FPT Software Quy Nhon

INTRODUCTION

Vu Van Dong

FPT Software Quy Nhon

Panorama of FPT university and AI research center in Quy Nhon - Vietnam.

QUY NHON

- Founded: **2019**
- Number of employees: 600
- Development target: 2000 employees by 2025
- **To become AI-Data Valley of Vietnam & Asia**

Why Quy Nhon?

- City of Science and Education
- One of three math centers in Vietnam

A Scientific Urban Area:
- The International Center for Interdisciplinary Science and Education (ICISE)
- Quy Hoa Science Valley

40 hectare AI Complex in construction

People's Committee Chairman of Binh Dinh province (left) handed investment approval decision to Mr. Truong Gia Binh – FPT Chairman for the construction project of 40 hectare FPT AI Complex in Quy Nhon city

The destination of the world's elite scientists:
- "Rencontres du Vietnam" (Meet Vietnam) attracted 10,000 scientists from >40 countries since 2013, including 18 Nobel Laureates visited Quy Nhon
- International Conferences on Math/Physic/IT: The Vietnam-USA Joint Math. Meeting (2019); The VN-Japan Joint Math. Meeting (2018); International Conference on Optimization (2016)
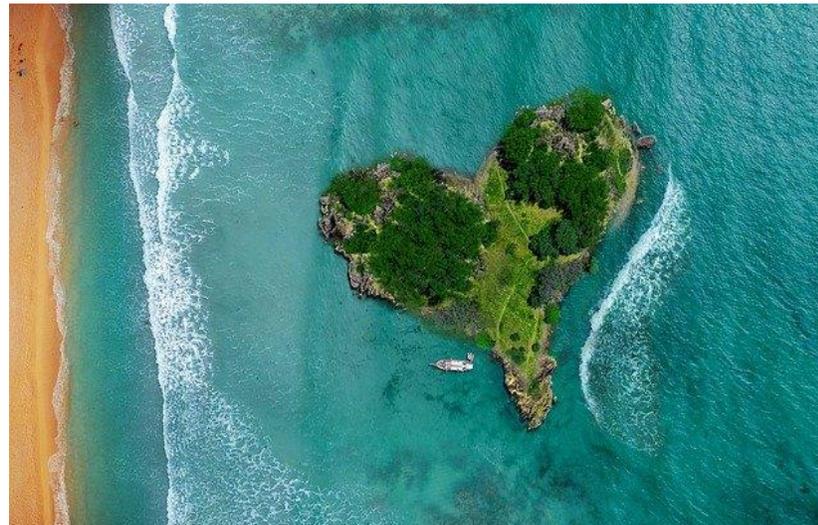
One of the most beautiful coastal cities in the world

- Beautiful nature and historic area

- Most popular destinations for Vietnamese tourists (Agoda)

- Top 10 of Asia's best beaches (Forbes)

- An international airport and one of 3 deep - harbor of Vietnam.

- 6th Largest-bandwidth from JP to Quy Nhon.

FPT Software Quy Nhon Campus

FQN Campus:
- Global Training Campus
- AI Valley – FPT City

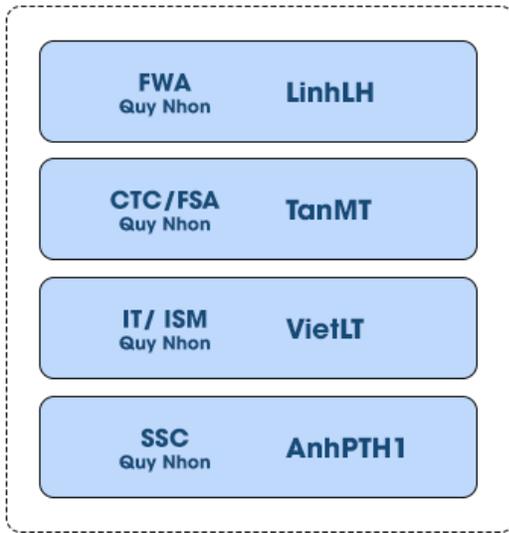| Area	Training Campus	Employee:
170,000 m²	10,000 employees	Present: 600 HR
110,000 m²	11,000 trainees/year	OKR 2025: 2,000 HR

QUY NHON

FPT Software Quy Nhon – Organization

FSOFT QUY NHON

1. FHM QAI: AI/Data Competency.
Focus build competency, become to top 1 about AI/Data Competency in VietNam

2. FHM Q9: Mass Unit in Quy Nhon.
In 2023, FHM Q9 focus main 2 market: **Japan** & **Korea** with nearly 100 employees.

3. GST Q7: Global Smart Technologies
Currently, Q7 have nearly 100 employees focusing on two main markets: **Japan** and **Korea**

4. FI GVS: Global Visualization Services
FPT has more than 10 years of experience in the Japan market to help clients implement high-quality, multi-channel marketing quickly at the affordable cost.

5. SCM Quy Nhon: Supply Chain Management, Global Smart Manufacturing. have nearly 100 employees 2023.

SERVICE AND OFFERING PORTFOLIO

RESOURCE SKILL

Azure 87

aws 52

Google Cloud 22

35

AI/DATA 101

PMP **PMI-ACP**
PMP-ACP 22

Vue.js 125

ReactJS 135

AngularJS 55

MES/MOM 60

Japanese [N1-2-3] 23

Java 165

Microsoft .NET 105

node js 115

Flutter

Korean [Topik 4, 5, 6] 5

Resources & Certificates

14
Associate Level Certificates
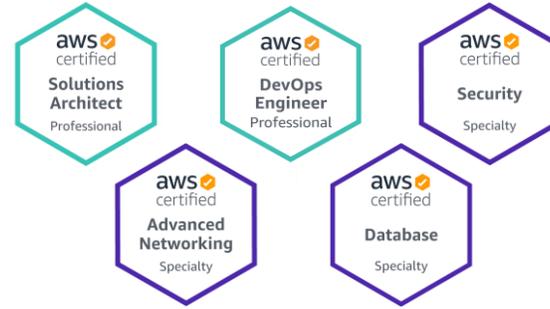
8
Expert Level Certificates

112
Associate Level Certificates

12
Expert Level Certificates

30+
Projects

350+
Engineers

90+
AI / DATA Engineers

FHM QAI

ChienVH1 – HaiNP7

OUR MISSION & VISION

FPT AI University Quy Nhon city - Binh Dinh province - The first university to specialize in AI

University Facilities

RnD

Collaboration with MILA to become **ASIA Pacific's largest academic research lab** specialized in Deep Learning

Solutions & Services

Unleash the power of AI-data with our **comprehensive** suite of high-performing solutions. We **optimize** business processes, **unlock hidden insights**, **empower** your workforce, and fuel innovation.

