Virtual Clustering and Collaboration Transform Turkey's Textile and Clothing Value Chain

Executive Summary

CUSTOMER NAME
Istanbul Textile and Apparel Exporters Associations (ITKIB), Istanbul, Turkey

INDUSTRY
Textile and clothing (TC)

CHALLENGES
· Highly fragmented, complex interactions
· Low ICT use and integration by SMBs
· Quota protections removed; work outsourced to other countries

SOLUTIONS
· Increase visibility into capability and capacity across the value chain to satisfy market demand
· Improve seller communications and collaboration to enable increased sales and productivity
· Improve access to technology and training to improve ICT skills and capabilities of smaller suppliers
· Create a business and technology platform that will enable improved delivery of products and services for TC value chain members

RESULTS
· 50 percent improvement in productivity of key processes
· Optimization of value chain
· Stronger integration of value chain partners

Background

In the book "Crescent & Star," author Stephen Kinzer describes Turkey as "the most fascinating country in the world." While some may not agree with Kinzer—a former bureau chief for *The New York Times* in Istanbul—one cannot dispute that the country has undergone a remarkable social and economic transformation over the past few years.

The momentum behind this transformation continues today. In June 2007, as part of the e-Transformation Turkey Project, the Turkish government began working with the Cisco® Internet Business Solutions Group (IBSG) to develop strategic initiatives on how the adoption of information communications technologies (ICT) could enable Turkey to increase the productivity of its key industries; improve its global competitive position in key markets; and drive the overall economic growth of the country. As the largest industrial employer and the second-largest exporter in the country, Turkey's textile and clothing (TC) sector was identified as a major priority.

Business Challenges

The TC sector is widely regarded as the locomotive of the Turkish economy and enjoys considerable visibility on both the domestic and global fronts. Proximity to leading European markets and large, mature textile and clothing clusters has fueled the growth of the TC industry, and in 2006, the World Trade Organization listed Turkey as the ninth-largest supplier of textiles and the fourth-largest in clothing.

Turkey's international success demonstrates the impact of clustering on the development of small and medium-sized businesses (SMBs) in emerging countries. Like most Turkish industries, the TC sector is predominantly comprised of SMBs. In an effort to promote SMB development, Turkey adopted a clustering strategy, which combines the efforts, resources, and expertise of colocated firms—in this case, SMBs in the TC sector—to increase productivity and improve competitiveness.

Cisco Internet Business Solutions Group (IBSG)

Clustering has proved to be an effective strategy, particularly because the value chain is best characterized as buyer-driven networks that operate through fragmented players and complex interactions. Market success for the advanced assemblers, design manufacturers, and brand manufacturers hinges upon their ability to manage the product and information flow among multiple SMBs (e.g., suppliers, outsourcers, and service providers) to produce and deliver finished garments to their end customers. In turn, the SMBs are dependent on the manufacturers, who serve as the "anchor" of the value chain.

While mobilizing the collective action of these entities has helped increase SMB capabilities, the absence of a strong ICT infrastructure has prevented the TC sector from reaping the full benefits this strategic shift was intended to produce. SMBs continued to struggle with the following challenges:

- **Limited visibility into market trends, shifting consumer and market demand, and increasing water, energy, and labor costs.** Without an industry database, the Istanbul Textile and Apparel Exporters Associations (ITKIB)—a quasi-government entity founded by the Under-Secretariat for Foreign Trade—and its members were not aware of unused capacity in the value chain, and were not in a position to increase utilization and efficiencies by matching buyers and sellers.

- **Untapped business development opportunities.** For the 40,000 SMBs in the TC value chain, the absence of a marketing directory with company, product, and contact details made targeting new customers difficult.

- **Sub-par quality and reliability.** Keeping pace with the "fast fashion" model led to production errors, late deliveries, and inferior quality.

- **Limited collaboration.** The current and traditional clustering strategy excluded remotely located textile companies, which in turn impeded collaborative design, development, and product and service delivery.

- **Inefficient operations.** With disproportionate ICT investments throughout the TC value chain, those partners unable to invest in expensive solutions—typically SMBs—became the weakest links and had a negative impact on operations.

- **Lost or delayed information.** Non-standard and non-immediate ways of communicating among buyers, exporters, suppliers, and their smaller suppliers compromised the delivery of critical information.

The recent removal of quota protections, which had previously shielded Turkey from lower-cost producers, served to further undermine the SMBs. Today, Turkish advanced assemblers are free to set up manufacturing operations outside Turkey, and they are doing so in large numbers. As a result, SMBs face diminishing business, and if this situation is not resolved, these companies will go out of business, leaving tens of thousands of workers unemployed. Finally, the propensity with which the SMBs operate in an "informal" economy further undermines the sector's performance and has a negative impact on the overall national economy and administration.

