

Rightshore!

Anja Hendel · Wolfgang Messner · Frank Thun
Editors

Rightshore!

Successfully Industrialize
SAP® Projects Offshore

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Foreword

Offshore delivery creates the opportunity to improve quality and to allocate resources in a better way. It is not a question of saying ‘yes’ or ‘no’ to India; it is about organizing a distributed delivery process that embraces onsite, nearshore and offshore services.

Creating the right mixture is what Capgemini calls Rightshore®. Used as a strategic instrument, it can be a highly effective answer to ever increasing demands and decreasing budgets. And it is one way to industrialize service delivery on a global scale while increasing one’s ability to innovate. By allocating resources correctly, Western companies can thus realize a number of competitive advantages.

Extending the level of quality delivered depends on the way collaboration is organized by the Western company, the level of expertise in setting-up the project, preparing and transforming the organization and factoring in cultural differences. Comprising many years of experience with offshore projects, this book shares learnings, knowledge in addition to strategies to create opportunities – avoiding bad investments and setting up successful delivery models that create value tailored to the needs of the individual company.



Baru Rao



Antonio Schnieder

Preface

ERP¹ harmonization remains high on the agenda of CIOs: 82% plan to invest more in ERP harmonization and consolidation.² Evaluating their investments, they focus on productivity increases and clearly measurable cost savings. ERP backbones are thus continuously enhanced with new features and higher integration. At the same time, customers scrutinize the costs of seemingly endless reworks of their ERP systems.

These drivers result in an ever increasing competitive pressure on IT organizations and ERP service providers to adjust delivery models. As a consequence, software development processes need to be industrialized, relying more and more on offshore delivery of ERP implementations from low-cost locations using standardized methods and sophisticated distributed delivery tools. This type of global delivery model represents the optimum combination of processes, end-to-end methodologies and quality procedures, with high-quality skills and sufficient resources available internally or externally on a global basis. Offshoring is the name of the game in the IT industry, and no large firm or IT service provider can afford to ignore the ever expanding delivery centers in India.

Target audience

This book is designed for business and IT managers aiming for drastic efficiency gains in their next ERP initiatives by embracing a global delivery model. Part I provides readers with a solid understanding of ERP offshore implementation, while Part II features case studies from projects conducted for renowned global clients. This book focuses on SAP implementations, though all considerations also apply to other ERP systems.

¹ ERP = Enterprise Resource Planning

² Cf. Camoin G, Larson U, Moch N (2006) European CIO survey: Views on Future IT Delivery. Capgemini Consulting Services, p 26

Added value

The editors of this handbook live and work in countries situated on both sides of the offshoring spectrum. We all have many years of experience in successfully managing and running projects between Europe, the US, and India.

In this context, we are frequently asked about the prerequisites and methods for conducting offshore projects, and whether offshoring offers any real advantages. In this book we discuss the advantages and challenges of offshoring in an open and honest fashion. We especially focus on Rightshore[®], Capgemini's mature concept for a global delivery strategy, and demonstrate how projects with India can be run effectively.

There are many challenges in offshoring application development to India. Notwithstanding, there are many opportunities for effectively utilizing global delivery models. In a few years time, when the headlines about India have faded away, everyone will wonder how SAP projects were ever pursued without a global delivery model.

The structure of this book

The structure of the book does not demand reading in a linear fashion but allows you to browse, jump, or hunt for the chapters that are most relevant to you.

Part I – Aspects of Offshoring to India

This part covers the management perspective.

Chapter 1, The Rightshore[®] Model examines the European and American offshoring market and alternative offshoring strategies. It outlines Capgemini's global delivery model, named and branded as Rightshore[®], while already introducing some of the topics mainly covered in later chapters.

Chapter 2, Offshoring in India – Opportunities and Risks describes the three success factors of India's IT industry: human capital, a thriving industry, and the creation of synergies between knowledge-based sectors. In addition, it highlights the limitations and risks associated with the current expansion of the IT industry in India.

Chapter 3, Economic and Business Effects of IT Offshoring offers decision makers and business shapers a better understanding of the rationale and economics of offshoring, as well as its effects.

Chapter 4, Industrialization of Application Implementation draws a parallel between the industrial revolution and packaged application development. It builds the case for a software factory approach of SAP application development.

Chapter 5, Offshore ERP Services explains the six application-related services – customization, testing, training, development, data migration, and upgrade – thereby laying the foundation for part two of this book.

Chapter 6, Transforming the Front-Office describes the necessary changes in the organizational structure and IT governance processes of companies offshoring their SAP projects.