OUR MISSION

Applying advanced technology to **improve the quality of life** of people

OUR VISION

Top 5 AI-Data Valley of ASIA by 2030

OUR CAPABILITIES

Benefit to customer

Reduce operation cost

Make decision better and faster

Human-error reduction & productivity improvement

- Centralize data, optimize costs, fuel efficiency
- Future-proof your platform, embrace new possibilities
- Migrate to agility, fuel innovation, gain the edge

Descriptive: What is happening?
Diagnostic analytics: Why did it happen?
Predictive analytics: What is likely to happen?
Prescriptive analytics: What should I do about it?

Integrating "**Simple, Effective, Time-saving, Adaptable**" AI solution to FPT's Products/Packages
Exchange business benefits from AI development and pilot operation to improve **reliability**
Product continuous improvement with Agile

Service offering

DX Data Engineering

- Data Consultant Services
- Build Data Platform
- Data Migration
- Data Platform Operation

AI/ML & Data Analytics

- Data Cleansing & Augmentation
- KPI Reporting
- Trend Analytics
- Advanced Analytics

IA - Intelligent Automation

- IA Consulting Services
- AI-powered Products as Service
- IA Package Development（AI, RPA, Software）
- IA Operation and Maintenance

1000+ (QAI: 300+) AI/Data Professionals

200+ (QAI: 100+) AI/Data Project

20+ AI Products/Packages Solutions

akaOCR akaCoga aka**CAM** aka**Inspection** aka**Focus**

Partnerships

Mila
aws partner network
Microsoft Azure
dataiku
Google Cloud Platform

OUR PRODUCTS, SOLUTIONS AND CUSTOMERS

akaOCR

An intelligent solution use AI/ML to solve paper problems and process documents.

akaCam

A Video Analytic Platform - Transform video data into actionable intelligence

akaFocus

Smart control of time and work to increase individual productivity.

cus360

Enterprise customer information crawling & ranking system

F_GPT Solution

Virtual Assistant Chatbot, VoiceBot, Knowledge management & mining

FHM Q9

NguyenBT1 - QuangNCN

INTRODUCTION

• Founding	• 2023
• Employee	• About ~100
• Key Customer	• NTA, DATA-X, HEIAN, TPCS

- Our department unit was established in early 2023 with the main mission of being a MASS unit in Quy Nhon. Currently, our main market is the Japanese market.

INTRODUCTION

Azure 30

aws 11

Google Cloud 02

PMP-ACP 07

Vue.js 35

ReactJS 35

AngularJS 20

Japanese [N1-2-3] 11

Java 25

Microsoft .NET 45

NTA | Nippon Travel Agency

Customer Overview

NTA
NIPPON TRAVEL AGENCY

Travel

3632 employees (2022)

Japan

1.4 Billion (USD) (2022)

Business Overview

- As a web application for internal customers, working with two main roles, operation and sale, to create products to sell to agents.

- The customer has two old systems, FIT and Unity. The system helps customers merge two old systems and migrate to Azure towards automation to reduce manpower and operating costs.

2-Years Contract Value
$2M+

Team Size
105+

Our Solution

Application Services:

Application Development, Maintenance, Application Management and Complete Life Cycle Services is provided and includes: Business Analyst & Design, Development; Integration, Documentation & Training

Migration
Migrate systems from old system into Azure Cloud.

Testing
Functional, Integration, End to End testing, Performance, Load and Stress Testing

Services

- Full-life-cycle services: Requirement analysis & design, code, test, deploy, go live support and maintenance

- Hypercare phase.

Benefit & Values

- Reduced operating costs for two legacy systems when merged into one and migrated to Azure.

- It's easier to integrate with a third party than manually integrating two old systems.

Case Studies - DataX

Customer Overview

dataX

Digital Marketing

250 - 500 employees (2022)

Japan

100M (USD) (2022)

Business Overview

- Customer is providing a Marketing Automation solution which contains ~20 applications that need to be maintained and developed new features.

- Customer needs to maintain and enhance their KPI management system to reach optimal functionality with many new items.

Contract Value
$600K+ (2023)

Team Size
30+

Our Solution

Application Services:

Application Development, Maintenance, Application Management and Complete Life Cycle Services is provided and includes: Business Analyst & Design, Development, Integration, Documentation & Training.

Testing
Functional, Integration, End to End testing.

Services

- Requirement analysis & design, code, test, deploy, and maintenance

Benefit & Values

- Shorten time to market for new features.

- Stabilize existing system through improvements and bug fixing.

