

BPS-Statistics Indonesia

Case Study

TUNGSTEN
AUTOMATION

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Gathering and analyzing census data in a nation of thousands of islands is a task that is made manageable by Tungsten technology. Using a suite of Tungsten products, BPS-Statistics Indonesia reduced processing time for the 2013 census by 90%.

Challenge

Indonesia is the world's 15th-largest country, encompassing islands on both sides of the equator. Any organizational census covering such an expansive territory would be challenging, but BPS-Statistics Indonesia faces additional complications for its census.

Indonesia has a population in excess of 254 million citizens, many of whom reside in remote areas in which electrical power is not always reliable. For a census, BPS has to mobilize 700,000 temporary workers to collect as many as 600 million pages of census data from across the country.

Also, there is a hard and fast deadline of six months for completion of each census because the results are an integral part of the Indonesian president's speech to the House of Representatives on Indonesian Independence Day.

"Based on previous experience, we understood that it is almost impossible to conduct a census on time and with the desired quality of data," said Dudy Sulaiman, Deputy Chief Statistician for Methodology and Statistical Information.

The time had arrived for an information technology solution.





**BADAN PUSAT STATISTIK
STATISTICS INDONESIA**

The Southeast Asian nation of Indonesia comprises nearly 17,845 islands—about 13,000 of which are inhabited. They include Java, Sumatra and Borneo. It's a geographic territory so large it covers three time zones.

BPS-Statistics Indonesia is a government institution mandated to conduct surveys and censuses. The Indonesian agency conducts one of three types of nationwide censuses—population, agricultural or economic—every three to four years, as well as surveys of various types in the years between census projects.

PRODUCTS IN USE

- Tungsten RPA™
- Tungsten Tungsten Capture™
- Tungsten Transformation™
- Tungsten Monitor™
- Tungsten Tungsten Mobile Capture™
- Tungsten TotalAgility®
- Tungsten Insight™

FOCUS

Business process automation

Solution

Sulaiman's approach to meeting these and other challenges is to view IT as an enabler for the business. In these cases, IT enables BPS to streamline processes, improve the quality of data collected and pull new efficiencies out of that data.

The first Tungsten implementation for BPS, which occurred during the run-up to the 2010 population census, featured Capture and Transformation. Imbued with this solution, BPS deployed the necessary hardware to 33 provincial branches throughout Indonesia and at the BPS headquarters in Jakarta. As census forms were

"It was spectacular. For the first time in our history, we were able to announce the results of a census in the same year as the census itself."

Dudy Sulaiman,
Deputy Chief Statistician
for Methodology and
Statistical Information,
BPS-Statistics Indonesia

collected, the hardware facilitated the capture, validation and extraction of the incoming data. This activity continued over three shifts per day, 24 hours a day, every day of the week.

To further enhance quality control, BPS used Monitor to highlight issues and flag problems. In the end, a data capture and analysis process that would ordinarily have required two full years was executed in just six months.

"Quite an achievement, I must say," Sulaiman said.

2013 Agricultural Census

Based on lessons learned in 2010, BPS ran a series of simulations and determined that processing all incoming data for the 2013 census without the Tungsten solution would have taken about two years. With Tungsten solutions in place, the BPS team processed 260 million pages (comprised of three different types of questionnaires) from 26 million agricultural households in just three months. That equates to a time savings of more than 90%—and an incalculable amount of savings in resources (e.g., people, hard costs, etc.).

2016 Economic Census

As it prepares for the 2016 economic census, BPS will further rely on Tungsten technology to help it

evolve into a more agile organization. The 2010 census used two types of questionnaires; three were used in 2013. The 2016 census will require the processing of 29 different types of forms. Managing that explosion of scale would have been impossible had BPS not applied new technologies and its own best practices to its data gathering operation.

In preparation for 2016, BPS has armed itself with additional Tungsten tools that promise to send efficiency and customer satisfaction to even higher levels.

By leveraging Mobile Capture BPS will eliminate delays caused by power unreliability. Census respondents in remote areas of Indonesia will be able to capture relevant documents with a cellphone camera and upload them directly.

Using RPA to automate the collection of this online information and Insight to analyze it, the bureau gains increased efficiency, faster insight and greater statistical accuracy due to better quality data.

BPS also implemented TotalAgility—the world’s first smart-process application development and deployment platform. With it, in addition to capture and transformation of the data it collects, BPS now has the power to further strengthen its census processes with process intelligence, e-signature and targeted, personalized citizen communications.

Beyond the census

BPS also has leveraged RPA and Insight to monitor more than 20 news sources, including local newspapers, blogs and social media for comments relating to the organization and its work. Using RPA to automate the collection of this online information and Insight to analyze it, the bureau gains increased efficiency, faster insight and greater statistical accuracy due to better quality data. This improved visibility into processes empowers BPS to be more responsive to breaking news and citizen sentiment, resulting in improved customer satisfaction and confidence.

The 2016 economic census is expected to generate in excess of 240 million pages of data (29 million businesses completing an eight-page form) BPS-Statistics anticipates processing the data in three months.

Results

Sulaiman and his team expect the 2016 economic census to generate in excess of 240 million pages of data (29 million businesses completing an eight-page form). That much information would once have been frighteningly large and would have necessitated two full years to wade through. With its suite of Tungsten solutions in place and operational, Sulaiman has confidence in the people and processes he now marshals.

“We’re going to try for three months this time,” he said.

Processing census data in such an abbreviated timeline will enable BPS to provide current and relevant data, rather than two-year-old information, for better governmental economic planning.

[Read more stories of success from our global customers at TungstenAutomation.com](http://TungstenAutomation.com)

About Tungsten Automation

Tungsten Automation, formerly Kofax, is the global leader in intelligent automation solutions with a trusted legacy of nearly 40 years, with a team of 2,000+ employees in 40 countries, serving 25,000+ global customers. Our dedication to innovation and customer success has earned us industry recognition, including being named a leader in Intelligent Automation (IA), Intelligent Document Processing (IDP) and Process Orchestration by top analysts. We are trusted to help businesses gain unprecedented efficiencies and reduce costs through AI-powered workflow automations that propel their businesses into the future.

To learn more, visit www.TungstenAutomation.com

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