

TRADING UP: HOW TUNISIA USED ICT TO FACILITATE TRADE

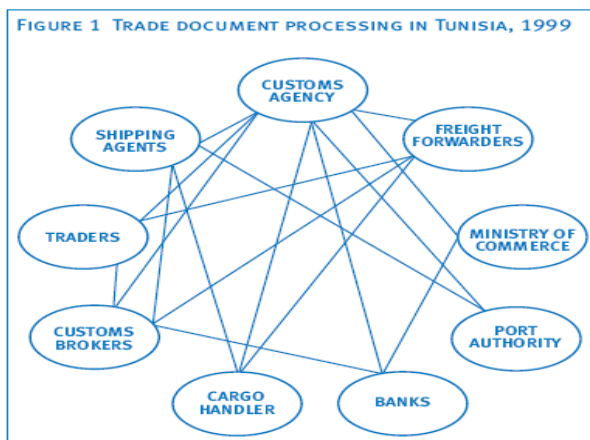
HAMID ALAVI

Although trade liberalization can create jobs and raise incomes, these benefits are easily undermined if excessive costs and delays hinder trade transactions – reducing a country's export competitiveness. This note shows how Tunisia embraced information and communications technology (ICT) to facilitate trade – cutting costs, saving time, and increasing international competitiveness. It also highlights the context and challenges, key initiatives, success factors, and impact of Tunisia's efforts.

Context and challenges

Over the past two decades Tunisia's trade has become more liberalized, with domestic firms gaining greater access to export markets through an agreement with the European Union and adherence to World Trade Organization rules. But despite initiatives in the 1980s to streamline the flow of information on merchandise trade, trade transactions remained costly and inefficient in the 1990s. Customs clearance requirements, port logistics and procedures, and quality assurance checks strained resources and imposed significant costs on both the government and the private sector.

In the late 1990s, cargo spent an average of 8 days in Tunisian ports – and often up to 18 days – due to customs, port, and technical control procedures, compared with a few hours in Singapore and 4 days in Argentina and Brazil. Similarly, customs clearance required an average of 4 days in Tunisia – and in many cases up to 7 days – while it took just 25 minutes in Singapore and 1 hour in Morocco. Moreover, Tunisian customs officials physically inspected 50–80 percent of imported merchandise, compared to less than 5 percent in Singapore or 15 percent in Morocco. There were several reasons for the high level of inspections in Tunisia, among which were lack of modern customs control techniques – risk management and selectivity, lack of modern ICT systems, post-release audits – and, more important, a mindset favoring more control than trade facilitation.



Further complicating matters, Tunisia's procedures for external trade required that documents be processed by multiple entities: the Ministry of Commerce, banks, the port authority, and the customs agency, as well as the usual professional organizations such as customs brokers, shipping agents, and freight forwarders. The inefficiencies of these trade document processing and clearance practices are illustrated in figure 1, where the lines indicate the main document exchanges that had to be carried out physically – meaning that hard copies of documents had to be delivered and in some cases picked up again (after several days) for further processing. Underlying these inefficiencies were 19 distinct steps required for import transactions and 15 steps for export transactions. Beyond the costs

involved, these cumbersome processes severely impeded the ability of Tunisian companies to respond to or accept short-notice orders, further undermining their competitiveness.

Key initiatives and success factors

In 1999 the Tunisian government – supported by the World Bank through the Export Development Project – introduced comprehensive measures to facilitate trade, starting with the simplification and automated processing of trade documents, with the European Commission financing the document simplification activities. Bank support was crucial in initiating and supporting a comprehensive program of trade facilitation involving not only automation of trade documents and processes through the application of ICT, but also customs reform and modernization, the creation of an electronic single window for trade transactions and information exchange associated with cargo handling and clearance, and the streamlining of technical controls inspection procedures and transport processes. The reforms were therefore based on the adoption of international standards for trade documentation and significant coordination among various stakeholders. The number of documents was rationalized. The development of electronic formats for trade documents made it easier to share information among stakeholders and process the information contained in the documents.

A key success factor was the commitment at the highest level of government. This was necessary because of the involvement of a multiplicity of government ministries and agencies in trade transactions and clearance. It was also necessary because of the importance of coordinated reform measures at the level of all agencies involved. This was made possible in Tunisia by the close involvement of the Minister of Commerce, who was also the chairman of the Superior Export and Investment Council, a cross-ministerial committee reporting directly to the President.

Another success factor was cooperation among private and government stakeholders at all stages of the reform process. This was achieved by creating a steering committee and a technical committee composed of key public and private sector stakeholders early in the process, which served as cross-agency implementing and coordinating body. The committees were instrumental in both the design and implementation of the initiatives. It was instrumental in coordinated actions by all agencies involved in trade facilitation. It would take only one of the agencies involved in trade transactions to derail the progress if that agency was slow in adopting modern processes and technologies compared to other agencies. The committees also played a key role in adopting a phased approach to counter complexity and ensure quick wins to secure confidence, and sought users' feedback early on through surveys and evaluation that allowed fine-tuning of the electronic systems. As such, Tunisia provides a good example of stakeholders coming together to simplify trade procedures and automate documentation and customs requirements.