GST Q7

PhongLT1

GLOBAL SMART TECHNOLOGIES | FPT Software

2022

2021

2023

2024

2025 …

Initialization

Set **foots** on Quy Nhon

Memorize

Spread the image of Q7

Imprint

The delivery unit is **good** and always longing for **change**

Add puzzle pieces

Add more **energy** and **color** to the unit's development

Global

Build an **independent** position. There are different **competencies** in GST
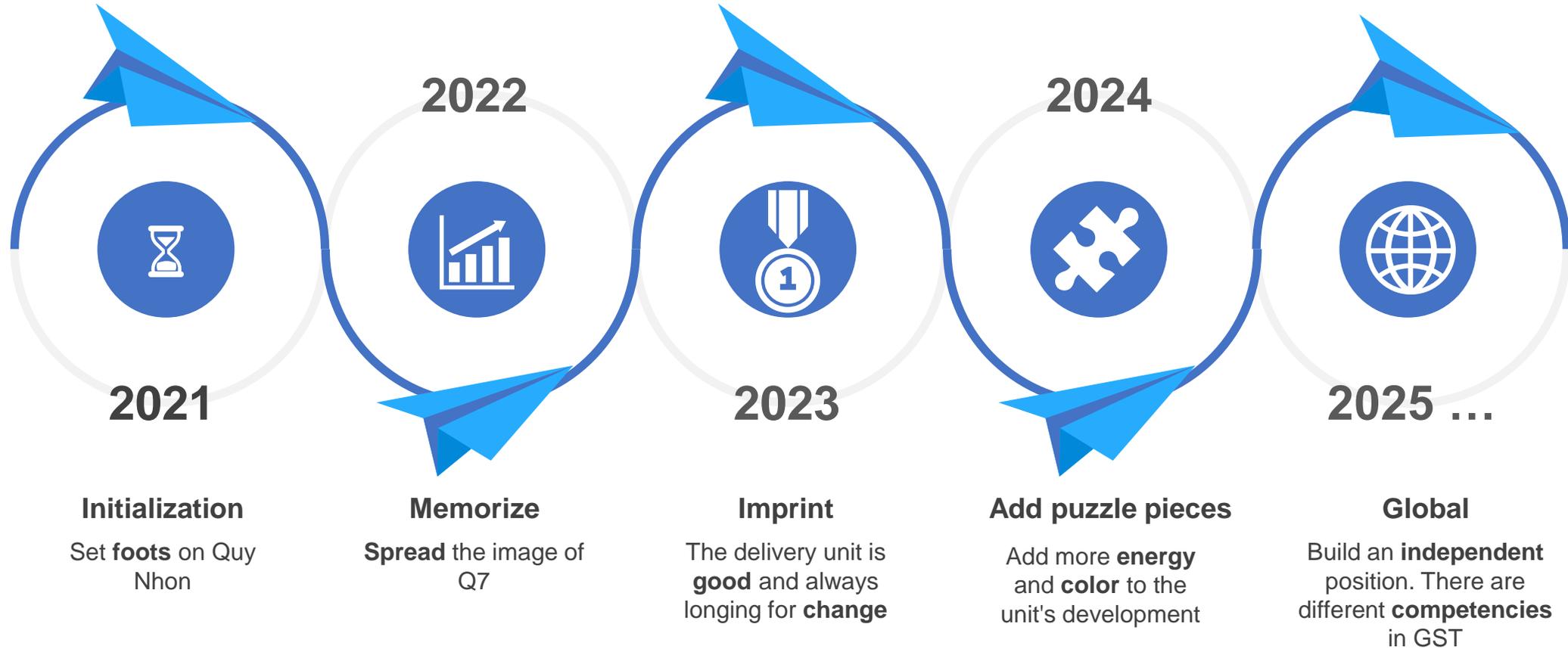
Currently, we have nearly **100** employees focusing on two main markets: **Japan** and **Korea**

jinjer

NTT

CITIZEN

Rakuten

TOSHIBA
Leading Innovation >>>

LG CNS

PENTA
SECURITY SYSTEMS

Secta9ine

GLOBAL SMART TECHNOLOGIES | FPT Software

We accompany our customers in the digital transformation journey by leveraging the advantages of smart devices & latest technologies.

1. Mobile Apps & Game Development	2. Smart Devices Ecosystem	3. Smart Platform Transformation	4. Payment Platform Development	5. Mobility Digital Experience
Deliver high-quality applications by leveraging 13 years of experience in Mobile Apps & Game	Accompany device manufacturers in developing built-in applications as well as significant ecosystems	Providing comprehensive solutions to transform legacy platforms to smart platform	Accompany payment solution providers to develop, deploy, and integrate other systems	Accompany manufacturing and transportation companies in developing connectivity systems
UIUX Design Services	**Smart TVs**	**Handy Devices Transformation**	**POS Payment**	**Connected Vehicles**
Native Development	**Smart POS**	**Store POS Transformation**	**Payment Gateway**	**Navigation**
Cross-platform	**Smart Printers**	**Payment POS Transformation**	**Payment Cards**	**Digital Keys**
Development	**Smart Cameras**	**Digitize with Mobile Devices**	**E-wallet**	**Ride Sharing**
Hybrid/Web	**Smart Appliances**	**and more**	**Payment Integration**	**Telematics**
Development	**and more**		**and more**	**and more**
Manufacturing | BF&I | Logistic & Transportation | Retail | Aviation | Media & Entertainment	Manufacturing | Healthcare | Logistic & Transportation | Media & Entertainment	Manufacturing | Retail | Logistic & Transportation | Media & Entertainment	Retail | BF&I | Logistic & Transportation	Automotive | Manufacturing | Logistics & Transportation

Azure **7**	aws **10**	Google Cloud **05**	(Android) **05**
Vue.js **30**	ReactJS **40**	AngularJS **20**	(Apple) **05**
Java **40**	Microsoft .NET **25**	node.js **15**	Flutter **05**

PMP PMI-ACP
PMP-ACP
8

Japanese [N1-2-3]
10

Korean [Topik 4, 5, 6]
5

Customer overview

It is a leading provider of information technology services, including consulting, system integration, network integration, business process outsourcing, and information technology outsourcing:
- AI/Big data
- Cloud
- Web3
- DX solution
- DX in finance
- Smart city
- Smart factory …

Business Overview

There are many small projects:
- Develop web app for document management
- Convert documents into pdf, image... into word, ppt
- Develop iOS and Android applications

2-Years Contract Value **$0.7M+**

Team Size **23+**

Our Solution

Application Services:
- Learn and integrate guest libraries
- Use SASE to test and integrate on customer environments due to network limitations and sim/card conditions

Testing
Functional, Integration, End to End testing, Performance, Load and Stress Testing

Services

- Requirement analysis & design, code, test, deploy, go live support

Benefit & Values

- Team develops with good productivity and quality. Help customers save costs
- Help customers successfully test the mobile outsourcing model abroad when limited in network and sim/card
- Create many opportunities to access the mobile segment for Korean customers

Customer overview

PENTA
SECURITY SYSTEMS

The company was established in 2009, with services related to security for:
- Cars
- Ships
- Cameras
- Electrical systems
- Smart cities...

Solution of Penta:
- Access Control System
- AI Security Assistant
- CCTV Solutions
- Gate Automations
- PA Systems

Business Overview

- Currently, Penta is cooperating very well with the Korean government to receive security projects. And will hire FPT to be the POC for these projects.
- Simulate security system for cars
- Simulate data and AI problems, block change
- Test the model on mobile …

2-Years Contract Value
$0.8M+

Team Size
10+

Our Solution

Resource:

Because the nature of the project is very short. About 1 project per month. Skills are always changing, so we have to approach top students from universities who are interested in research to do this project.