Chapter 7, Intercultural Aspects of Project Management in India highlights peculiarities in managing intercultural projects between Europe and India. This chapter describes some of the elements required to understand the many facets of India.

Chapter 8, Managing from a Distance: Virtual Delegations to India presents the results of a study analyzing the various aspects that make offshore projects successful.

Chapter 9, How to Start a Rightshore® Project shows how to successfully initiate an offshore project and leverage the full potential of the offshore concept.

Part II – Case Studies for Rightshore® Projects

The second part aims at IT project managers looking to learn from real-life case studies of successful projects leveraging the global delivery model. Even if you are already convinced that you will offshore to India, this chapter will offer you many practical ideas from different SAP projects.

Chapter 10, Case Study: A New Sales Planning Platform for the Automotive Supplier Industry shows the project setup and utilization of the Rightshore® approach through distributed delivery of the Capgemini Business Intelligence Factory in Bangalore, India.

Chapter 11, Case Study: Remote Customizing describes an otherwise typical SAP implementation at a client where remote customizing is used for the first time.

Chapter 12, Case Study: Testing for the Utilities Sector describes how the test function of a project was successfully implemented through the capabilities of the Testing Factory in India.

Chapter 13, Case Study: Preparation of Training Material for Manufacturing Industries provides an overview of things to consider when developing end-user training material.

Chapter 14, Case Study: Software Development for a Global Manufacturing Company highlights the team setup, processes and methods used for the ABAP and XI development preparing the template and related roll-outs.

Chapter 15, Case Study: Data Migration for a Global Semiconductors Manufacturer shows the experiences we made during an international roll-out program in the area of data migration.

Chapter 16, Case Study: Distributed Delivery of an SAP Solution at a US Life Science Company provides insight into a major ERP implementation at a world

leading pharmaceutical company performed with a ‘One Team’ approach for remote customizing.

Chapter 17, Case Study: Management Learnings for Distributed Delivery from a Major Engagement in the CPR Industry gives insides about real project challenges and issues on a large SAP engagement, where major parts were delivered from offshore.

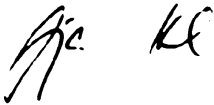
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Last but not least, our special thanks go to Ralf Gerstner at Springer for accompanying the editing and production process of this book.



Anja Hendel



Wolfgang Messner



Frank Thun

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Part I
Aspects of Offshoring to India

Chapter 1

The Rightshore® Model

Frank Thun

Abstract Nowadays, there is a wide range of experience with offshoring IT services. Delivery from offshore locations is strongly established in the United States and the United Kingdom, while continental Europe still lags behind. In Europe, nearshore models still dominate the market. A framework for building an optimal combination of onsite, nearshore, and offshore delivery capabilities is provided by Capgemini's Rightshore® model.

1.1 The market for offshore IT services

The worldwide IT service market size amounts to \$ 672bn in 2006 (+6.4% compared to 2005)¹. Within this market, offshore delivery is growing at 14.5% in Europe and 18% in North America, thereby soaking up more and more market share.

Table 1.1 Offshore IT service growth and market share²

Offshore services in Europe and the US					
	2006-2010 CAGR				
US IT services growth	6.8%				
Offshore services in the US	18.0%				
Western Europe IT services growth	5.8%				
Offshore services in Western Europe	14.5%				
Offshore services: Market share					
	2006e	2007e	2008e	2009e	2010e
US	4.3%	4.6%	5.3%	5.8%	6.4%
Western Europe	1.3%	1.4%	1.5%	1.6%	1.7%

¹ Cf. [Gartner 2007, p6]

² Cf. [HSBC Global Research 2007, p7-8]

The offshore market in Asia Pacific (APAC) is growing at an even higher rate, albeit from a lower base. IDC states that 79% of the offshore market is spent by North America, 17% by Europe, and 4% by APAC. South America’s and Africa’s market shares are negligible.³

1.1.1 Demand for offshore IT services in Europe

In Europe, approximately 34% of the IT service market is related to application design, realization, test, and roll-out.⁴ The bulk of this is in the ERP area.⁵ In contrast to application, infrastructure management and support, this share is set to increase in 2007 (see figure below). Thereby, due to the given cost pressures and a lack of skilled resources onsite, offshoring Application Implementations gets more and more into the focus of CIO’s.

Pressure on ERP implementation service providers, i.e. IT departments or external service providers, to come up with new, more efficient delivery models is growing. More and more decentralized delivery models will be used (see Figure 1.2).

External offshore and distributed delivery are performed from geographically dispersed locations. All other IT delivery options in Figure 1.2 are mainly executed onsite. In the study at hand, nearshore encompasses service providers working fully or partly on client sites.