Starting in 2000, Tunisie Trade Net, a semipublic agency, was established to operate a value-added network providing electronic data interchange for stakeholders and expediting the flows and processing of trade documents. TTN shareholders include 10 government agencies, including the national port authority and Tunis Air, and 18 private organizations, including several banks and the Tunisian Internet Agency. The system works with all the actors involved in international trade, including the customs agency, the Ministry of Commerce, technical control agencies, the Central Bank, ports, private traders, agents, freight forwarders, customs brokers, and banks (figure 2).

FIGURE 2 TRADE DOCUMENT PROCESSING IN TUNISIA AFTER IMPLEMENTATION OF TUNISIE TRADE NET (TTN)



Three main set of documents are processed through the TTN system: Shipping manifests; the customs declaration; and technical control documents. In addition, the system processes online tariff payments and transport documents. A connection to the TTN server enables participants to exchange documents and messages with other participants. Shipping manifests and customs declarations are sent over the network, reducing processing times. In addition, manifest data are available to the cargo handling operator in electronic format, eliminating the need for the handler to capture data, and improving planning and operations. TTN provides a flexible user

interface: trade professionals such as customs brokers, freight forwarders and shipping agents use client-based applications designed to process large numbers of transactions, while occasional users can opt for a Web-based interface.

The effectiveness of TTN in reducing trade frictions and costs depended on several other measures that were needed to complement the above actions, including:

- Enhancing the customs computer system to support international message and document standards for automation of manifest acquittal and processing of customs declarations. These changes reduced personal contact between declarants and customs officials, facilitated more rapid, transparent, and consistent processing of customs declarations by eliminating routine manual checks, and enabled better risk management.
- Developing Ministry of Commerce information systems to electronically process approvals for restricted goods through TTN, thereby eliminating manual delivery and collection of the Certificate for External Trade to and from the Ministry of Commerce.
- Installing three scanners at key border and port sites to speed verification of consignments.

Furthermore, all of these measures had to be accompanied by back-office reengineering and change management at the level of each agency to allow for efficient application of modern methods and technologies.

Impact

Tunisia's investments in trade facilitation have dramatically reduced import and export processing times. Imported goods can now be cleared from ports in an average of 2 days. Manifest processing after the completion of vessel operations used to take up to 4 days, but electronic processing has cut that to 1 day. Payment of customs and port duties and storage charges now takes only a few hours, rather than a full day. The time needed to prepare and process customs declarations has dropped to 15 minutes, down from as long as 3 days. In 2003 the physical inspection of goods reached the target level of 15 percent, and now they are at the international best practice norm of 10 percent, down from 50–80 percent in late 1998. Trade document processing in Tunisia after implementation of TTN electronic processing of ship manifests has generated savings for the maritime cargo handling operator. Moreover, the TTN experience has shown how ICT can increase the efficiency of government administrative processes. As a result the TTN platform is being considered for electronic procurement services and other e-government applications.

Lessons Learned

1. Trade clearances can improve dramatically when administrative and political commitment combines with advances in information and communications technology.
2. Involving private sector stakeholders and creating a public-private implementing body from the outset has helped deliver improved design, which has been assimilated into various systems more rapidly. This has also made possible the adoption of a successful implementation approach based on the following steps: (a) a phased approach to allow quick wins and demonstration effect to show impact and generate further interest in reform; (b) adoption of international standards (SAD, UN EDIFACT) to allow for easy exchange of required information to trading partners and authorities; (c) user feedback to fine tune the system and ensure it would respond to the private sector needs; and (d) monitoring of progress and ensuring coordinated application of modern methods by all agencies involved in the trade processes.
3. Application of IT succeeded when the following steps were taken in sequence: First, simplify and/or eliminate some procedures; second, standardize information that responds to needs of different operators; and third, facilitate exchange of information.
4. Theories and good intentions alone will not deliver project objectives. It was important to identify and attend to practical and logistical issues and processes in the Customs supporting environment to maximize the chance of success. Extending electronic processing to all import and export administration and all agencies involved in trade transactions – not only customs, and developing their “back offices” to handle electronic processing of trade documents, is a key success factor.

Conclusion: Tunisia's success has involved much more than applying technology to trade documents. An important prerequisite is commitment at the highest level of government. The second main factor for success is cooperation among private and government stakeholders at all stages of the reform process. The third factor is the simplification of documents and processes at the level of all agencies involved in trade clearance and control, before designing and applying ICT systems. The fourth factor is the adoption of a regulatory framework that allowed and supported electronic processing and signatures. The fifth success factor is extending electronic processing to all agencies in trade transactions and developing their "back offices" to handle electronic processing.

About the Author

Hamid Alavi is a Senior PSD Specialist in the Middle East and North Africa Region of the World Bank. He has been Regional Trade Facilitation Coordinator since 2005. He has managed a large number of projects and policy dialogue on private sector development, investment climate, trade facilitation, and export development in several countries. He is the task team leader for the project that is the subject of this SmartLessons Note.

DISCLAIMER

IFC SmartLessons is an awards program to share lessons learned in development-oriented advisory services and investment operations. The findings, interpretations, and conclusions expressed in this paper are those of the author(s) and do not necessarily reflect the views of IFC or its partner organizations, the Executive Directors of The World Bank or the governments they represent. IFC does not assume any responsibility for the completeness or accuracy of the information contained in this document.

Please see the terms and conditions at www.ifc.org/smartlessons or contact the program at smartlessons@ifc.org.