

Digital Transformation of the Family Planning Supply Chain System in Indonesia

Authors: Omar Balsara, Barbara Lamphere

INTRODUCTION

Reliable, responsive family planning (FP) supply chains deliver quality contraceptives when and where they are needed. Through the 'MyChoice' project, JSI partnered with Indonesia's National Population & Family Planning Board (BKKBN) to design and adopt a comprehensive systems-based approach with an aim to strengthen the supply chain (SC) workforce at each level, empowering them with new tools, skills and information to enable holistic and continuous SC improvement. Beginning in 2018, 'My Choice' led the digital transformation of the FP supply chain with an aim to make it more efficient, resilient and responsive. The project conceptualized, developed and rolled out a suite of applications that digitizes SC operations at each level of the chain. The digital system known as SIRIKA is currently being used by all provinces and districts and a few health clinics across the country.

NEED FOR DIGITIZATION

SCALABILITY

A comprehensive system to integrate and standardize SC operations across levels and regions to support the large network.

EFFICIENCY

Streamlined processes to replace inefficient paper based systems that put a burden on warehouse managers with automated digital systems.

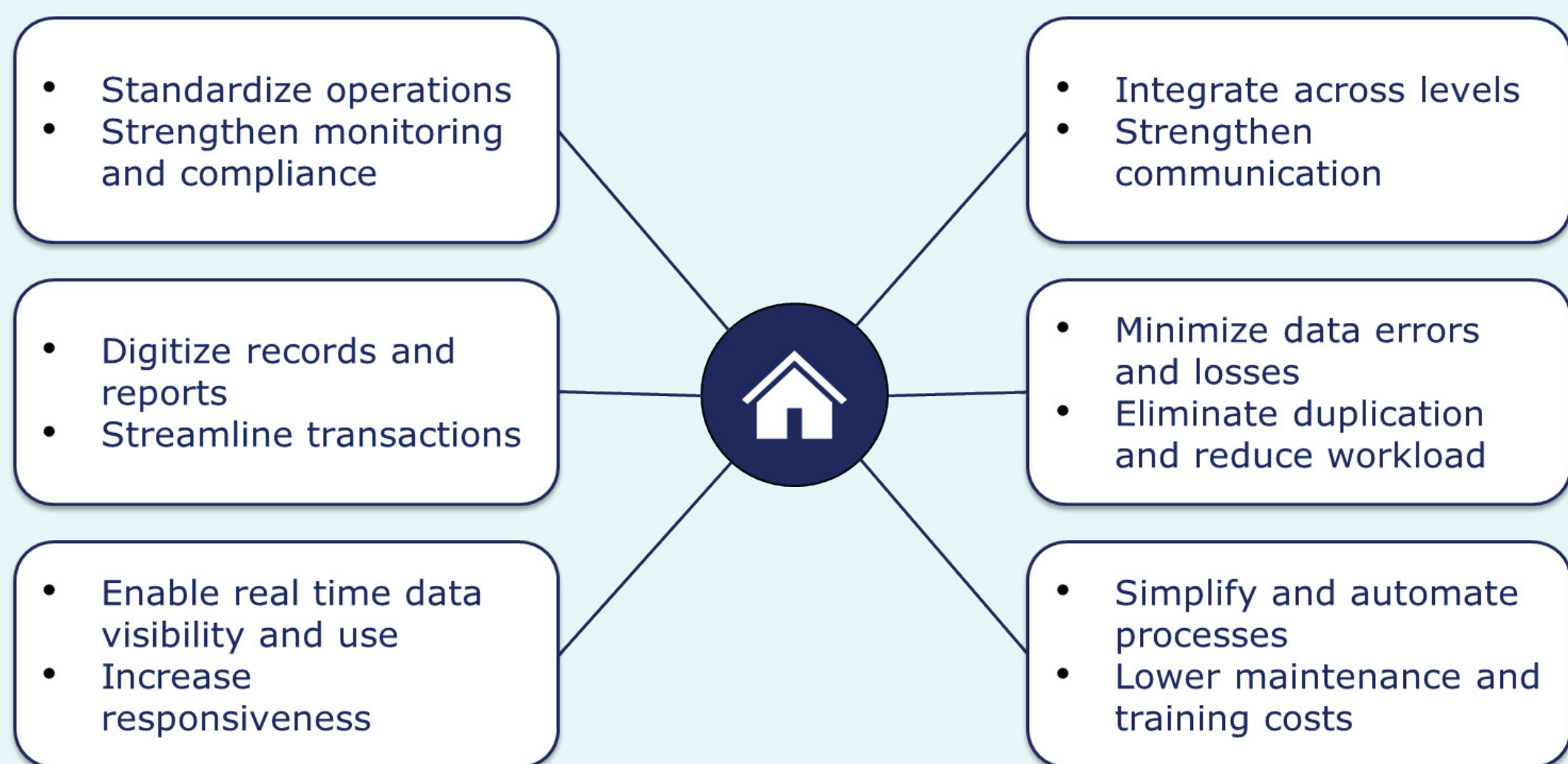
DATA QUALITY

A digital ecosystem to strengthen data quality and visibility to address data quality issues that resulted in lack of trust and use of data.

AUTOMATION

Increased automation and updating of worker skills to eliminate manual tasks that negatively impacted data quality and efficiency.

SYSTEM OBJECTIVES



EVALUATION METHODOLOGY

An evaluation was conducted to measure implementation progress and the impact of the digital applications on supply chain operations and overall system performance. Data was collected through a user survey, group discussions and analysis of logistics transaction and report data. The key objectives of the evaluation were to:

- Identify implementation successes, challenges, and areas for improvement. Formulate lessons learned.
- Obtain feedback from users to inform future product improvements.
- Measure impact of digital applications on supply chain performance.