Learning and researching quickly are important factors for this project

Services

- Full-life-cycle services: Requirement analysis & design, code, test, deploy, go live support

Benefit & Values

- Helps customers test the feasibility of projects
- Helps customers quickly demo with their customers

Customer overview

Ginger is a cloud service that supports efficiency in HR-related operations such as **personnel labor, attendance management**, **payroll calculation**, **workflow**, and **expense settlement**.
By consolidating all data related to human resources and labor in Ginger and managing it in "one database," we reduce the effort required to register and change information in each system.

Business Overview

- Develop and integrate human resource management functions such as Team management, Evaluate members, List of talent members …

- Build web view for users, admins and integrate with 3rd party services

2-Years Contract Value
$2M+

Team Size
50+

Our Solution

Application Services:
Divided into 3 development teams:
- Talent: Focus development functions for user
- API: Focus public api for other services
- Admin: Focus development function for admin

Testing
Functional, Integration, End to End testing, Performance, Load & Stress Testing, Security testing

Services

- Full-life-cycle services: Requirement analysis & design, code, test, deploy, go live support and maintenance

Benefit & Values

- Discuss and come up with ideas for product development with customers. Conduct continuous demos to help customers access the product early to save costs

- The products produced are of good quality and help customers sell products to many partners.

FI GVS

TungDV

Overview of Global Visualization Services

FPT has more than 10 years of experience in the Japan market to help clients implement high-quality, multi-channel marketing quickly at the affordable cost.

Digital Contents

DTP
- Flyers, magazines, catalogs
- POSM :Point of sale material

Video Production
- Separation of objects & backgrounds
- Editing colors, audio, subtitles
- Editing videos

E-book
- Online catalogs, flyers, magazines etc.

Landing pages, web
- Web Content
- UI Design (Web&Application)
- HTML Content Creation

3D Services

3D Modeling & Animation
- 3DCG creation
- Multi-industry 3D creation

CAD／CAE
- Create models from CAD drawings
- Structural calculation of buildings
- Rendering

BIM
- Creation of models and 2D drawings from CAD data

AR/VR/Digital Twins
- Creation of AR applications for WebAR
- VR simulation

Merit

- Set up a working environment similar to client.
- Develop automated tools to improve quality and reduce costs.
- Available 24/7/365.
- More than 300 resources with highly skilled technicians.
- Quickly set up team and able to handle occasional cases.
- High security.

Skills

Why Us

Experience

- 3D Techniques – Advanced & Senior Level
- Rich in know-how and various domains of services, make a different with big ideas and global support.

Price

- Understand the needs and desires of customers to provide the most accurate solution and optimize costs for each customer.

Flexibility

- We are a team of problem solvers.
- Flexible respond time for each URGENT package.

Technology

- Apply technology in project operation
- Develop automated tools to improve quality and reduce costs.

Resources

- Quickly set up team and able to handle urgent cases.
- Available scale 100-300 3D highly-technical resources.

Overview of Global Visualization Services

FPT Software

FPT has more than 10 years of experience in the Japan market to help clients implement high-quality, multi-channel marketing quickly at the affordable cost.
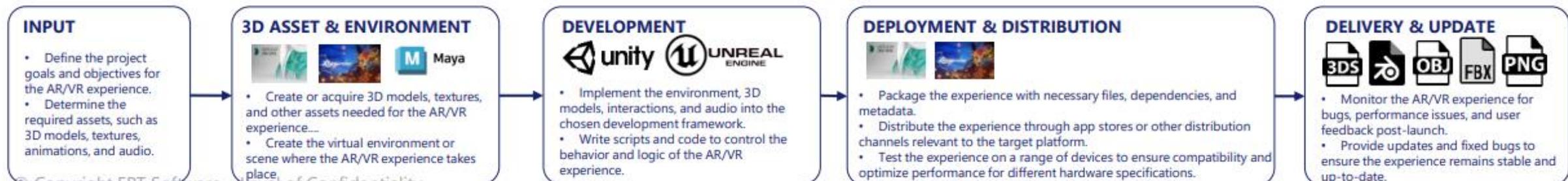
Video Workflow

INPUT
- Customer provides source videos
- Review the data: including video, objects, images, audio, effect, etc.
- Customer provides plugin

Create Objects or Edit
- Import the needed data as requested into the project.
- Create new or adjust the 3D or 2D objects.
- Create material, textures and adjust the color with 3D object.
- Set up the light source and 3D effects (ex: light, smoke effect, Blur...)
- Set up the camera view.
- Export the data image or video transparent

Create Video & Edit
- Import the final source video including new object data to merge into the common project.
- Configure the Camera or frame
- Adjust the key frame for each scene.
- Import audio and effects.
- Create transitions effects, adjust the speed, insert the motion effects.
- Synchronize edited audio and video

Export Video & check video
- Export video to the appropriate formats such as .mp4, .mov, etc.
- Review the output quality.

Delivery Video
- Export the final video (.mp4, .mov, .avi...)

3D Workflow

INPUT
- Define the project requirements
- Plan the overall structure and design of the 3D project

MODELING
- Create objects with software like 3Dsmax, Blender, Maya...
- Refine the models by adding details, textures, and materials.

TEXTURING
- Use photoshop or substance painter to edit and create textures...
- UV unwrap the models to create a 2D representation of their surface for accurate texture mapping

RIGGING & ANIMATION
- Create a skeletal structure (rig) for models or objects to enable realistic movement and deformation.
- Define keyframes and animations for the 3D models using tools like timeline editors, motion curves, or procedural animation techniques.
- Fine-tune the animations by adjusting timing and motion paths.

Delivery
- Use a rendering engine to generate the final 2D images or animations from the 3D scene.
- Deliver the final 3D content to the client e.g. FBX, OBJ, 3ds, blender, JPG or PNG...

AR/VR Workflow

INPUT
- Define the project goals and objectives for the AR/VR experience.
- Determine the required assets, such as 3D models, textures, animations, and audio.

3D ASSET & ENVIRONMENT
- Create or acquire 3D models, textures, and other assets needed for the AR/VR experience....
- Create the virtual environment or scene where the AR/VR experience takes place.

DEVELOPMENT
- Implement the environment, 3D models, interactions, and audio into the chosen development framework.
- Write scripts and code to control the behavior and logic of the AR/VR experience.

