of time by setting the timer



Smoke detection and valve control in case of fire and earthquake

**Safety** ↓

✓ Control valves and cut off gas supply by detecting smoke caused by



Leakage gas detection and valve control in case of gas leakage Possibility of accident 1



✓ Automatic control and shutdown of valves when gas is detected using a gas detection sensor





# Implementing a Safe Society through the Innovation of Gas Safety Blocking System

# A safe product

- Blocking gas safety, which is the product's original function, should be perfect under any circumstances.
- Ensures customer confidence through proactive preventive functions for the causes of gas safety accidents.

# **Customer** centred

- It provides automated gas safety blocking to provide convenience for customers to use gas.
- It provides an interior function that can add class to the kitchen environment with sensuous design

## leading-edge technology

- It needs to be able to improve functions and performance by applying high-tech technologies such as IoT and AI.
- We need to upgrade products with advanced technology through continuous R&D

# social contribution

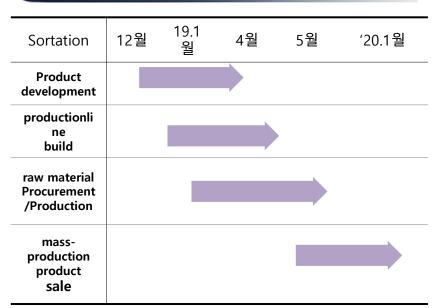
- Implement the ideology of providing ecofriendly products and implementing a safe society.
- The growth of the company should be generated from customers and its performance should be returned to society.



# Business strategy

WIDICO IS PRODUCT BUSINESS

#### **Proceeding with commercialization**



#### Product developm ent

Completed design development of design, circuit and app

> Acquiring KC Certification: November 15

#### productio n line build

- Fabrication of Molds and Establishment of Mass Production System: End of September
- > Establishing a Production Line: During
  November

#### massproductio n sales

- > Raw Materials Procurement Period: Up to 8 weeks
- Mass-production operation and market launch in July

#### marketing strategy

#### Target the client.

- General Home (Apartment, Housing)
- a restaurant
- Public offices and industrial sites

#### **Positioning**

- Differentiate from other products
- High-quality, highfunctioning position
- Advanced products to prevent gas safety accidents

#### **Product**

Functional differentiation of hightech grafting (IoT, AI)

 Consideration for the socially disadvantaged, such as the disabled, the elderly and the weak

#### **Price**

- Market price lead strategy (price differentiation)
- Flexible pricing policy operation

#### **Place**

- Domestic and Foreign Business
   Departments Organized
- Establishment of distribution network for construction site, procurement office, branch office, and agency

#### **Promotion**

- Early establishment of brand awareness
- Promoting strategies for selling media and home shopping
- Participation in exhibitions at home and abroad



#### **Distribution and Market Strategy**



#### Sales target

			(단위:억원)
A place of sale	′19	′20	′21
construction payment	15	20	30
general sale	10	20	40
Procurement Agency	5	10	20
Overseas export	3	10	10
합계	33	60	100

#### **How to Achieve Sales Goals**

Retail sale

- > Opening of a regional sales branch
- > Recruitment of National Sales Outlets
- Delivery of the procurement office (government agencies and government offices)
- > Selling Internet shopping malls
- Professional Sales (Master)UDICO Trade
   Establishment Operations

construction payment

Overseas export

- New apartment, apartment, apartment, villa, multi-family housing, etc. in order to connect the construction company.
- > Strengthening the sales force of existing apartment units
- Utilize government export support policies
- Linkage of domestic export companies and localization of overseas branches

Order and the status of the contract

- Agreement on the Payment of New Apartment Construction Sites
- Jeongseon District, Hanam, Paju, Gangwon Province, Gyeonggi Province
- Gwangju, Gyeonggi Province (Docheok, Oppo, Yangberly)
- Seoul Gwangjin, Incheon District
- Japan Export Convention (Duson International)
- \$300,000 export agreement with a company specializing in exports



