Enhancing Collaboration Between Patients & Doctors

Like any other industry, healthcare always strives for seamless data flow. For healthcare providers, a lot is only the line if the right data cannot get to the right person and at the right time. Data silos not only waste time and effort in syncing patient information, but they can also cause errors in diagnosis and treatment. It is this reason that every healthcare institution looks to the help of technologies to improve the flow of data within their systems.

Case Study Highlights

Domain Healthcare

Problems

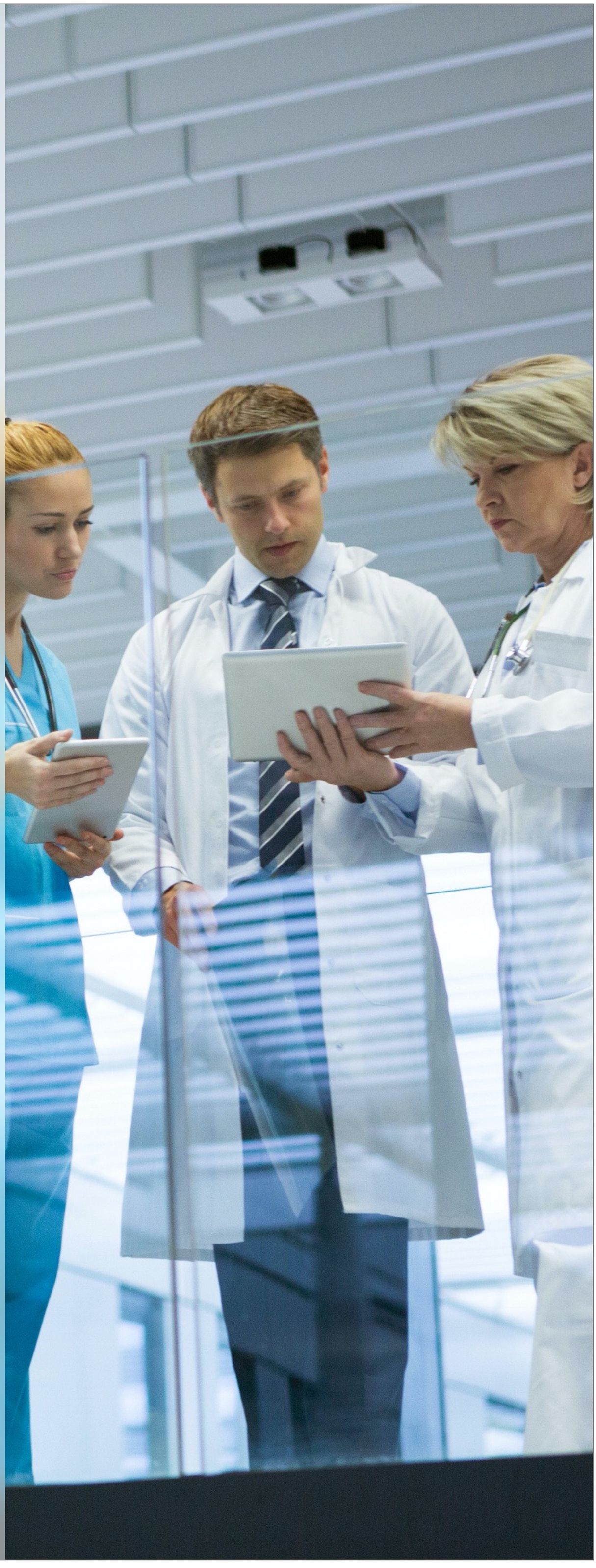
- Fractured data structure within the hospital ecosystem ;
- Time-consuming retrieval of data
- Threaten data integrity and single version of truth;
- Patients find it hard to manage their data across different hospital within the ecosystem;

Solution

- Two applications for Patients and Doctors are developed on top of a centralised dataset :
- The Patient application: allows patients to interact with multiple services from the Client’s ecosystem;
- The Doctor application: allows doctors to keep updated with their patients’s medication portfolios

