Development of Executive Information System (EIS)

Mobile EIS Using *Quasar* Framework and Microservice Pattern

A Study Case in Indonesia Financial Service Authority (**OJK** RI)

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Research Background

Given the digital transformation in currently emerging digital era in Financial Service Industry; marked by the rise of Fintech; Financial Service Authority (FSA) is challenged to mitigate new type of risks that are introduced by it. As first step, Indonesia FSA seeks for an effective and efficient way to present up-to-date Strategic Information to its Top Executive Leaders to enable informed strategic decision making.

Methodology

Unified Processing **(UP)**

Adaptive and Iterative

Inception
Interview, Document Study, Literature Review, UML (Use Case) & Prototyping

Elaboration
UML , Quasar Framework, Loopback, Microsoft SQL Server

Transition
User Acceptance Test, Survey

Satzinger, J. W., Jackson, R. B., & Burd, S. D. (2016)

Challenges

How to deliver up-to-date Financial Service Strategic Information to Indonesia FSA 's Top Executive in timely fashion; whenever required; any-time and any-where.

Business Benefits

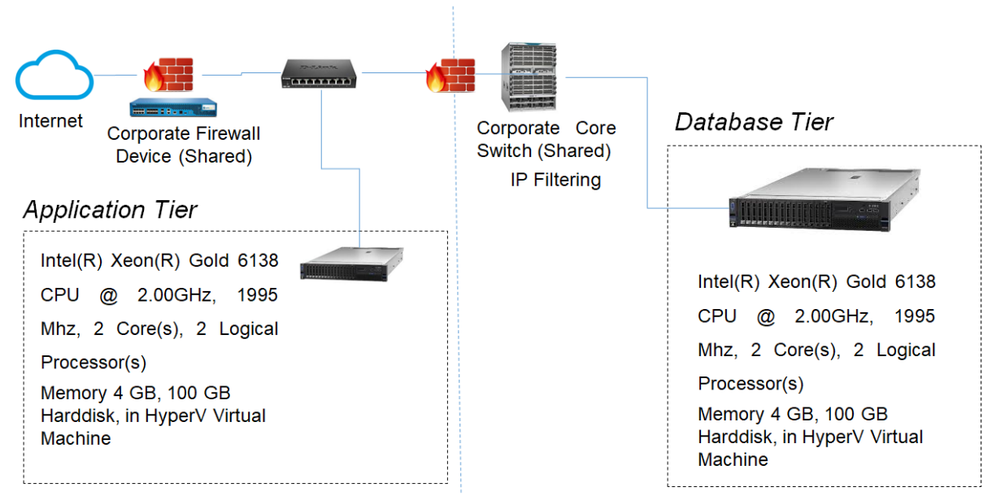
- Timely Decision Making
- Increase Value of Data and Information
- Access Strategic Information any-time & any-where

Technology

Quasar Framework + LoopBack Microservice

Multi Platform Deployment: Web (**SPA**, PWA, SSR), Mobile (Android/iOS), and **Desktop**

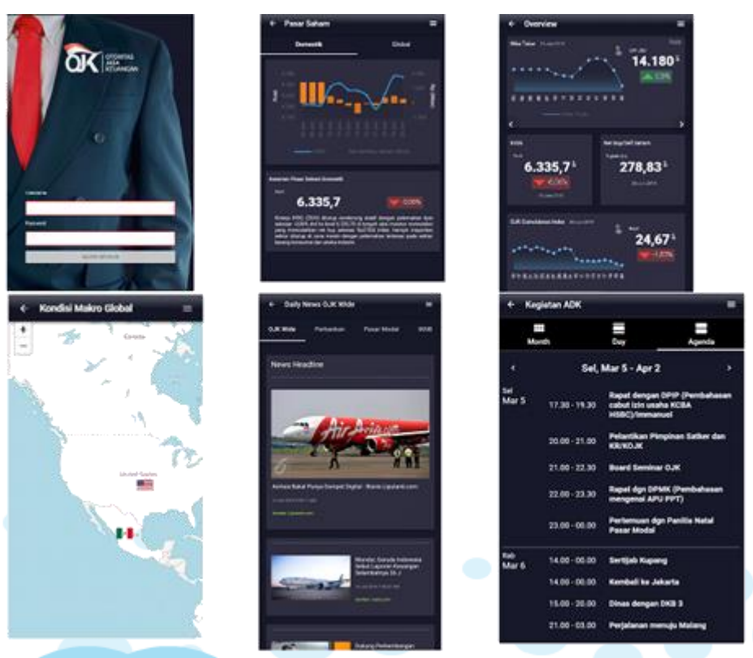
Allow **containerized** **application** and elastic computing



Research Result

Mobile Executive Information System (m-EIS)

System is developed and implemented in Android and iOS.



Related Artifacts

- Thesis Documents
- Powerpoint Presentations
- Science Journal (Submitted)

e-journal.unair.ac.id/JISEBI

- CD/DVD

Selected References (9 of 52)

[1] R. Sharda, D. Delen, E. Turban, J. E. Aronson, T. Liang, D. King, E. Turban, Business intelligence and analytics: Systems for decision support. Boston: Pearson, 2014.

[2] K. A. More, & M. P. Chandran, Native Vs Hybrid Apps. Proceeding of International Journal of Current Trends in Engineering & Research, 563-572., 2016.

[3] J. W. Satzinger, R. B. Jackson, & S. D. Burd, *Systems analysis and design in a changing world*. Boston, MA: Cengage Learning., S. D. 2016

[4] L. Andersson, L. Usability and User Experiencein Mobile App Frameworks: Subjective, but not Objective, Differences between a Hybrid and a Native Mobile Application, 2018.

[5] T. Schlachter, C. Düpmeier, R. Weidemann, W. Schillinger & N. Bayer, "My Environment"–A Dashboard for Environmental Information on Mobile Devices. In International Symposium on Environmental Software Systems (pp. 196-203). Springer, Berlin, Heidelberg, 2013.

[6] C. Gröger, C. Stach, B. Mitschang, & E. Westkämper, A mobile dashboard for analytics-based information provisioning on the shop floor. International Journal of Computer Integrated Manufacturing, 29(12), 1335-1354, 2016.

[7] R. Mahato, Hybrid Mobile Application Development, 2016.

[8] S. Bischoff, S. Aier, M. K. Haki, & R. Winter, Understanding continuous use of business intelligence systems: A mixed methods investigation. JITTA: Journal of Information Technology Theory and Application, 16(2), 5. 2015.

[9] V. Venkatesh, & F. D. Davis, A theoretical extension of the technology acceptance model: Four longitudinal field studies. Management science, 46(2), 186-204. 2000.