DEPLOYMENT & DISTRIBUTION
- Package the experience with necessary files, dependencies, and metadata.
- Distribute the experience through app stores or other distribution channels relevant to the target platform.
- Test the experience on a range of devices to ensure compatibility and optimize performance for different hardware specifications.

DELIVERY & UPDATE
- Monitor the AR/VR experience for bugs, performance issues, and user feedback post-launch.
- Provide updates and fixed bugs to ensure the experience remains stable and up-to-date.

3D Modeling - Asset for AR/VR

❖ **Project Overview**
- End-user: The leading E-commerce Corporation in the US.
- Project objective: Create 3D model asset with AR/VR standards.
- Duration: yearly.
- Volume: up to 28,000 models/year.
- Software: 3DsMax, Substance Painter, Photoshop, Blender…

❖ **Scope of work:**
- Convert image data into a 3D model for AR/VR.
- Modeling specifications: Triangular polygons, polygon limit of 200,000 or less. Create 4K textures for PBR.
- Deliverables are stored on the portal site for verification and inspection.
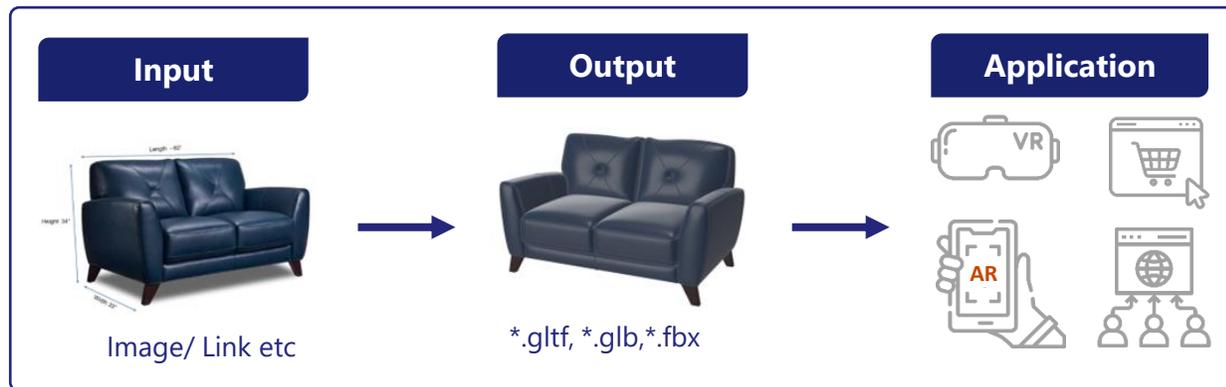
❖ **Achievement:**
- 100% achieved SLA and of which more than 50% exceeded the committed SLA.
- First Time Approval rate (Approve at the first delivery) increased from 85% to 94%.
- Discount from 5-15% according to volume order levels.
- Provide 100% quality models according to customer requirements.
- Propose to customers processes and acceptance criteria for product categories that are complex and have insufficient related documents yet.
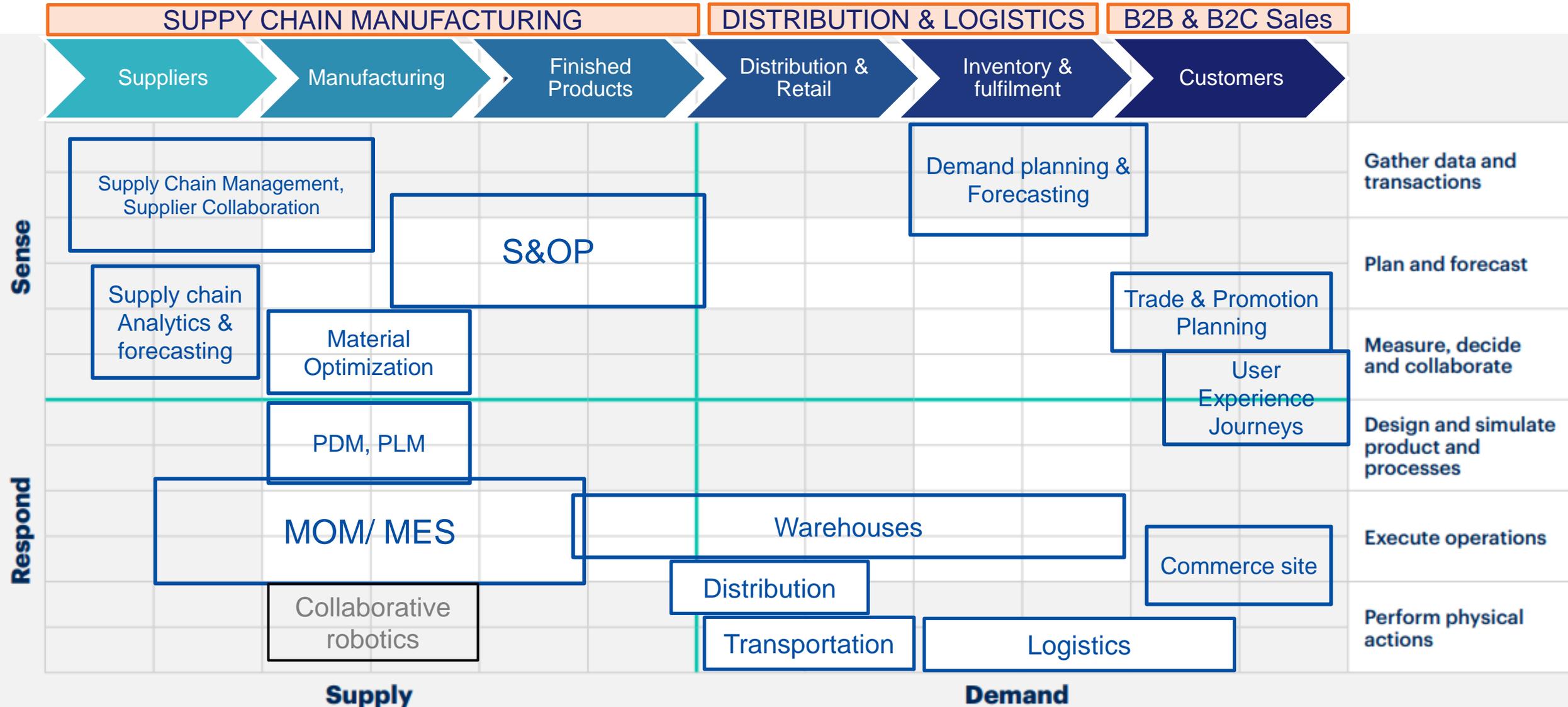

