

Seminar 4A: Technology and Innovation

23 October 2015, Axum Room in the Millennium Hall Conference Center, Addis Ababa

In the face of the highly competitive Global Textile & Apparel business, keeping up with the latest technologies and innovation is no longer an option. This seminar highlighted some leading technology and innovative solutions that can support the growth of Africa's Textile & Clothing industry.

Session Chair: Ali Kwajaffa, ACTIF Director

Moderator: Jas Bedi, ACTIF Chairman

Speakers:

Francisco Aguiar, Director Sales, Europe, Middle East and Africa, Gerber Technology

Takashi Yuhara, Managing Director, Japan Sewing Machinery Manufacturers Association (JASMA)

Levent Kocaman, Altiware

Sidharth Sinha, Founder and CEO, Vogue/Velocity Group

Summary:

Mill use of cotton in Africa accounts for only about 1.5% of world cotton use. Much of the equipment used in Africa is antiquated, and capacity utilization levels are low. Nevertheless, there is broad agreement that the African textile value chain is poised for growth. Some of the fastest growing economies in the world are in Africa, African governments are embracing free market policies, and by 2025 the working age population of Africa will be as large as China's is now. In order to realize its potential, textile manufacturers in Africa must adopt new technologies and modern management strategies.

Francisco Aguiar emphasized the need for integrated technology solutions that automate processes, improve collaboration among business units, enhance work flow, improve efficiency and shorten cycle times. He noted that manufacturing speed and precision are needed to respond to rapid changes in consumer preferences and avoid chargebacks. Automation can reduce inefficiency and material waste by between 5% and 20%, and remote monitoring can optimize system operating efficiency.

Takashi Yuhara noted that apparel production is one of the most labor intensive of all industrial activities and that there are low barriers to entry in the field of garment production. These factors make efficiency, automation and accuracy essential for competitive survival. He emphasized the importance of machinery that is user friendly, thus reducing training requirements and improving accuracy and quality, machinery that is oil free to avoid staining work in progress, machinery that consistently produces accurate pucker-free seams and machinery that is durable.

Levent Kocaman emphasized the need for textile and clothing manufacturers to develop key performance metrics in order to define objectives, measure current performance, analyze and improve performance, and review results leading to continuous improvement. He suggested that software must be simultaneously flexible and scalable, customizable and modular, compatible with other software and customizable, and integrated into a whole-process user-friendly business solution that can combine textile production, garment production and product sales in one management system.

Sidharth Sinha recounted his experiences in developing numerous international businesses, including a garment production facility in Ethiopia. He emphasized the need for 24/7 high speed internet connectivity for constant monitoring of machinery performance, diagnostic reports and automated interventions to ensure production efficiency. He emphasized the importance of integration of design, fashion, production efficiency and marketing in order to maintain competitiveness. He noted that training workers and learning to use technology is the same whether a company starts with older machines or newer. Therefore, he said that African manufacturers should start with the newest technology rather than starting with technology that is out of date and trying to catch up. He noted that substituting labor for technology was a false economy because it consigns African producers to out-of-date production methods resulting in inefficient, uncompetitive practices and inferior quality.

Panel members agreed that when technology fails it is because of poor implementation and inadequate operator training. It was noted that technology adoption costs must include change, adaptation and training costs, in addition to machinery purchase and installation. Workers must be informed of how they will benefit from technology adoption so as to encourage acceptance rather than resentment and resistance.

Up-to-date machinery utilization requires continuous high-speed internet connectivity for monitoring, diagnostics and operation, and this capability must be, and can be, provided in Africa. Likewise, stable, reliable electrical power must be ensured to realize efficient utilization of new technologies. Equipment manufacturers are working to build protective features into machines, but African factory operators must work with local power providers to ensure adequate stable power sources.

There is an enormous gap between technology training commonly available in African schools and the needs of industry for skilled workers. Government and industry, working with universities and technical institutes, must collaborate on solutions to narrow the technology skills gap affecting the textile/garment value chain in Africa.