Scan or click to view evaluation report

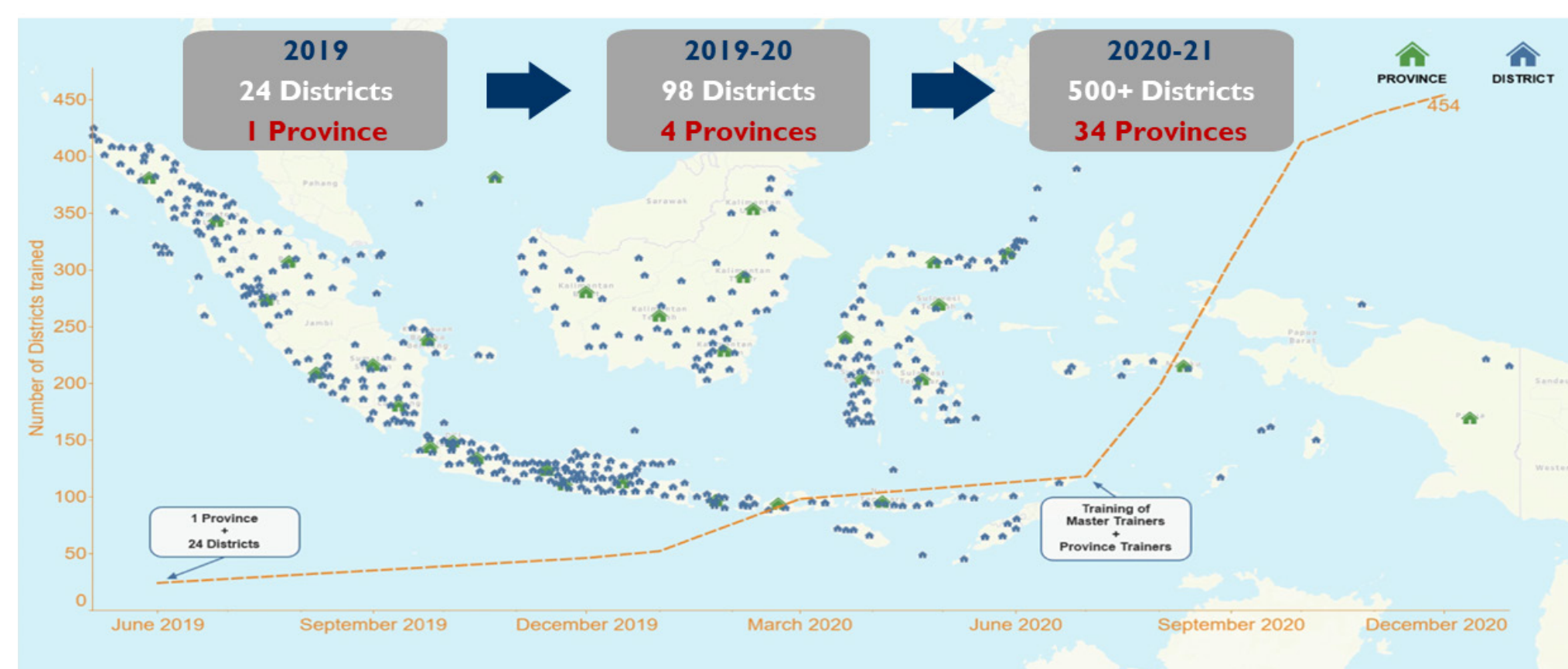