Da Nang | **Quy Nhon** | **250+ pers**

Input — Image/ Link etc

Output — *.gltf, *.glb,*.fbx

Application

Ramp-up HR plan

Month	Value
Jan 2023	48
Feb 2023	48
Mar 2023	73
Apr 2023	79
May 2023	101
Jun 2023	127
Jul 2023	150
Aug 2023	172
Sept 2023	193
Oct 2023	216
Nov 2023	250
Dec 2023	250

Data input → **Data classification** → **Modeling**

Modeling → **UV**

Texture

Material mapping → **Export 3D view**

Final check → **Delivery**

Model:
*.max, *.fbx, *.glb, *.obj, *.gltf

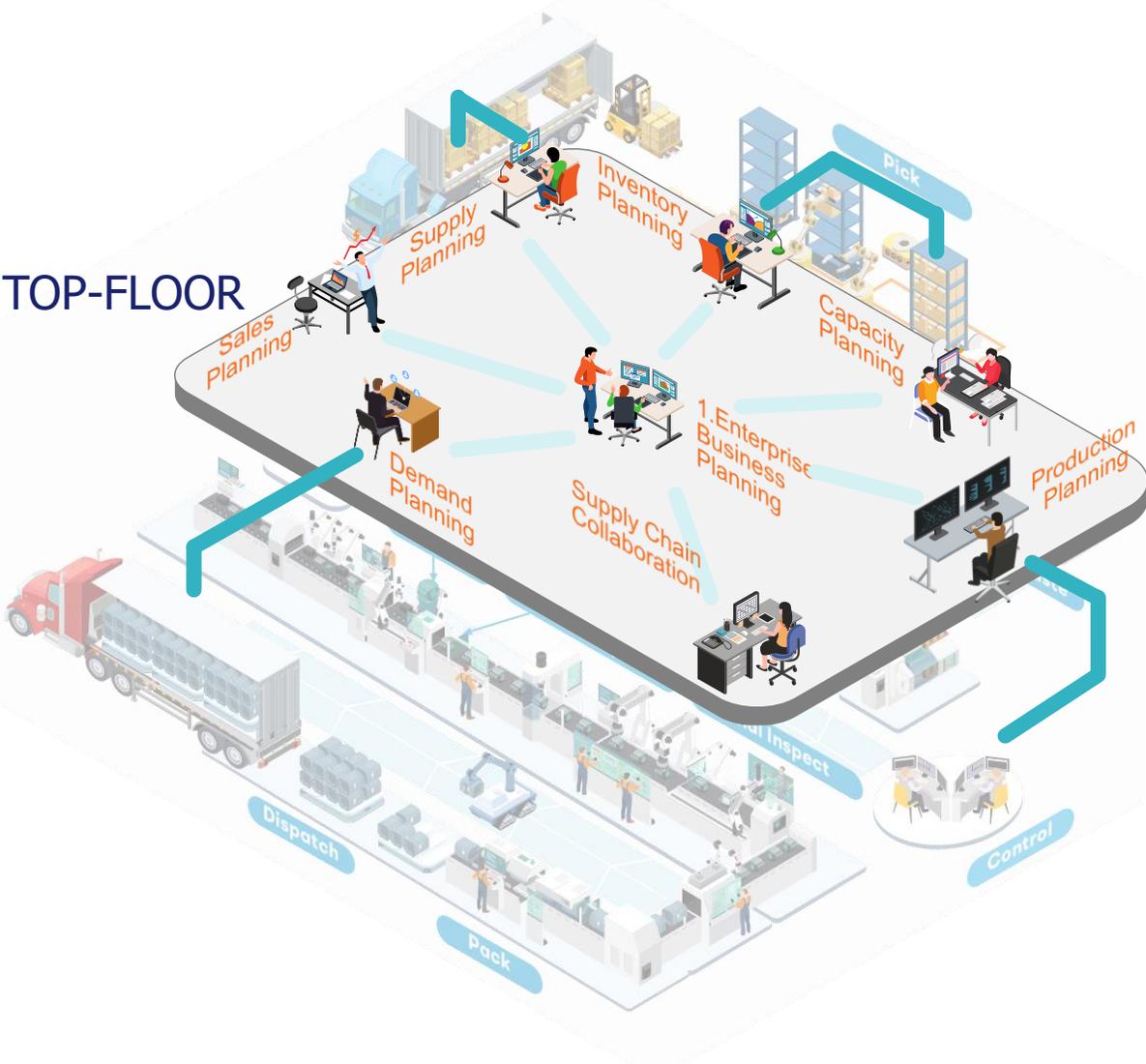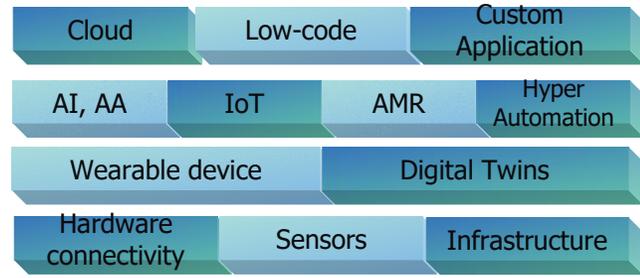Texture - *.jpg, *.png

SCM

SUPPLY CHAIN MANUFACTURING
SHOP-FLOOR TO TOP-FLOOR
SOLUTIONS & SERVICES
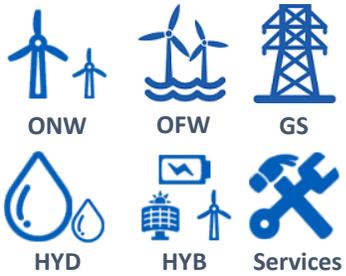
1. Landscape Assessment
2. DX Roadmap Consulting
3. DX Solutions Implementation & roll-out
4. Operation Support

FPT Software

SCM

Cloud	Low-code	Custom Application
AI, AA	IoT	AMR	Hyper Automation
Wearable device	Digital Twins
Hardware connectivity	Sensors	Infrastructure