To improve performance as well as reduce the incidence of missed opportunities and lost revenue, operations across the TC value chain must be optimized so that all partners—in particular, the SMBs—become more aware of the market needs. Many SMBs, however, are not well-prepared, and may not be able to respond appropriately due to limited access to capital, technology, and skilled workers.

Solutions

As part of the larger engagement with Cisco, ITKIB tapped the Cisco Internet Business Solutions Group (IBSG) for assistance in launching a strategic value chain initiative.

Cemal Bayazit, deputy general secretary of ITKIB, explains, "Our vision for the initiative was to focus on how the advanced use of ICT could transform the Turkish TC value chain; enable a new business/operational model; and drive increased SMB productivity. We believed that by partnering with Cisco IBSG, our chances for success were greater."

To gain insight into the dynamics and business needs of the SMBs and the entire TC value chain, Cisco IBSG first conducted needs analysis workshops with the SMBs and anchor clients to identify and prioritize the value chain challenges. Next, Cisco IBSG interviewed global buyers and government stakeholders such as the Ministry of Industry and SMB unions to gauge expectations of the envisioned improvements enabled by ICT. After evaluating the information collected over four months of meetings with value chain partners, Cisco IBSG presented a vision and roadmap for value chain transformation and SMB development on top of ICT technologies: a vertically integrated ICT platform offering that would address the business challenges and enable the required business processes by incorporating virtualization, collaboration, visibility, affordability, and scalability.

Once ITKIB endorsed the Cisco IBSG recommendation, a Cisco team comprising multiple entities on various tracks—solution architecture, engagement of pilot companies, business model, and technology blueprint—was assembled in different stages to complete the solution and pilot implementation. Cisco IBSG led the development of the integrated solution, which took place over six months and included ongoing, detailed workshops with the Cisco products and services teams. At the conclusion of this development phase, it was decided that the solution would have four main components to meet the business needs:

- **An industry directory application** that would connect the entire TC ecosystem by letting all partners register, view supply and demand, and contact and communicate with each other. This, combined with an online marketplace application that compiles buy/sell postings, would increase visibility into capability and capacity across the value chain and improve overall ICT utilization. Dubbed the "Facebook of Textiles" by leading Turkish press, the value proposition resembles that of Facebook—by registering and providing information on their companies, SMBs gain access to communication tools and business processes that improve their visibility, productivity, and market opportunities, and reduce the cost of production cycle time.

- **Efficient, flexible collaboration tools** such as virtual communities, virtual meetings, and a collaboration platform would extend the traditional clustering model to include overseas branch offices or factories and remotely located SMBs, enabling them to work, share information, and design in collaboration with others as if they were within the cluster. Real-time communication tools (voice, video, data) would enable the prompt exchange of information among value chain partners.

- **Custom applications** developed to enable information exchange, workflow management, and visibility among related companies of the value chain of a large exporter. Applications for sampling, product planning, and design would be open and simple to ensure all partners can share and use them through the platform.

- **A connectivity package** so that SMBs can connect to the platform and with each other without incurring unreasonably high costs. Providing a common platform that is accessed via the Internet facilitates stakeholder sharing and helps ensure that all SMBs, regardless of size and level of complexity, can easily adopt ICT to advance their businesses.

In tandem with solution development, Cisco IBSG and ITKIB identified two leading advanced assemblers and brand manufacturers, Mavi Jeans/Erak Manufacturing and Talu Tekstil/Taha Group (and their 10 suppliers), to join the pilot and represent the industry. The local Cisco commercial team and Cisco IBSG project managers engaged with the CEOs and managers to plan, implement, and monitor the pilot.

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In addition, Turk Telekom, Turkey's leading integrated telecommunication services provider, worked with the Cisco channel teams to begin developing the business model to deliver these complex collaborative and custom applications as a profitable and scalable managed services offering.

"The impact the TC sector has on Turkey is immeasurable," says Murat Veziroglu, Turk Telekom's voice services director–Marketing. "At Turk Telekom, we believe we have a responsibility to contribute to Turkey's future. Partnering with Cisco IBSG on the development of the new TC business model enables us to add value to this important sector, and helps us expand the adoption of ICT to the SMB segment as integral to ensuring our country's vitality."

