South Africa falling behind with digital transformation

Industry 4.0 is transforming manufacturing rapidly and digital transformation has been on many CXO's agenda for a number of years. Despite this, only a small group of companies is in a position to gain real competitive advantage from this operations revolution. In PwC's Strategy& Global Digital Operations Study 2018 only 10% of global manufacturing companies are dubbed as 'Digital Champions', while almost two-thirds have barely or not yet begun the digital journey.

For its report, *Digital Champions: How industry leaders build integrated operations ecosystems to deliver end-to-end customer solutions*, PwC's consulting capability, Strategy&, surveyed 1,155 executives at global manufacturing companies in 26 countries including South Africa and asked them about their views on Industry 4.0 and digital operations. Based on the outcomes, PwC developed a digital maturity index to explore the role of frontrunners – the so-called 'Digital Champions" – and what distinguishes them to outpace their competitors.

Pieter Theron, PwC partner advisory services and head of Industry 4.0 South Africa, says: "Digital Champions, are noteworthy because they view digitisation in ways that are far-reaching and aggressively innovative, well beyond automation and networking. It is disappointing to note that none of the manufacturing companies we surveyed in South Africa are Digital Champions and most fall into the Digital Novice category (the least digitally mature companies in the report)."

From a regional perspective, Asia Pacific (APAC) are the most advanced with 19 percent of them from that region in the Digital Champion category. These companies are championing the digitisation and end-to-end integration of their operations, introducing digital products and services and connecting new technologies across their organisations at a much faster rate than their peers in the Americas (11%) and EMEA regions (5%). Already today, Digital Champions are deriving more than 50% of their revenue from digital or related services instead of traditional products.

Because of the number of Digital Champions, Asia-Pacific companies expect 17% growth in digital revenue over the next five years, compared with the 13% growth anticipated by EMEA companies. That gap is expected to continue to widen, as 32% of Asian companies plan to have established mature digital ecosystems in the next five years, compared with 15% in EMEA and 24% in the Americas. "This is not good news to South African manufacturers as it will result in a growing competitive gap that will become increasingly difficult to bridge," Theron adds.

Key findings of the report
·   Consumer goods (6%), Industrial manufacturing (6%) and Process industries (6%) are lagging significantly behind Automotive (20%) and Electronics (14%) who have the largest share of Digital Champions. There are no Digital Champions among the South African companies that participated in the survey.
·   The bulk of global manufacturing companies are applying new technologies to their operations in an experimental way instead of a coordinated strategic effort to increase revenue and reduce costs.
·   Two-thirds of companies don't have a clear digital vision and strategy to support digital transformation and culture and in South Africa digital transformation is conservative and sporadic.
South Africa lagging behind on path towards digitisation
Digitisation will lead to an increase in production in mature markets, as it reduces operation costs and enables companies to rely less on labour arbitrage. However, companies in the EMEA region (including South Africa) mostly don't get beyond a medium level of supply chain integration and are often lacking high automation and connectivity in their manufacturing operations. Compared to their Asia Pacific counterparts, EMEA companies also more often fail to connect their strategic, operational, technological and people-related capabilities, and less often incorporate partners in their business models to create customer value.
Consequently and while already being behind, EMEA companies only expect their investments in new technologies and digital ecosystems to result in 12.7% growth in digital revenue over the next five years,

compared to 16.6% growth among Asian companies.

Theron comments: "Although the growth expectation for South African companies are similar than two years ago when we first did the survey, South African companies often do not have the advantage of setting up robust digital operations from essentially a blank slate in terms of factory automation, workforce, and even organisational IT networks as a whole due to numerous complex legacy systems and facilities to upgrade, integrate, or discard. Additionally, Asian companies appear to be keener to try new business models and develop innovative products and services. We require a radical new approach to digital transformation in South African manufacturers."

South African Companies should learn from other industries

Two-thirds of global manufacturing companies have barely or not yet begun the digitisation of their operations and especially in Process industries, Consumer goods and Industrial manufacturing (where most of the surveyed South African companies operate) only a few companies have emerged as Digital Champions. Industrial equipment companies are already more advanced, but Automotive (20% Digital Champions) and Electronics (14%) are clearly the most digitally mature.

Theron adds: "One of the reasons why automotive and electronics companies are surpassing other industry competitors is because operations in auto companies have been optimised, automated and connected for decades, while electronics manufacturers have been at the forefront of outsourced manufacturing, which requires connecting and managing disparate systems and partners across an extended value chain. In South Africa we need to challenge popular belief and learn from other industries and Digital Champions."

South Africa is missing cost savings by connecting essential technologies

New technologies are implemented across the board, but only Digital Champions are able to leverage these technologies to truly connect and collaborate along the end-to-end value chain. They take a holistic approach, connecting essential technologies across the organisation and with strategic partners instead of isolated implementations like many companies in South Africa. As a result, they expect to achieve high cost savings and efficiency gains from technology implementations: 16% anticipated cost savings in the next five years versus 10% for Digital Novices.

At least 90% of Digital Champions have already implemented, piloted or planned some of the most current technologies, like IoT (97%) and advanced robotics or AI (90%). Starkly different, only about one-third of Digital Novices have adopted the most common operational technologies, like predictive maintenance (39%) and integrated supply chain planning (32%).

People at the center of digital transformation

Two-thirds of the survey respondents said they don't have a clear digital vision and strategy to support digital transformation and culture, and only 27% believe their employees have the required qualifications to master the digital future. On the other hand, more than 70% of the Digital Champions say their leaders express a clear vision for the future and serve as role models for digital change in their organisations. Consequently, Digital Champions invest heavily in people development and training and cultivate multi-disciplinary teams to foster innovation across functional boundaries.

Jorge Camarate, Strategy& partner comments: "The people ecosystem enables and supports the efforts of a company's strategic direction, solutions, performance and operations, thereby influencing its evolution. To make this transformation, Digital Champions assess the status quo of their workforce; advance the best and brightest and most digitally-oriented existing talent whole training others to also achieve this category, and inject new talent into the organisation where gaps on people's skill sets and capabilities are revealed."