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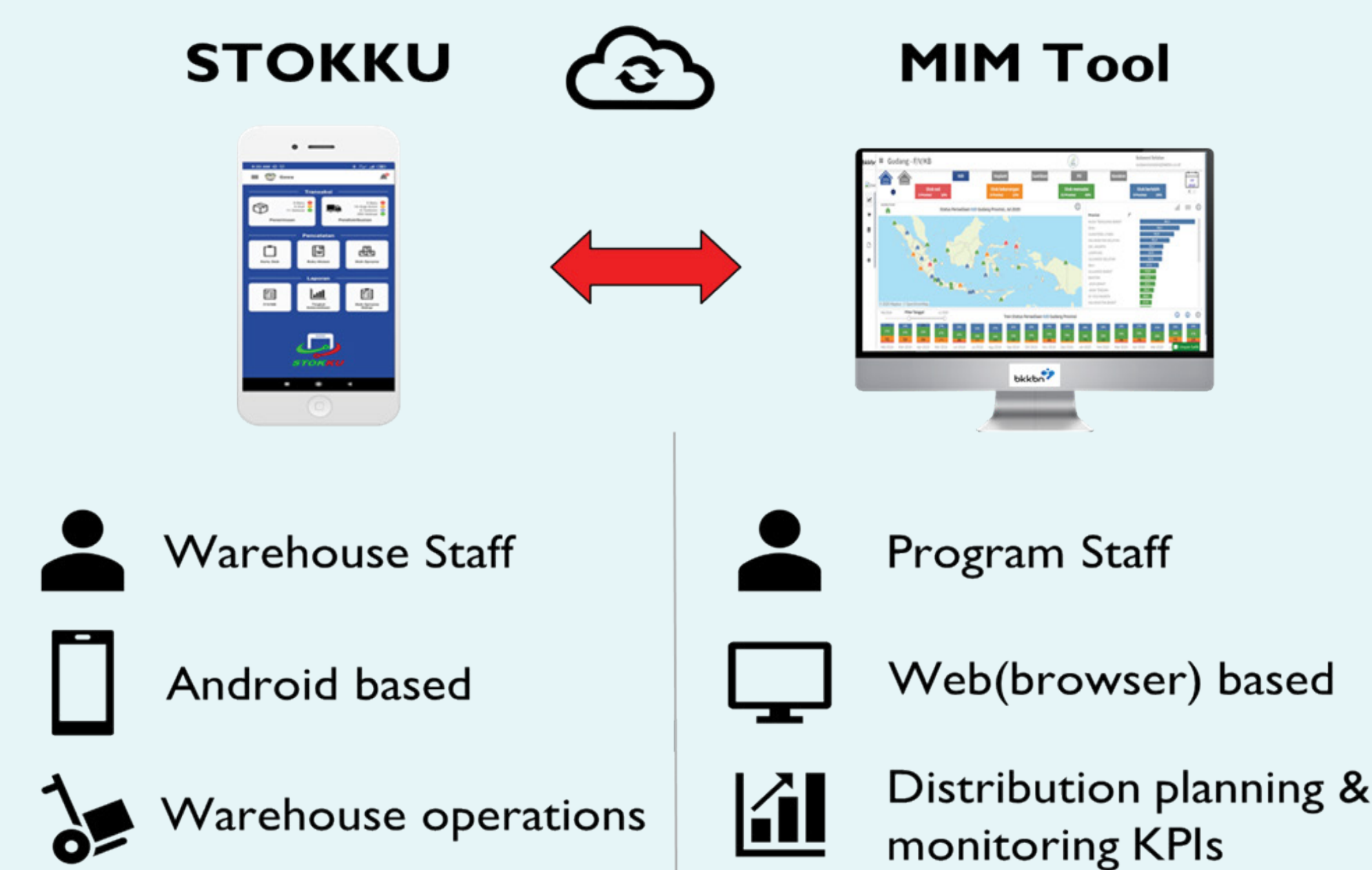
PROGRAM IMPLEMENTATION

