# **Evolution of Innovation**

From our founding in 1934 to the present, we have continued to develop our proprietary core technologies to continually accumulate a competitive advantage by leveraging our base technologies. Here, we will explain the history of innovation in the Fujifilm Group, which has promoted a growth strategy by consistently anticipating the future.

Attempts to Realize the Domestic Production of Film (Glass Dry Plates to Films)

1935

1936

1940

Attempts at Colorization (Black and White to Color) and Establishment and Systematization of a Culture of High-Quality Manufacturing

1950

1964



Base technologies

Ability to create new materials that make the impossible

possible by controlling molecular

structures and conditions at will



Fuji Photo Film Co., Ltd. is established, taking over the photographic film operations of Dainippon Celluloid Company Limited. First shipment of the first domestically produced film for motion pictures



Fuji Chrome Film



Fuji X-Ray Film



Air cartographic

After achieving the

domestic production of film

portfolio to include general-

purpose film, photographic

and graphic arts film. We

succeeded in the research

for motion pictures, we

expanded our product

print paper, X-ray film

and manufacturing of optical glass as we strove to

manufacture cameras.



Fuji F5 50 cm, a lens for aerial photography



Fuji Color Film



Fujica Six IA

We developed a camera, an enlarger exposure

unit and a processing machine on our own in

pursuit of high technology. We acquired the

mechanical, electric and optical technologies that

were necessary for this systematization process.



Fuji Enlarger Type B



Analysis of silver halide using an electronic microscope (laboratory)



Fuji hanger-type automatic processor

# Research and manufacturing of silver halide emulsions (Silver halides are substances with a high level of visible-light photoactivity.)



# Research and manufacturing of films

(As celluloid is highly combustible, we studied incombustible TAC film and PET film and began manufacturing them ourselves.)

# Research and manufacturing of sensitizing dyes

Sensitizing dyes are essential for generating high-fidelity photographic images.

Technology for roll-to-roll coating manufacturing of photographic materials

We acquired a multilayer coating technology because three color-developing layers for cyan, magenta and yellow were necessary.

We acquired an oil dispersion technology for evenly dispersing the coupler in each gelatin layer to prevent colors mixing.

Color formation is a complicated mechanism, in which exposed silver halides and developing agents react with each other, and the reactant and coupler react with each other, thus forming colors. We acquired a technology for precisely controlling the redox reaction.

# Base technologies







We possess energy-saving and environmentally friendly technologies in addition to our proprietary technologies that we

have been honing for the handling of high-quality images. These technologies are applied in the design of hardware in various fields, such as digital cameras and medical equipment.

# Base technologi

Analysis, evaluation and simulation technologies in the molecular/ atomic level and in the nanometer range, including analysis and simulation technologies that are essential for the functional design of materials, support the high-level material technology development by Fujifilm, which operates in various fields.

# Base technologies

Colorization resulted in a significant increase in the materials we use and the use of multilayered films. Technologies and processes evolved

high-quality images. In this process, we acquired advanced analysis and

imaging technologies for microprobe analysis and microscale analysis.

in response to the demand for the assurance of high quality and



Technologies for evaluating image quality, including the characteristics of photos such as color and picture quality. are applied in the analysis and evaluation of many imaging devices, from display devices to medical equipment.

# Technology

and synthesizing polymer materials that fulfill specific

#### Functional Molecules Technology

#### Film Formation Technology

# maging Forming Technology

# **High-Precision** Coating Technology

## Nano Dispersion Technology

## **Redox Control** Technology



The Fujifilm Group has been providing society with a large number of products and solutions that contribute to solving social issues by combining its core technologies and acquiring new technologies.

1970

2000

#### 2001

Converted Fuji Xerox Co., Ltd. to a consolidated subsidiary (changed our investment ratio to 75%)

## 2006

Established FUJIFILM Holdings Corporation

## 2008

Acquired TOYAMA CHEMICAL Co., Ltd., made full-fledged entry into the pharmaceuticals business

# 1970-1999 Business expansion based on technological capabilities

# **Efforts at Digitalization and Acceleration of Globalization**

We promoted the digitalization of the photographic film, medicine and printing businesses ahead of others. Furthermore, we began to establish overseas subsidiaries in the 1960s and started to establish overseas production sites and promote overseas sales in the 1980s, thus accelerating globalization.

# 2000s: Period of exploration into growth areas

# Second Foundation—Created a Resilient Business Portfolio

The photographic film market shrank at a rapid rate. To overcome this crisis—the potential loss of our core business—we restructured our business. Taking stock of the technologies we had cultivated in the development and production of photographic film, we entered the cosmetics and pharmaceuticals markets as future growth areas.

