

Analisis Faktor-Faktor Keberhasilan Migrasi Sistem On-Premise ke Cloud Studi Kasus PT. Prudential Life Assurance Indonesia = Analysis Critical Success Factor Migrating On-premise System To Cloud Study Case PT. Prudential Life Assurance Indonesia

Sinaga, Retiana Fadma Pertiwi, author

Deskripsi Lengkap: <https://lib.ui.ac.id/detail?id=9999920519136&lokasi=lokal>

Abstrak

Cloud Computing merupakan teknologi yang mulai banyak diadopsi oleh organisasi. Salah satu perusahaan finansial yang melakukan adopsi Cloud Computing adalah PT. Prudential Life Assurance Indonesia. Perusahaan ini mengadopsi Cloud sebagai pengganti infrastruktur On-premise dengan didasarkan atas keinginan tim bisnis untuk melakukan inovasi tanpa adanya hambatan waktu. Dalam proses migrasi sistem NBWF ke Cloud, proses migrasi mengalami kendala yang mengakibatkan terhambatnya proses Sprint yang sedang berjalan. Dampaknya tim bisnis dan tim IT tidak bisa menyelesaikan Sprint sesuai Timeline yang telah disepakati dikarenakan sistem NBWF tidak stabil. Proses migrasi sistem NBWF ke Cloud dilakukan paralel dengan berlangsungnya Sprint pada environment yang sama. Target tim IT untuk memindahkan sistem ke Cloud bertabrakan dengan target tim bisnis dalam menyelesaikan Sprint. Sehingga proses migrasi ditunda dan akan dilakukan kembali ketika Timeline telah ditentukan agar tidak mengganggu Sprint yang telah berjalan. Didasarkan atas permasalahan yang ditemukan, penelitian ini bertujuan untuk mengidentifikasi Faktor-Faktor apa saja yang menentukan keberhasilan proses migrasi sistem On-premise ke Cloud. Hasil pengumpulan dari data kuesioner akan dilakukan analisis menggunakan metode AHP. Dari hasil Analisis didapatkan peringkat pertama pada Kriteria Organizational dengan bobot 43,9%, peringkat kedua yaitu Kriteria Technological dengan bobot 36,5% dan yang terakhir Kriteria Environmental dengan bobot 19,6%. Faktor pada Kriteria Organizational peringkat pertama yaitu Faktor Management Support dengan bobot 27,5%, yang kedua Faktor Project Budget dengan bobot 18,1%, ketiga Migration Plan dengan bobot 13,1%, keempat Timeline Migration dengan bobot 12%, kelima Technical Readiness dengan bobot 7,2%, keenam Risk Assessment dengan bobot 6,5%, ke tujuh Policies and Procedures dengan bobot 6,4%, ke delapan Compliance with Regulation dengan bobot 4,9%, dan terakhir Knowledge Base dengan bobot 4,3%. Faktor pada Kriteria Technological peringkat pertama yaitu Faktor Infrastruktur dengan bobot 22%, yang kedua Faktor Data Security and Privacy dengan bobot 15,1%, ketiga Bandwidth dengan bobot 13,2%, keempat Compatibility dengan bobot 12,3%, kelima System Integration dengan bobot 9,2%, keenam network stability dengan bobot 8,9%, ketujuh Amount of Data dengan bobot 6,6%, ke delapan Application Performance dengan bobot 6,5%, dan terakhir Complexity System dengan bobot 6,2%. Faktor pada Kriteria Environmental peringkat pertama yaitu Disaster Recovery Plan dengan bobot 42,6%, Kedua SLA Provider dengan bobot 29,8%, dan Competitive Pressure dengan bobot 27,6%

.....Cloud Computing is a technology that is starting to be widely adopted by organizations. One of the financial companies that adopt Cloud Computing is PT. Prudential Life Assurance Indonesia. This company adopted the Cloud as a replacement for On-premise Infrastructure based on the business team's desire to innovate without time constraints. In the process of migrating the NBWF system to the Cloud, the Migration process experienced an obstacle that resulted in the stalling of the ongoing Sprint process. As a result, the business team and the IT team could not complete the Sprint according to the agreed Timeline because the

NBWF system was not stable. The Migration process of the NBWF system to the Cloud is done in parallel with running the Sprint in the same environment. The IT team's target to move the system to the Cloud collided with the business team's target in completing the Sprint. Until the Migration process is postponed and will be done again when the Timeline has been determined so as not to disturb the Sprint that has been running. Based on the problems found, this research aims to identify any factors that determine the success of the Migration process of On-premise systems to the Cloud. The results collected from the questionnaire data will be analyzed using the AHP method. It was found that the first rank was the Organizational Criteria with a weight of 43.9%, Technological Criteria with a weight of 36.5%, and Environmental Criteria with a weight of 19.6%. Factors in the first level of Organizational Criteria are the Management Support Factor with a weight of 27.5%, the second Project Budget Factor with a weight of 18.1%, the third Migration Plan with a weight of 13.1%, the fourth Migration Timeline with a weight of 12%, the fifth is Technical Readiness with a weight of 7.2%, sixth Risk Assessment with a weight of 6.5%, seventh Policies and Procedures with a weight of 6.4%, eighth Compliance with Regulation with a weight of 4.9%, and lastly Knowledge Base with a weight of 4.3 %. Factors in the first-level Technological criteria are the Infrastructure Factor with a weight of 22%, the second Data Security and Privacy Factor with a weight of 15.1%, the third Bandwidth with a weight of 13.2%, the fourth Compatibility with a weight of 12.3%, the fifth System Integration with 9.2% weight, sixth network stability with 8.9% weight, seventh Amount of Data with 6.6% weight, eighth Application Performance with 6.5% weight, and finally System Complexity with 6.2% weight. Factors in the first level of Environmental Criteria are Disaster Recovery Plan with a weight of 42.6%, Second SLA Provider with a weight of 29.8%, and Competitive Pressure with a weight of 27.6%.