The share of offshore and distributed delivery in IT budgets has increased by 2% to a total of 6% between 2004 and 2006. This growth is bound to accelerate rapidly:

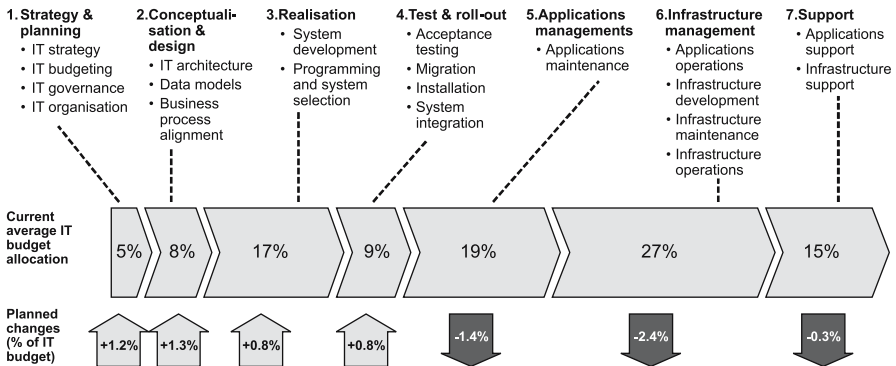


Fig. 1.1 IT budget allocation along the IT value chain and planned changes⁶

³ Cf. [IDC 2004]

⁴ This chapter is largely based on 162 interviews with European CIOs. Cf. [Capgemini 2006, p12]

⁵ Exact data is hardly available, as ERP market data surveys fail to distinguish ERP license and service revenues.

⁶ Cf. [Capgemini 2006, p20]

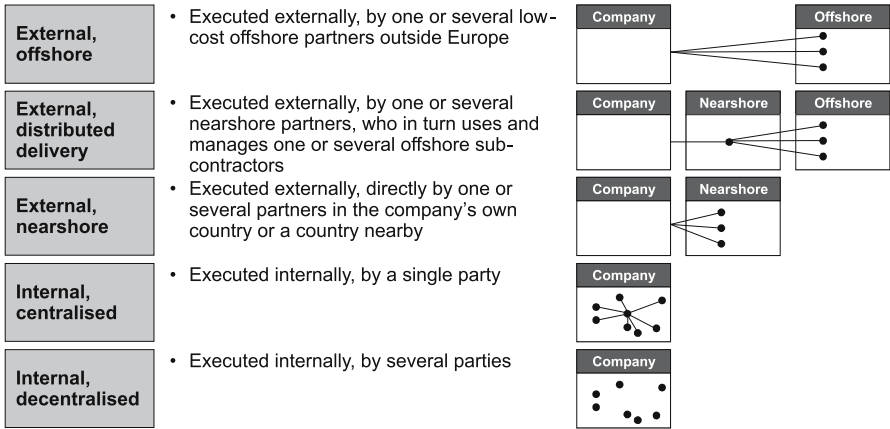


Fig. 1.2 IT delivery options

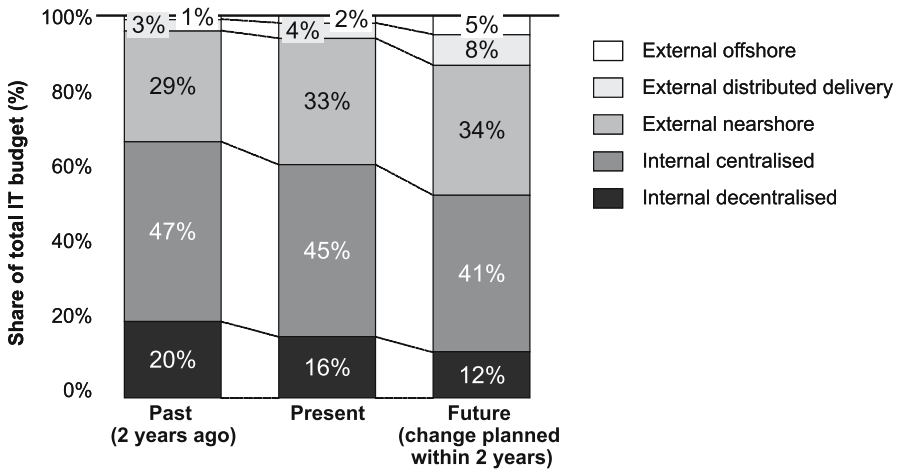


Fig. 1.3 IT budget snapshot of delivery options from 2004 to 2008

13% of IT budgets are forecasted to be spent via offshore and distributed delivery in 2008.