TOP-FLOOR

Sales Planning
Supply Planning
Inventory Planning
Pick
Capacity Planning
1. Enterprise Business Planning
Production Planning
Demand Planning
Supply Chain Collaboration
Final Inspect
Dispatch
Pack
Control

SHOP-FLOOR

Receive Material
Sort
Pick
AMR
Issue Material
Fabricate
Assemble
In-line Inspect
Recycle Waste
Final Inspect
Dispatch
Pack
Control

Materials Optimization

MES, Work Order

Statistical Process Control

Production Scheduling

Unified Data Platform

Asset Management

OEE

Transportation MS

Product Traceability

Quality Management System

INTRODUCTION

Azure **15**

aws **11**

Google Cloud **06**

nexacro PLATFORM **25**

PMP PMI-ACP PMP-ACP **04**

Vue.js **30**

ReactJS **35**

AngularJS **28**

mx mendix **30**

Japanese [N1-2-3] **3**

Java **55**

Microsoft .NET **35**

node js **25**

DS DELMIA APRISO **20**

ONW   OFW   GS

HYD   HYB   Services

Customer is leading renewable energy equipment manufacturers with more than 50,000+ installed based and 400+ gigawatts of clean renewable energy and equipped more than 90 percent of utilities worldwide.

Custom Solution:

Technical Stack:
- Cloud: AWS, Azure
- IIoT, MOM, MES
- Web-based/Saas Application:
  - Java, NodeJS
  - Angular
- Cross-platform Mobile App

IT Services:
- Development Services
- 24x7 AMS

FPT built the solution to digitalize 58 customer's factories across 20+ applications and systems from Supply Chain to Manufacturing.

		NAM	LAM	EUR	IND	China	Other Asia
GRID	32	8	3	12	5	2	2
HYD	3	1	1			1	
LMW	15	3	1	6	2	3	
MM	2				1		1
OFW	1			1			
ONW	5	1	1	1	1	1	
	58	13	6	20	8	8	3

FPT Software

Customer overview

A leading company in areas of rotor blades manufacturing to the Renewables Energy

~ 50 000

wind turbines installed worldwide Presence in 80+ worldwide countries

Contract value: 1,2 M / Year

Team size: 28 HC (QNH 20)

Business need

A standard **Manufacturing Execution System (MES)** solution that is scalable and flexible to different operations, shared knowledge and best practices across the business, which can be easily implemented across GE Renewable Energy factories, while leveraging horizontal applications to create a platform serving as a single source of truth.

- eAndon Alerts
- TAKT Cycle Time
- SEED Skill & training
- Quality Suite NCR management
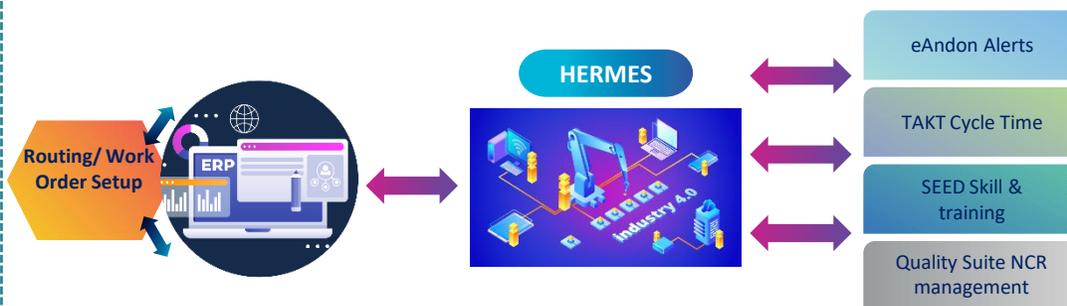
Benefit & Value

HERMES enables GE to control workflows and produce useful production data that can increase operations' productivity, efficiency, and responsiveness. The manufacturing team can use that capacity to turn production problems into long-term operational advantages as well as short-term solutions.

Become operationally excellent
Streamlining throughput and raising asset effectiveness. With HERMES, GE can manage resources, machinery efficiency, energy and people more skillfully.

Increase the efficiency of the supply chain
Gathering production data in context, and quickly and simply spotting performance target deviations to identify the underlying causes of operational problems.
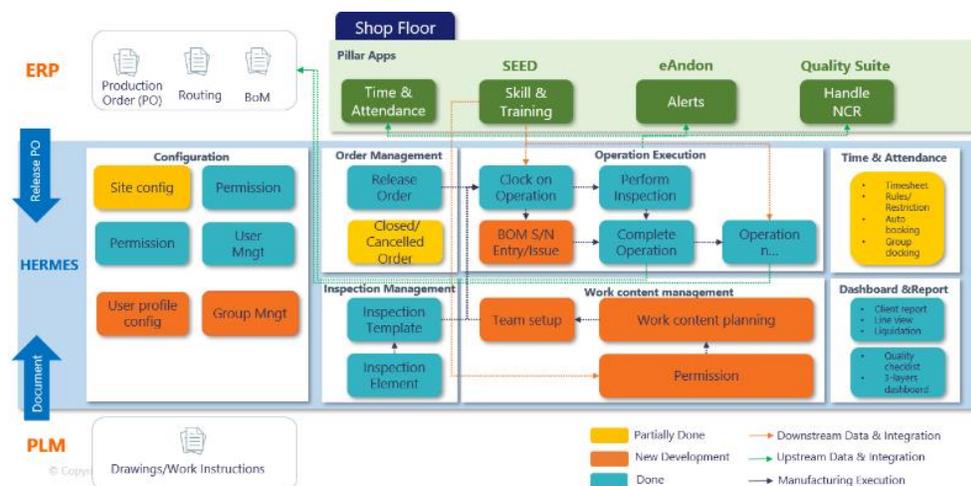
Reach sustainability objectives
With a better awareness of the impact of production on resources consumed, GE can take control of resources and push for equipment upgrades.

FPT's solution

A cloud-based **Manufacturing Execution System (MES)** built on top of AWS Cloud Services applying micro-services architecture which helped to separate modules by business capabilities, enabling maximum flexibility for customization while rolling out for multiple factories serving different businesses.

HERMES's cloud architecture benefits from Amazon EKS's connections with AWS networking and security services as well as all the **performance**, **scale**, **dependability**, and **availability** of AWS infrastructure. HERMES also achieved environment independence and uniformity, where all cloud environments are consistent with ability to be easily deployed in the future without the need for change.

