Middle Eastern software development

by Nael Salah, Managing Director and Founder, ESKADENIA Software

In the Middle East - indeed, in much of the developing world - local technology buyers have long preferred to buy their hardware and software abroad even when lower-cost local options exist. Nowadays, although knowledge-based industries such as software development that rely primarily upon brainpower are flourishing throughout the developing world (especially for outsourcing), old habits die hard. These local enterprises can produce world-class software, but they need the support and encouragement of the region's telecom sectors and governments to grow.

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Ironically, there has been a bias, a general preference, for foreign goods and services - until recently, mostly Western - throughout not only the Middle East but probably most developing countries: "If it's foreign, it has to be better." Quite often, this quality comparison has been untrue and unfair for years.

The procurement cost of foreign telecom sector products and services is normally a multiple of the cost of products and services that are essentially the same, but designed and developed by regional suppliers. Nevertheless, most regional telecom operators tend to deal with more expensive suppliers. A Gulf telecom operator staff member once told me that: "If we deploy a carrier grade telecom system from, say, a Jordanian company and we have operational problems, our superiors, the ruling family, and the public in general will put such great pressure on us that those responsible might even be discharged from

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the company. If the same problem occurs and we inform them that the system has been developed and deployed by say a German supplier, then we are covered and no one can criticise our decision even if the cost of the system is many times that of the Jordanian counterpart!"

The almost total reliance on imports from predominantly European telecom suppliers

for non-core telecom systems has, with the weakness of the dollar, resulted in soaring costs for systems and associated services. The cost of imports in most countries in the Middle East and Africa have, in general, increased during the past few years by almost 40 to 50 per cent and inflation rates has risen to double digits rates in some countries resulting in strained budgets and hardship.

The partial preference for foreign-based suppliers and a number of other factors such as lack of funding for local technology companies, and modest practical encouragement and support by the government, have hindered the development of regional telecom-grade systems suppliers. Yet, a number of suppliers have emerged in the past few years that, against all odds, are succeeding.

While most regional software companies have chosen to source wholly or partially

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western suppliers' off-the-shelf products, and act as middle men to facilitate the deal, or as integrators using trained local or regional human resources to reduce costs, a number of suppliers have tried to go the hard way and design and develop systems from scratch.

As regional suppliers headquartered in Jordan, we have invested in local intellectual property through the design, development, deployment and after-sales system support of a range of advanced and sophisticated telecom-grade software products that have been integrated with the products of most major core network telecom suppliers.

The success of regional telecom software suppliers depends to a large extent on a number of factors. Most important is the creation of a true spirit of partnership between the telecom operators and the few telecom software suppliers in the region. A partnership between the operators and suppliers will result in a win-win situation and operators will benefit from cost reduction in systems and services procurement, shorter time-to-customer, and availability of a nearby business discussion partner that understands the needs of the operator and shares the same language, culture and background. The operators, of course, must establish stringent standards for quality and ensure they are strictly adhered to; they must also certify the competence of the regional suppliers' technical staff and organisations.

The deregulation and liberalisation of the regional telecom market provides the necessary environment for the growth and success of local suppliers; by fostering competition and making it possible for new operators to enter the market, the liberalisation of the market has resulted in an increase of the number of operators. This broadens the market for local suppliers and facilitates the development of partnerships between operators and suppliers. Increasing the number of operators in each country is a necessary condition for the growth of true competition between the operators. Competition will put pressure on prices which, in turn, will make it increasingly important to control capital expenditures and operational costs. The competition will also stimulate an active market in value-added services and other products needed to differentiate operators from each other.

The development of the region's financial market is another factor that will positively influence the success of the regional telecom suppliers as funding technological companies has so far been quite limited. A number of new competitors and certain traditional industry segments such as real estate, tourism, and manufacturing have attracted most of the venture capital. The financial market can easily understand the requirements of the competing non-technological industries, yet has little understanding of the lack of tangible assets typical of software technology companies. The lack of Middle Eastern companies that have been notably successful developing technology-based service or products - especially software developers - has contributed greatly to the financial sector's unwillingness to supply the financing needed to create truly vibrant technology sectors.

The recently increased investment in the Middle East's educational systems - its schools and universities - will certainly produce results, but it will take some time before they are apparent and significant. The Middle East and African regions have recently focused on creating more schools and universities and, indeed, many new educational institutions have appeared in the past years throughout the region. Now, it is necessary to focus upon improving the quality of education for both technical and soft skills areas. The region is well known for its high levels of unemployment, yet many technology sector firms are searching in vain for qualified and competent personnel.

Regional telecom software system suppliers need entrepreneurship and a, 'yes we can', attitude. They need to be able to actually provide telecom operators with advanced, state-of-the-art, high quality, high performance, stable systems. Opportunities occasionally exist, but seizing these opportunities and successfully meeting the

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challenge will be the true test of a world-class Middle Eastern telecom software sector. Support from the regional operators is needed. The operators need only insist upon receiving competitive, world-class, products, and then encourage local suppliers by giving them a real chance to develop and provide them.

The Middle East and North African region has produced many highly qualified technical and business human resources. Traditionally, they have relocated to Europe and North American seeking the sort of challenging employment with high level of job satisfaction and good pay that was rarely found in the region. The growth of technology-based enterprises in the region is, in some cases at least, starting to reverse this 'brain drain'. Many highly qualified people who left the region are now coming back bringing their skills to the newly developing technology sectors in their home countries; many are calling this reverse exodus the 'brain gain'. The continuation of this trend will help strengthen the Middle East's telecom technology-based companies, operators and suppliers alike.

Human resource development, including through the creation of a continuous learning environment by the regional technology suppliers, is necessary to enable local high-tech companies to take part, and some day lead, in the telecom sector's technology race. The region has human resources with the potential to achieve this end.

The wide-spread use of the Internet has helped provide equal access to all sorts of information and technologies; and has greatly equalised the opportunities to succeed. Product managers, designers and developers in Jordan, Egypt, Saudi Arabia, Dubai or Lebanon can, given a similar work environment, compete with those in the Silicon Valley, Stockholm, Helsinki, Shenzhen or Bangalore on an equal footing.

The deciding factor will be the ability of regional information and communication technology firms to convince the market to give them a chance to prove themselves as providers of regionally developed sophisticated systems. We believe we have shown this can happen. We believe it will happen.