While there are significant geographical and cultural differences in adopting offshore delivery – with the UK leading in Europe, followed by the Nordic countries and the Netherlands – these differences appear to be slowly diminishing. Here, global companies play an important role by being early adopters of offshore delivery. Global companies are five times more likely to utilize offshore or distributed delivery. By embracing offshore, global CIOs claim to have saved 15 to 20% compared to former internal delivery.

1.1.2 Comparison of the demand for Offshore IT services in North America and Europe

HSBC lists three main differences between Europe and North America:⁷

1. Offshore is less politically accepted in Europe
2. Nearshore capacity is more developed than in the US
3. The multitude of languages spoken in Europe makes use of India-based resources more complicated than in North America

The adoption of offshore delivery models has been much more rapid in the US. Even in the Western European high-cost countries, geographical and cultural proximity has led to more extensive nearshore delivery than in the US. This continues to be a major factor, slowing down the adoption of offshore delivery models. Even so, offshore IT services rendered for Europe still grow at 2.5 times the rate of the overall IT service market in the region, whereas they are growing at 3.1 times the respective rate in North America.⁸

Table 1.2 shows an overview of chances and challenges of western geographies while offshoring to India. General risks like cultural differences, etc. are not included in the overview.

The US is challenged by major time differences to India of about 10 hrs, but has only few language issues. For this reason, a lot of work has been done using landed resources⁹ from offshore. When the offshore market moved to Europe it basically

Table 1.2 Chances and risks for the offshore market in Europe

Market	Chances	Challenges
USA	<ul style="list-style-type: none"> ● Language ● Rates 	<ul style="list-style-type: none"> ● Time difference
Europe (UK)	<ul style="list-style-type: none"> ● Language ● Rates ● Time difference 	
Europe (west)	<ul style="list-style-type: none"> ● Time difference ● Rates 	<ul style="list-style-type: none"> ● Language
Europe (east)	<ul style="list-style-type: none"> ● Quantity of qualified resources ● Time difference 	<ul style="list-style-type: none"> ● Rates
Europe (north)	<ul style="list-style-type: none"> ● Time difference ● Language ● Rates 	
Europe (south)	<ul style="list-style-type: none"> ● Time difference ● Language 	<ul style="list-style-type: none"> ● Rates

⁷ Cf. [HSBC Global Research 2007, p9]

⁸ Cf. [HSBC Global Research 2007, p2]

⁹ Landed resources are Offshore resources working onsite.

started in the UK, due to the language advantage. Crossing the Atlantic brought another advantage: The time difference halved to just 5h30. The further east in Europe, the less time difference gets a problem, especially in Nordic countries where working habits are to start work early. In contrast to the rest of continental Europe, Nordic has another advantage of being well versed in the English Language. Even so the time zone difference is reduced in Eastern Europe, this advantage is evaporates as wage differentials dwindle. Offshoring in eastern or southern Europe is largely driven by market shortages in the supply of skilled resources.

1.1.3 The supply of offshore IT services

While more and more global companies have set up IT service departments offshore, that growth is outstripped by far by the growth of external offshore delivery models.

On the supply side, Gartner ranks Tata, Infosys, Wipro, Accenture and IBM as leaders in the application service market in Europe and North America.¹⁰ In Europe, these are joined by Capgemini, and in North America by Cognizant, whereby both companies are ranked as challengers outside their respective home markets. Capgemini is especially strong at offshore services for package-based application implementations, its competitors are more geared towards application outsourcing. The top 10 suppliers (in terms of revenue) share only 25% of the market.¹¹ There is a very high number of small and medium suppliers operating in the IT service market.

In contrast to the overall application services market, the market for offshore delivery is a lot more focused. HSBC reckons that, in 2005, 84% of offshore IT delivery has been performed by Indian pure players, i.e. Indian owned companies like

Table 1.3 Presence of major suppliers in India

Presence in India (2007) ¹²			
Company	Employees in India	Total no. of employees	Percentage in India
IBM	53,000	200,000	27%
Accenture	35,000	170,000	21%
Capgemini (incl. Kanbay)	17,500	80,000	22%
EDS	15,000	120,000	13%
CSC	7000	80,000	9%
LogicaCMG	3000	39,000	8%
Atos Origin	1500	47,000	3%
TietoEnator	600	16,000	4%

¹⁰ Cf. [Gartner 2006, p12]

¹¹ Cf. [Gartner 2007, p7]

¹² As per information received from media communications of the individual companies in October 2007; figures for EDS, CSC and Atos Origin are based on [HSBC Global Research 2007, p8]

Tata, Infosys, Wipro etc.¹³ Established IT service companies in Europe are struggling to counter the emergence of the pure players. They have built up a massive presence in India (see figure below), but despite high growth, continue to trail behind the pure players in terms of growth and profitability. Consequently, stock evaluations for pure players have sky-rocketed over the last years.