Finally, a separate team of systems integrators worked with the Cisco teams to actually deliver and implement the components of the technology solution at pilot locations. The pilot consisted of two phases, and the objectives were to create, test, and validate the following:

- **The business benefits of the Business Communications Platform (BCP)**, a communications and collaboration environment based on a tailored version of Cisco WebEx Connect™ and Cisco Unified Communications, for the Turkish TC sectors.

- **An Industry Directory Database (IDD) Portal integrated with the BCP** to enable registered subscribers and database users to research/identify products and suppliers, and integrate them into the BCP collaborative environment.

- **A customizable project management application** modeled on advanced assemblers' preproduction planning and sample development processes that integrate external suppliers and customers into a virtual project team.

- **Managed services offerings** to deliver networking solutions (products, service, and support) to Turkish TC manufacturers and suppliers.

- **The development of alliances or partnerships** to stimulate investment and cocreate new, sustainable business models to deliver advanced services and solutions to the Turkish TC sectors.

Business Results

The pilot study took place over the course of three months, and user feedback from the 12 participating companies indicates that the performance improvements (production cycle times), faster stock turnovers, reductions in error rates and late deliveries, new business opportunities, and travel and cost reductions (via web meetings) create a very strong business case and ROI for the participating companies. Actual pilot findings suggest that productivity improvements of up to 50 percent in key processes (such as sample production, which involves all suppliers and partners in the value chain) generated an ROI for an average-size SMB in approximately three to four months. For this study, an average SMB is one that includes between 100 and 250 employees.

Additionally, a detailed cost/benefits analysis shows that the total ROI for a large exporter—defined as one that employs between 500 and 1,000 employees—and its suppliers could yield a total internal rate of return of 4,500 percent over a five-year period. Such an analysis proves that large companies can trigger, support, and/or push their suppliers in the value chain to create the value identified in the collaboration solution.

The benefits from using Cisco Unified Communications tools integrated with Cisco WebEx to facilitate meetings with geographically dispersed partners were recognized almost immediately. "The solution enables us to reach suppliers without any time and location dependencies, and we are also able to easily share our documents with other stakeholders in a secure environment," says Hulya Cetinkaya, quality service manager–Talu Tekstil. "If we are able to use the solution efficiently and extensively, I believe we will achieve a very good level of productivity increase in our business processes."

Complementing the increased productivity is the greater visibility and transparency offered by the collaborative IDD, which serves as a marketing window to the textile industry inside and outside Turkey. Metin Ozbey, consultant to Erak Talu CEO and owner Ersin Akarlilar, explains, "IDD is like a gateway, an easy, accessible, and trusted source for finding textile partners."

According to Ahmet Hasanbeseoglu, director, Cisco IBSG–Emerging Markets and the project lead, added to the impressive business results and demonstrated ROI were the innovative concepts realized during the project. "By virtualizing the traditional clustering model, this project has breathed new life into an old strategy and helped Turkish SMBs to connect, collaborate, and profit beyond the constraints typically set by geographical, logistical, and institutional boundaries. Along the way, we developed a replicable model and solution that can be transferred and used in other Emerging Markets and industries."

Hasanbeseoglu also points out that the partnership Cisco IBSG established with ITKIB and the Turkish government was critical to the success of the pilot. "When working with as many stakeholders as we did, on a cross-segment engagement

that has national implications from a social and economic standpoint, it is mandatory that the right organization is identified as a partner. Our association with ITKIB and the Turkish government gave us a lot of credibility—key for securing buy-in of the various TC value chain partners and eventually orchestrating the varied and complex aspects of this project. This is a key learning and best practice we will want to emulate in the future."

Next Steps

Moving forward, ITKIB and Turk Telekom plan to deploy three waves of commercialization. The first phase will consist of a soft launch of the platform developed by Turk Telekom, supporting 10 large exporters and all of their suppliers with significant pricing advantages. The intent of this rollout is to validate the business model and solution architectural model. Following this phase, a commercial launch and deployment of local and custom applications is expected, during which ITKIB is optimistic about reaching its target threshold level of 30 percent adoption. The pricing for the packages will be kept at a minimum through government subsidies and Turk Telekom discounts for one year.

Looking further ahead to vertical integration and partner development, once the majority of the 40,000 SMBs are on the platform, there will be an opportunity to collect subscription fees and create a new market opportunity for custom application and web services development partners for the textile sector.

More Information

The Cisco Internet Business Solutions Group (IBSG), the global strategic consulting arm of Cisco, helps CXOs and public sector leaders transform their organizations—first by designing innovative business processes, and then by integrating advanced technologies into visionary roadmaps that address key CXO concerns.

For further information about IBSG, visit http://www.cisco.com/go/ibsg