The implementation of the digital tools began in June 2019 in four project provinces. During this initial period, the development team worked on product improvements based on user feedback and strengthened the system to be ready for scale. Due to the Covid-19 pandemic, in person trainings were replaced with a blended learning approach that included online self learning complemented with live virtual sessions. In June 2020, a team of government master trainers was trained to roll out the applications nationwide. By the end of 2020, all 34 provinces and 454 out of 512 districts were trained and using the new digital system to service over 15,000 service delivery points.



SYSTEM DESIGN

With an aim to shift from a rigid paper based system to a dynamic digital ecosystem, the project designed, developed and supported the roll out of a digital system known as SIRIKA. The system is comprised of two inter-connected applications that are used to support multiple supply chain tasks. STOKKU, which means "my stock" in Indonesian, is an android-based application used by warehouse staff to manage its operations. STOKKU is complemented by the web-based MIM (inventory management and monitoring) tool used by program staff for distribution planning and monitoring key supply chain performance indicators.



KEY FEATURES

- TRANSACTIONS**: Receipts and issues recorded quickly with just a few clicks
- PERFORMANCE**: Dashboard for tracking key SC performance indicators in real time
- RECORDS**: Automated digital stock records with customized filters
- DISTRIBUTION**: Automated calculation of resupply quantities and delivery tracking
- REPORTS**: Automated real time and monthly stock and exception reports
- NOTIFICATIONS**: Low stock alerts, date reminders and shipment notifications

USER TESTIMONIALS



"STOKKU has made my work much easier. I no longer need to manually maintain stock records and delivery documents are automatically generated."

- DISTRICT WAREHOUSE MANAGER



"The MIM Tool can be accessed from anywhere and has made monitoring stock levels at SDPs easy. Distribution plans can be created quickly and accurately."

- DISTRICT HEAD OF FP SERVICES

RESULTS

The digital transformation of the FP supply chain has had a significant impact on SC operations, shifting from a rigid and cumbersome paper based system to a dynamic digital ecosystem that provides end-to-end visibility and transparency.

89%

of survey respondents said that using the applications has made their job easier and has reduced their workload, allowing them to spend more time on other tasks.

The distribution process has been automated allowing users to easily schedule and track distributions making the process more efficient. The automation of delivery documents and the batch picking process has significantly reduced operation times and created efficiencies in warehouse operations.