Benefits

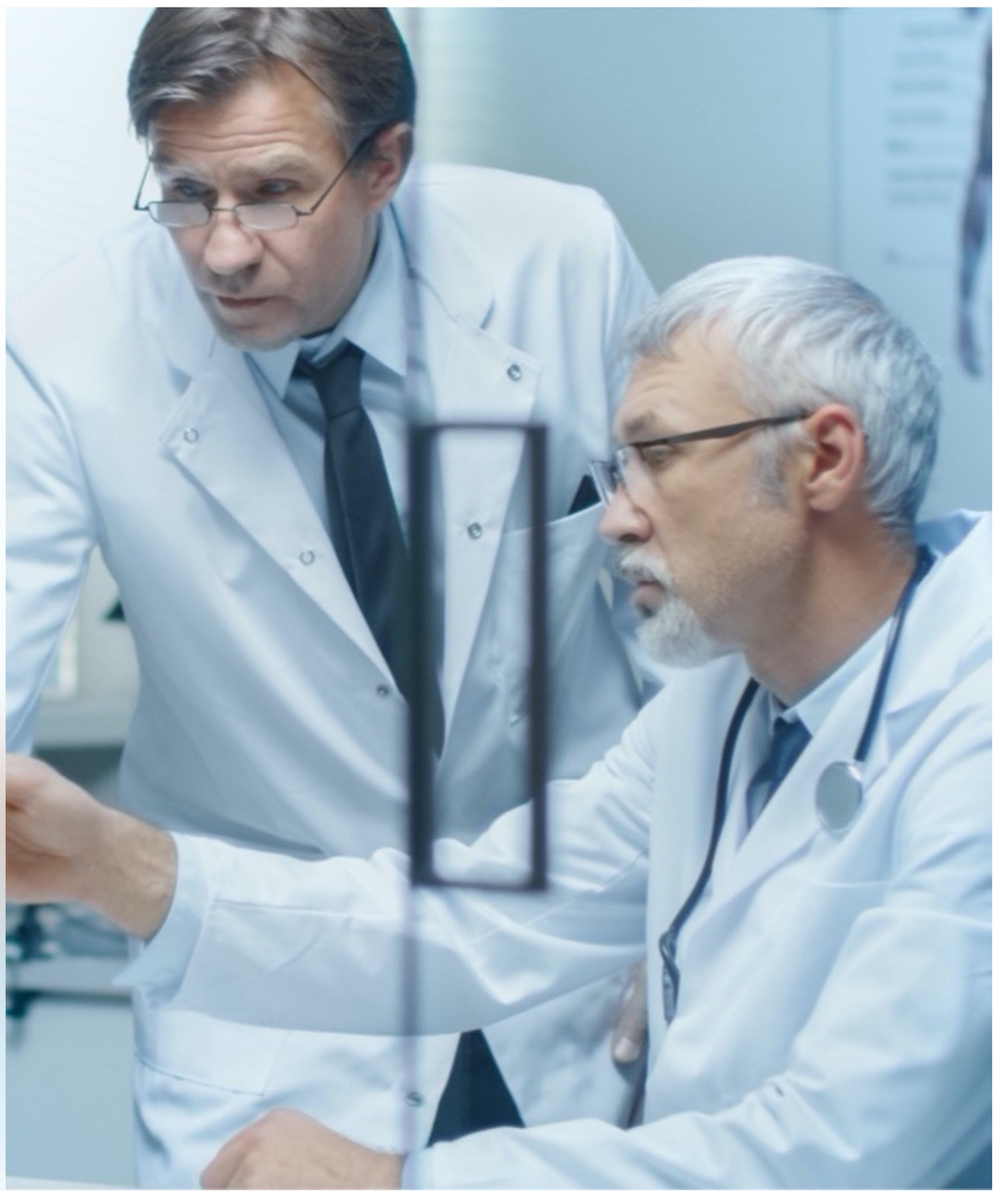
- One-stop-shop information hub for patients and doctors;
- Real-time and accurate data for fast decision-making;



In this case study, FPT worked with a leading private healthcare provider to enhance the interaction and collaboration between patients and doctors; and improve the quality of healthcare in the process.