# 1983 World first

Launched FCR, a digital X-ray diagnostic imaging system



#### 1999

Launched the medical-use picture archiving and communications system (PACS) SYNAPSE

# 2003 World first

Launched a double-balloon endoscope



Launched Sapientia, a fully digital endoscope



# 2006

Launched the F Square i series of functional skincare cosmetics (Entered the cosmetics market)



# 2007

Launched **ASTALIFT** skin-care series for anti-aging



1965 Japan first Launched the SK and **GKN PS plates** 

# 1996 World first

Launched the WV (wide view) film

Provide a Wide Array of Products and Solutions **Leveraging Our Base and Core Technologies to** 

# 1975 Industry first

Launched the Fuii Xerox 6500, a full-color copy machine



# 1987 World first

Launched the Zero Printer 100, offering both printing and copying functions



## 2000

Launched the Color DocuTech 60, the world's fastest (at that time) full-color electronic printing and publishing system



# 2002 Industry first

Launched the netprint service to retrieve personal documents from copiers in convenience stores

Launched the "beat," a service providing Internet environments for small and medium-sized enterprises

1976 World first Developed the Fujicolor F-II 400, a high-speed color negative film



1986 World first

Launched the Fujicolor QuickSnap, a one-time-use recyclable camera



1988 World first

Developed the FUJIX DS-1P, a fully digital still camera

1998

Launched the INSTAX mini 10 instant camera



# 2000 World first

Launched the FinePix 4700Z digital camera equipped with the Honeycomb Super CCD sensor



▶ Please refer to p.16 for our current base and core technologies.

2020

# **Evolution of Innovation**

2010

# 2012

Acquired SonoSite, Inc. and entered into the ultrasound diagnostics field

# 2017

Acquired Wako Pure Chemical Industries, Ltd.

#### 2019

Converted Fuji Xerox Co., Ltd. to a wholly owned subsidiary

# 2021

Changed the company name from Fuji Xerox Co., Ltd. to FUJIFILM Business Innovation Corp.

## 2022

Acquired Inspirata, Inc.'s digital pathology division

# 2011

Acquired MSD Biologics Limited/ Diosynth RTP Inc. and entered into the Bio CDMO markets

# 2015

Acquired Cellular Dynamics International, Inc.

# 2018

Acquired Irvine Scientific Sales Company and expanded businesses in the fields of life sciences (culture media)

## 2019

Acquired Biogen (Denmark) Manufacturing ApS and accelerated the growth of the Bio CDMO business

# 2021

Completed the acquisition of FUJIFILM Healthcare Corporation, which is the successor to the diagnostic imaging business of Hitachi, Ltd.

# 2010s: Period of the examination of growth areas

# **Enhanced the Business Portfolio and Accelerated Growth**

Anticipating the expansion of the market, we fully entered the Bio CDMO business in 2011 and actively pursued M&A opportunities by examining and identifying areas where we could demonstrate our competitive advantages.

# 2020s: Period of growth

# Generating Value with a Positive Impact on Society, **Leading Markets**

We are focusing our efforts on generating value to positively impact industries and society by accelerating the creation of synergies within the Fujifilm Group and enabling our leading-edge proprietary technologies to evolve.

# 2011

Made full-fledged entry into the Bio CDMO business



## 2016

Launched the FDR nano, a lightweight, portable digital X-ray imaging device Launched the FDR Xair, a mobile X-ray imaging device



# 2018

Announced REiLI, the AI technology brand



# 2021

Launched cloud services for medical institutions

# 2023

Launched the AMUI FT SOPHINITY digital mammography system



#### 2011

Launched the Jet Press 720



## 2012

Launched high-capacity magnetic tapes using barium ferrite (BaFe) magnetic particles



## 2018

Launched the "Hibimikke (Crack Finder)," a social infrastructure image diagnostic



## 2021

Launched the FUJIFILM LTO Ultrium9 Data Cartridge, which provides safe, long-term storage of high-volume data at low cost



## 2009

Launched the ApeosPort-IV Series, offering environmental impact reduction services

# 2011

Launched the Working Folder cloud service supporting document sharing



# 2020

Launched the CocoDesk, a personal workspace service



# 2021

Launched the Apeos Series of Fujifilm-brand multifunction devices and printers with enhanced security features



# 2023 World first

Launched a pressure-bonding toner with an adhesive function





zoom lens compatible with 4K cameras



2019 World record

Launched the FUJIFILM GFX100, equipped with a large-format sensor with 102 million pixels



2019

Launched the INSTAX mini Link, a printer for smartphones



#### 2021

Launched the INSTAX mini Evo hybrid instant camera



