

No Country's AD Community Is an Island

Joseph Feiman

Globalization will impel AD communities worldwide to make cultural adjustments, invent new collaboration methods and adopt new technologies. Is your enterprise ready to join the international community?

ANALYSIS

It is a truth universally acknowledged that the United States is the only "software superpower" in the world. But that truth tends to obscure another fact: There is a larger application development (AD) world community, which extends far beyond the borders of the United States. India, Russia and China have taken the first steps on a path that, by 2010, will enable them to challenge U.S. supremacy in AD.

Most U.S. technology vendors and enterprises have not yet acknowledged the existence of that larger community or their relationship with it, and have failed to respond to the threats and opportunities that it poses. Many are still uninformed about the AD trends that occur in other countries — even in countries that appear to be very similar culturally to the United States, such as certain European nations. But, as the English poet John Donne has written, "No man is an island, entire of itself; every man is a piece of the continent, a part of the main." This is also true of the IT community. Through this and subsequent Global Application Development Spotlights, Gartner intends to address this lack of information by illuminating the trends and concerns faced by this larger, worldwide AD community. We believe that enterprises must understand their place in the international IT community for two reasons:

We expect that, by 2010, the United States will cease to be the only software superpower in the world and will share the title with two or three other countries (0.6 probability).

We also envision that, by 2010, a new divide will open up between countries capable of both producing and consuming IT products and those capable of only consuming them, because of a lack of general and special education and R&D culture. The first group will consist of G7 countries, India, China and Russia (0.7 probability).

This issue of the Application Development Spotlight addresses several major global AD concerns:

- What legal, social, and cultural problems will global AD efforts face?
- What is the cost of global AD, deployment and maintenance?
- What standards, technologies, methodologies and best practices will enable developers from different countries to collaborate on global projects?
- What standards, technologies and methodologies will enable the creation of globalized and localized application?
- Will the United States remain the only software superpower? What countries will emerge as principal providers of software and services during the next five years?
- In implementing global AD, what unique problems will different countries face, and what problems will they all have in common?

Gartner offers its clients unparalleled international capabilities within the research and consulting community, established through 4,300 associates in more than 90 locations worldwide, including Brisbane, Johannesburg, Jerusalem, New Delhi, Surrey, Sao Paulo and Tokyo. The articles for this Spotlight have been written by Gartner analysts who are familiar with the AD communities in these and other countries. Each article is informed by the analyst's knowledge of his or her home base, as well as a vision of the interrelated, international commonalities.

The Spotlight consists of a dozen articles that examine a wide spectrum of global AD concerns.

In "IT Self-Portrait: A Global Application Development Survey," M-15-4849, Joseph Feiman and Dale Vecchio interpret the results of a survey conducted by Gartner at our IT/Expo Symposium events in the United States, Europe, Asia/Pacific and Japan. They discuss global AD technology status and trends; the market share of AD tools, programming languages and scripts; the pace of adoption of .NET and Web services and the priority that AD organizations worldwide give to the common problems they face.

Did you realize that using metrics to appraise your employees' performance could be illegal in some countries? Have you imagined that enforcing a non-smoking policy will sharply decrease your team productivity? In "Legal and Social Implications of Global AD," TG-15-5010, Andrea Di Maio writes about these and other legal and social implications of global AD.

What should be the line items in your budget proposal for the global AD project? In "Application Globalization Costs," COM-14-3196, Nick Jones tells you what to put in place to minimize the gap between the estimated and real cost of global AD projects.

In "Software Development Lessons From the Open-Source Trenches," T-15-6434, Nikos Drakos shares with you the best practices learned from the open-source community's experience in building software without ever physically seeing your closest counterpart.

In "RAD From Opposite Ends of the Earth: A Case Study," CS-15-4289, Greta James presents a case study in which two enterprises expeditiously accomplished a mission-critical project that they collaboratively conducted from two separate hemispheres.

Are there particular methodologies that will guarantee, even across international borders, the quality of the software that you are developing? Matt Light describes your choices and gives advice on AD process adoption in "International AD Process Standards: Traffic to Left or Right?" TU-15-9073.

In "Unicode: One String to Rule Them All," T-15-6877, Nick Jones analyzes Unicode — an international standard character encoding scheme — explaining what it is, and cautioning about what it is not.