The company

Company E is a global leader in healthcare services. With a network of dozens of hospitals and medical centres across the globe, the company can cater to thousands of patients at the same time. Due to the high quality in services, their healthcare institutions are the trusted destinations for people who seek different types of medical attention. With it, their hospital & clinic ecosystem was expected to expand.



The Data Problems

As the number of hospitals and clinics increased, Company E realised that it was facing a significant problem. While their ecosystem comprises of numerous healthcare institutions and the quality of services are consistent, the company was maintaining separated systems to manage their expanding number of hospitals and clinics.

Needless to say, this silo approach prevented information from one hospital to freely flow to others when needed. The result is patients and doctors could not access the right data at the right time, leading to confusion in interactions, appointments and treatments. Furthermore, as patient data was not shared, time and effort had to be spent to duplicate and check information across hospitals as patients moved around different institutions within Company E's healthcare ecosystem. This naturally left room for both errors in information and cost increase. From the patients' perspective, a lack of a mechanism to centralise their medical information made it much difficult for them to manage their own health in a systematic away.

Growing faster than the system can handle

Cannot access right data

Cannot access right time

Cannot share

Duplicate time

Duplicate effort

Addressing the Problems

An integrated channel of interaction was much needed to improve the collaboration between patients & doctors and streamline the flow of data within Company E's healthcare ecosystem. The idea was, FPT team would be completely revamping a set of mobile applications on top of a centralised database which collects data from various sources. The mobile apps would provide patients and doctor quick access to real-time medical information. With the hope of increasing the accessibility and scalability of the system to serve a growing number of patients, the project team used cloud services from AWS for the mobile applications

The Patient Application

Acting as a digital gateway for patients to access different type of services within The Client's ecosystems, the mobile application for Patients enable them to:

- Search within the ecosystem for institutions or doctors of their preferences;
- Make appointments with healthcare professionals;
- Order pathology tests as instructed by doctors;
- Receive & store pathology test results;
- Receive & store medical reports from doctors from different institutions;
- Receive & store doctors' instructions for different conditions;
- View their medical information and history;

The Doctor Application

The on-the-go application was expected to keep doctors updated of patients' medical history and appointments in a timely and accurate manner. The system allows healthcare practitioners to:

- View daily schedule and appointments;
- View patients' medical information & history;
- Receive patients' pathology test results;
- Send out medical reports & instructions to patients;
- Request support from Clinic Assistance;
- View & update account receivables (for contract healthcare practitioners);

As the applications share a centralised database, the integrity of information passed from patients to clinics to doctors is ensured. The likelihood of tampering or erroneous data entry is significantly reduced. At the same time, as patients' medical data is confidential, access is only granted to authorised personnel. By syncing up data among doctors and clinics within Company E's ecosystem, information is also available to those in need at the right time.

The Impact

The remodelled system of managing and extracting data across Company E has addressed one of the fundamental issues of healthcare, which is the collaboration between doctors and patients. The mobile applications provide both the patients and doctors with timely access to a single version of the truth related to patients' medical data and doctors' appointments. This new approach not only enables a mobile and one-stop-shop service hub for users, but it also delivers a seamless flow of information between patients and doctors, improving the effectiveness of collaboration among them and thus enhancing the quality of healthcare.

From the operational viewpoint, as collaboration is enhanced, errors caused by data silos and information confusions are also significantly reduced. Company E can now avoid many costs associated with unsatisfied customers or even lawsuits due to incorrect data within their systems.

FPT Software is part of FPT Corporation, a technology and IT services provider headquartered in Vietnam with nearly US$1.2 billion in revenue and 28,000 employees. Being a pioneer in digital transformation, the company delivers world-class services in Smart factory, Digital platforms, RPA, AI, IoT, Mobility, Cloud, Managed Services, Testing, more. FPT Software has served over 700 customers worldwide, 83 of which are Fortune 500 companies in the industries of Aerospace & Aviation, Automotive, Banking and Finance, Communications, Media and Services, Logistics & Transportation, Utilities, Consumer Packaged Goods, Healthcare, Manufacturing, Public sector, Technology and so on.

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