93%

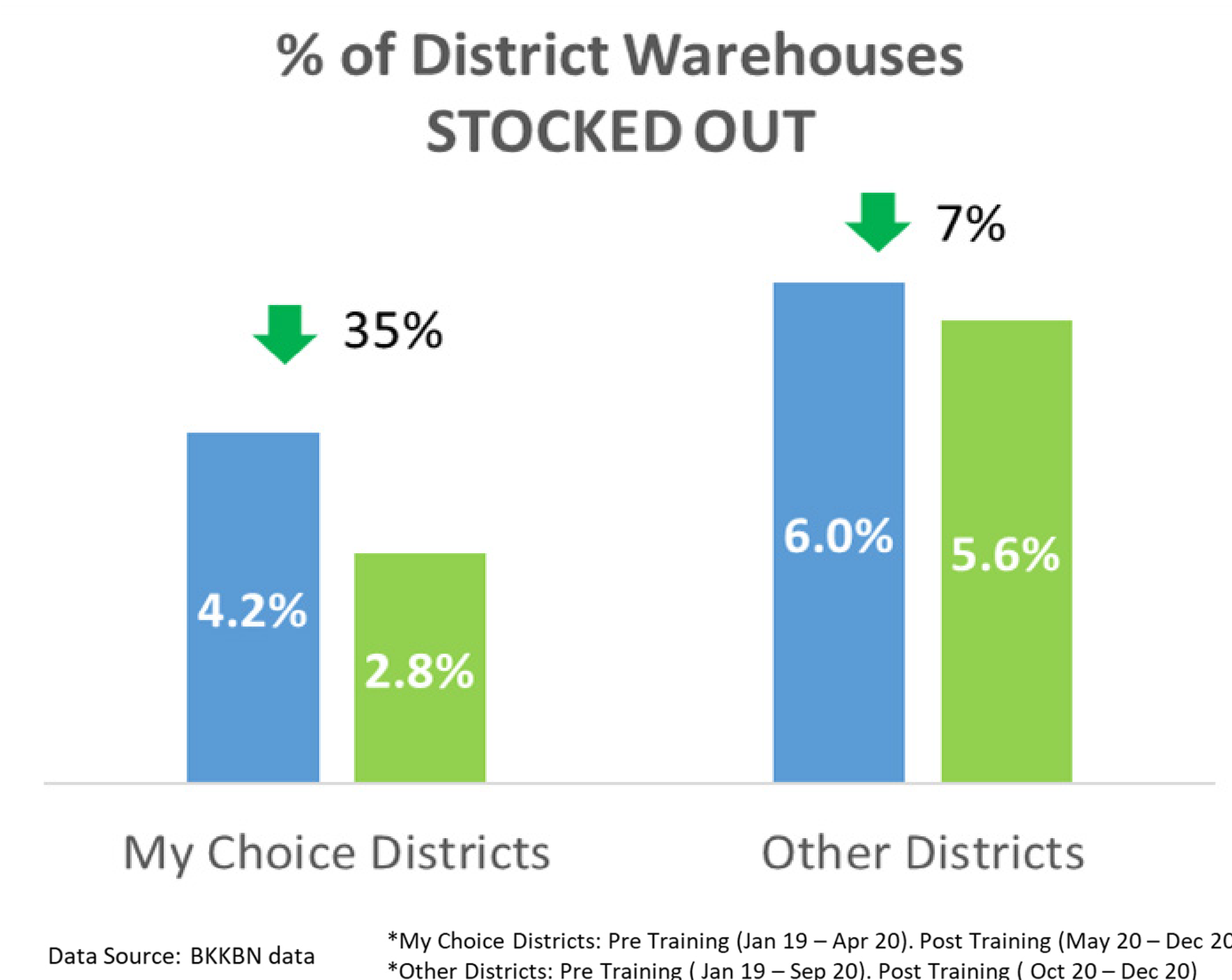
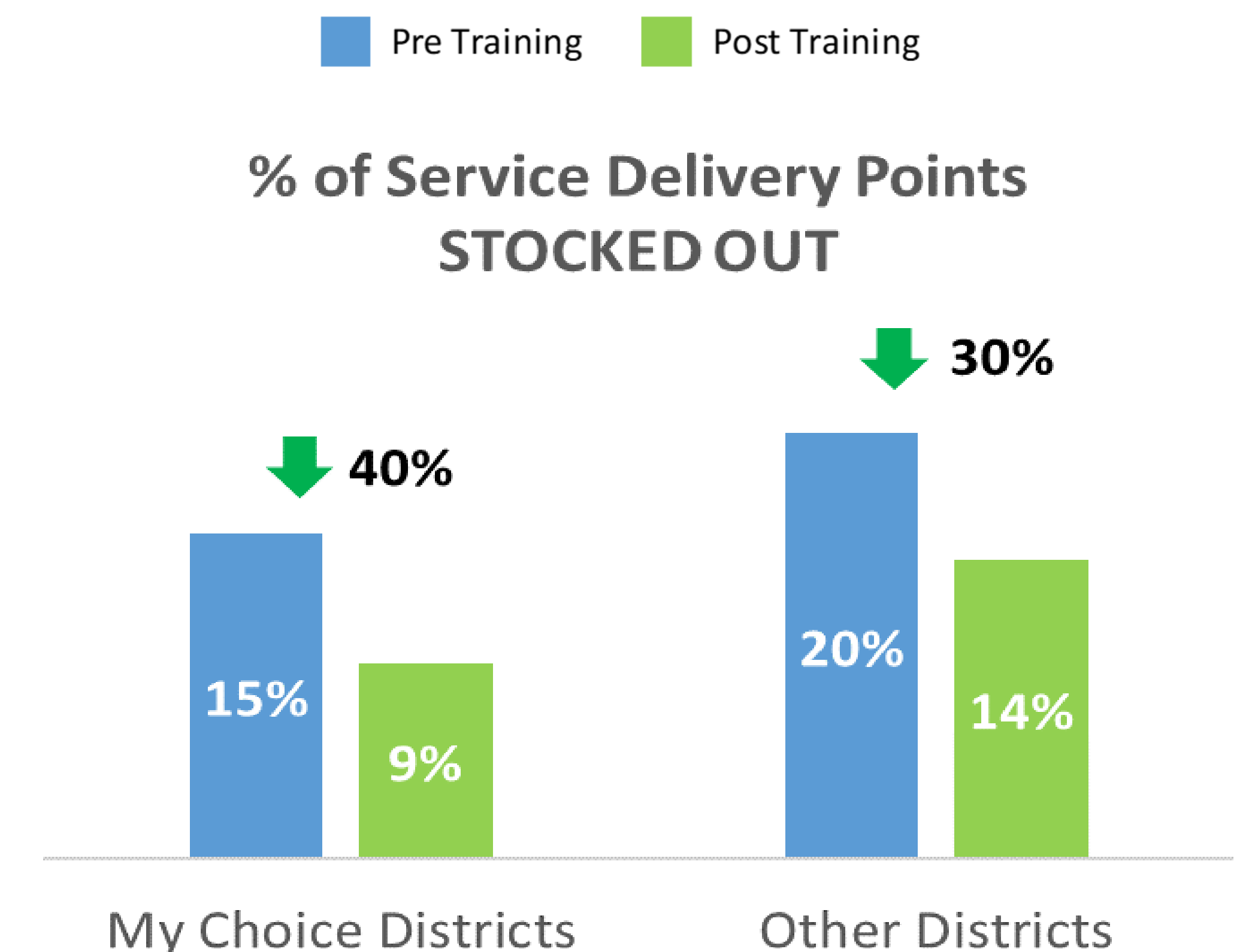
of survey respondents said their distribution tasks have become easier and simpler.

Digitization has greatly enhanced data visibility; users appreciate the real time visibility to track supply chain performance from anywhere.

96%

of survey respondents said the digital system makes monitoring key performance indicators easier and more effective.

Overall the implementation of the digital system has improved supply chain operational performance resulting in improved product availability at all levels of the supply chain.



Data Source: BKKBN data

*My Choice Districts: Pre Training (Jan 19 – Apr 20), Post Training (May 20 – Dec 20)
*Other Districts: Pre Training (Jan 19 – Sep 20), Post Training (Oct 20 – Dec 20)

CONCLUSION

The success of the FP program is largely dependent on the performance of its supply chain as it supports Indonesia's large network of over 17,000 family planning clinics. The benefits of digitizing the SC system have been clearly demonstrated. SC operational performance has significantly improved, specifically in the areas of quality, productivity, and cost. The supply chain workforce has learned new skills and automation has significantly reduced workload allowing more time for other tasks. These improvements in operational performance have resulted in reduced stock outs and improved contraceptive availability, enabling warehouses and service delivery points (SDPs) to better fulfill the needs of their clients. Technology and automation on their own cannot guarantee improved performance and must be supported by a well trained and motivated workforce, standard operating procedures, and a conducive policy environment.