In "Software Internationalization: Doing It Right From the Start," TG-15-6822, Dion Wiggins addresses the advantages you can gain by incorporating internationalized features in an application's design to easily localize them later for a variety of countries — with significant cost savings.

The enormity of the challenges faced by Chinese enterprises and the speed at which e-transformation can proceed is the subject of Louisa Liu's "Pitfalls on the Path to Enterprise E-Transformation in China," TG-15-3627. She provides an analysis on China's adoption of e-business concepts and its subsequent economic transformation.

Will Russia become a competitor with India in just a few years? In "Analyzing Russia's Offshore Services Capability," M-15-4749, Ian Marriott and Rita Terdiman focus on the awakening giant's potential as a center for sophisticated software development and project outsourcing.

Frances Karamouzis differentiates between offshore sourcing myths and realities in "Debunking the Myths of Offshore IT Service Offerings," DF-15-5315. Quality and productivity, culture and infrastructure are the subjects of her critical analysis, with the objective of helping enterprises avoid costly mistakes and missed project deadlines.

In "Innovative Program to Develop and Export Brazil's Software," CS-15-5090, Waldir Arevalo walks us through the phases of the government, nonprofit and private-sector programs that aim at making Brazil a world-class software development center with a global reach.

This Global AD Spotlight is the first in an upcoming series that will focus on a variety of global AD subjects. Watch for our next issues of the Global AD Spotlight.

Features

"IT Self-Portrait: A Global Application Development Survey" (M-15-4849). Surveys conducted at Gartner IT/Expo Symposium events worldwide illuminate several critical global AD trends. **By Joseph Feiman and Dale Vecchio**

"Legal and Social Implications of Global AD" (TG-15-5010). We draw attention to some cultural and working practices to watch for in collaborative efforts with staff in other countries. **By Andrea Di Maio**

"Application Globalization Costs" (COM-14-3196). We explain what plans to put in place to minimize the gap between the estimated and real cost of global AD projects. **By Nick Jones**

"Software Development Lessons From the Open-Source Trenches" (T-15-6434). Open-source software is being developed by "virtual" teams whose members are dispersed and rarely meet. **By Nikos Drakos**

"RAD From Opposite Ends of the Earth: A Case Study" (CS-15-4289). We offer best practices from the experiences of a development team and a group of business users who overcame distance and used time zones to their advantage in building an efficient, customer-friendly system. **By Greta James**

"International AD Process Standards: Traffic to Left or Right?" (TU-15-9073). With enterprises globalizing and AD becoming more distributed and "virtual," the need for a consistent approach to AD is becoming critical. **By Matt Light**

"Unicode: One String to Rule Them All" (T-15-6877). We explain the advantages of using Unicode for data that is created in multiple countries or is likely to be transmitted internationally. **By Nick Jones**

"Software Internationalization: Doing It Right From the Start" (TG-15-6822). If you're seeking a global market for your software, it's better to build applications to support these markets from the beginning, rather than retrofitting English-language solutions. **By Dion Wiggins**

"Pitfalls on the Path to Enterprise E-Transformation in China" (TG-15-3627). The experience of Chinese enterprises offers some valuable lessons in rapid e-business transformation. **By Louisa Liu**

"Analyzing Russia's Offshore Services Capability" (M-15-4749). Russian offshore providers could be your future AD partners. **By Ian Marriott and Rita Terdiman**

"Debunking the Myths of Offshore IT Service Offerings" (DF-15-5315). If you decide to use an offshore IT service provider, make sure it's for the right reasons. **By Fran Karamouzis**

"Innovative Program to Develop and Export Brazil's Software" (CS-15-5090). A Brazilian government-sponsored software initiative offers lessons in how to increase your presence in the global IT market. **By Waldir Arevalo**

This research is part of a set of related research pieces. See "Application Development in the 'Global Village'" for an overview.

REGIONAL HEADQUARTERS

Corporate Headquarters
56 Top Gallant Road
Stamford, CT 06902-7700
U.S.A.
+1 203 964 0096

European Headquarters
Tamesis
The Glanty
Egham
Surrey, TW20 9AW
UNITED KINGDOM
+44 1784 431611

Asia/Pacific Headquarters
Level 7, 40 Miller Street
North Sydney
New South Wales 2060
AUSTRALIA
+61 2 9459 4600

Latin America Headquarters
Av. das Nações Unidas 12.551
9 andar—WTC
04578-903 São Paulo SP
BRAZIL
+55 11 3443 1509