1. ADMINISTRATION & INTEGRATION
2. OPERATION EXECUTION
3. INSPECTION CONFIGURATION
4. COMMUNICATION
5. TIME AND ATTENDANCE

FPT Software

Customer overview

The customer is the only manufacturer in the world that is dedicated to all areas of contact lenses

Menicon

Since 1951

Contract value: 4.6 M (9/2022 -> 03-2024)
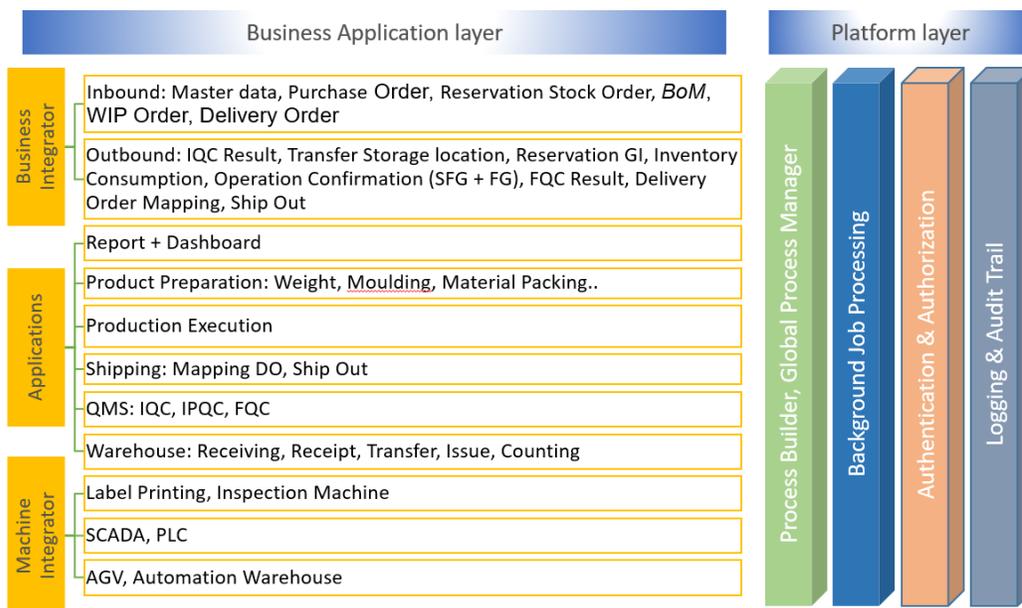
Team size: 35 HC (QNH 20)

Business need

- Provide both hardware and software solution of the **Manufactoring Execution System and Scada** to control the new **Medical devices manufacturing plant**. The facility consists of Medical devices manufacturing facilities, raw materials, materials, storage facilities for goods, utility facilities...
- Product: **Contact lens**

High level architecture blocks

Business Application layer

Business Integrator	
	Inbound: Master data, Purchase Order, Reservation Stock Order, *BoM*, WIP Order, Delivery Order
	Outbound: IQC Result, Transfer Storage location, Reservation GI, Inventory Consumption, Operation Confirmation (SFG + FG), FQC Result, Delivery Order Mapping, Ship Out

Applications	
	Report + Dashboard
	Product Preparation: Weight, Moulding, Material Packing..
	Production Execution
	Shipping: Mapping DO, Ship Out
	QMS: IQC, IPQC, FQC
	Warehouse: Receiving, Receipt, Transfer, Issue, Counting

Machine Integrator	
	Label Printing, Inspection Machine
	SCADA, PLC
	AGV, Automation Warehouse

Platform layer

- Process Builder, Global Process Manager
- Background Job Processing
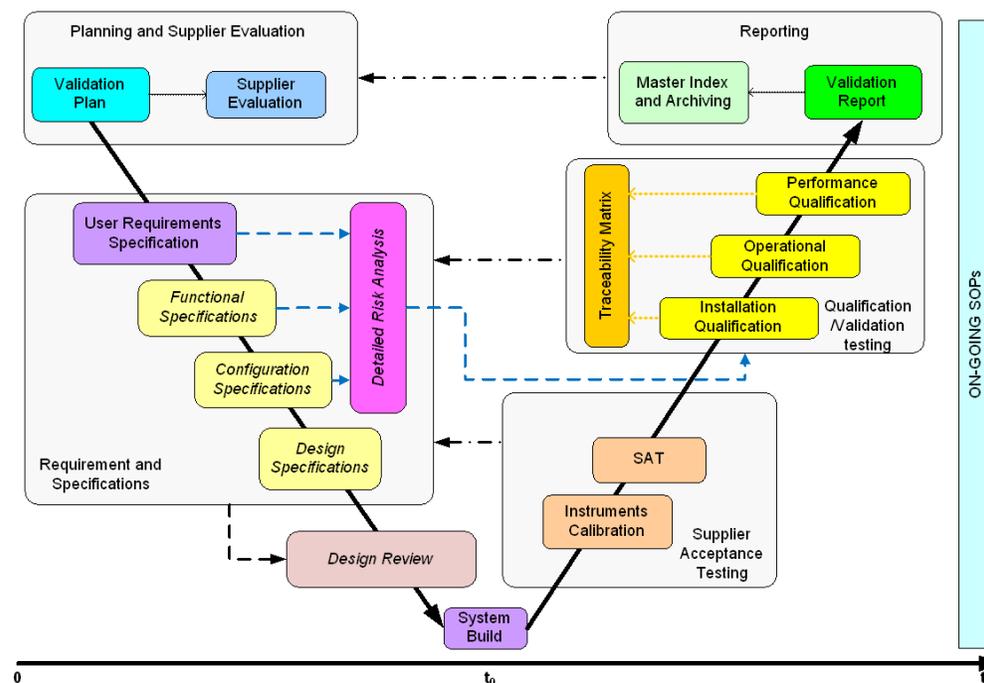- Authentication & Authorization
- Logging & Audit Trail

FPT's solution

FPT based on the **Dassault System Apriso** package to implement the solution for **MOM / MES** functionalities layer and the **Aveva** package for **Scada/PLC** functionalities layer.

In order to ensure the customer requirements and **comply GAMP5**, we built a system for responding to this project in a partner ring system that takes into account the results of responses to requirements and locations

GAMP5 – Computer System Validation

FPT Software

Thank You!