IT organizations and service providers are challenged with adapting the heart of their operating model to offshore delivery. With this book, we like to provide insights, points of view, and case studies of seasoned offshore veterans.

1.2 Rightshore® approach

Which delivery model should be chosen by a company for a given project at hand? Performing the right work in the right place at the right time for the best economic value is a matter of getting it to the right place.

1.2.1 Choosing the right location

Front-office teams, located onsite, manage the projects. Sharing the same language, culture, and turf as our customers, they have deep knowledge of their markets and industries. They are in charge of designing optimal solutions.

Back-office teams, located onshore, nearshore or offshore, run the process-driven parts of the projects. They combine the benefits of cost-efficient, skilled labor, economies of scale, and maximum productivity with quality.

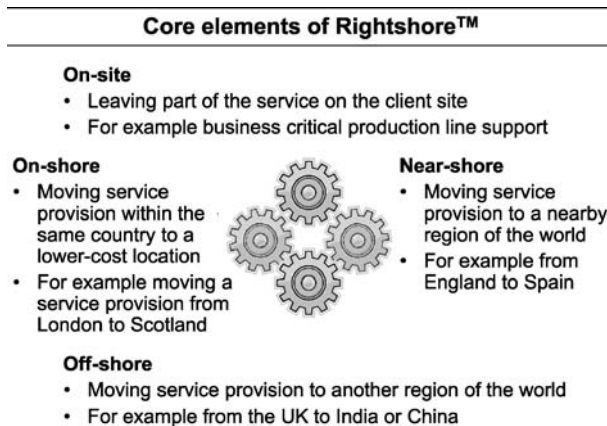


Fig. 1.4 Capgemini’s Rightshore® Delivery Model

¹³ Cf. [HSBC Global Research 2007, p8]

A model for evaluating which delivery location to choose is given in Table 1.4. Based on a series of expert interviews¹⁴, provides an first indication which delivery location (onsite, nearshore or offshore) appears to be suitable for a given project situation. The suitability will vary depending on the service which is to be offshored as indicated in the table below by the different weightings attached to each evaluation criteria. The values given are examples taken from a major project of a global electrical equipment manufacturer (see case studies in the second part of this book):

Table 1.4 Model for evaluating delivery locations for development and customizing streams of projects (example)

Criteria			Service Offerings					
			Development			Customization		
			Value	Weight	Result	Value	Weight	Result
Cost sensitivity	1 Low	10 High	9	10	90	7	8	56
Speed to deployment	1 Low	10 High	10	4	40	10	3	30
Degree of user interaction	1 High	10 Low	8	4	32	2	2	4
Clarity of scope	1 Low	10 High	5	3	15	4	6	24
Size of engagement	1 Low	10 High	9	3	27	9	7	63
Engagement duration	1 Low	10 High	9	4	36	9	6	54
Complexity of engagement	1 High	10 Low	3	3	9	3	2	6
Communication infrastructure	1 Low	10 High	3	6	18	3	8	24
Cultural affinity	1 Low	10 High	2	4	8	2	2	4
Availability of skilled resources	1 Low	10 High	7	7	49	4	2	8
Sum				48	324	53	46	273
Weighted mean			65		6,75			5,93

The weighting of each criteria is dependant upon the services that are to be delivered from offshore. If speed is of essence, delivering customizing from offshore is not very attractive, while the project is only marginally slowed down by shifting development offshore. Basically, a weighting greater than five favors offshore delivery, while a weighting less than five favors onsite delivery.

- **Cost Sensitivity:** The cost pressure on the budget. For a project undertaken for a electrical equipment manufacturer the cost of delivering 11,000 man-days of developments offshore was appalling, triggering the move to offshore. The case for offshore customizing was string, but somewhat less attractive as still significant parts of Customizing had to be delivered onsite restricting potential cost benefits
- **Speed to deployment:** Business importance of project result to be delivered as soon as possible. This was all important for the electrical equipment manufacturer, as the timing of roll-out to 130 Countries were depending on the first deployment projects.
- **Degree of User Interaction:** The more User Interaction is needed to come up with an optimal result, the less offshore is recommended. Examples of this are tasks where Designs are best iteratively designed, for example complex reports or

¹⁴ Own research and cf. [Cag Gemini 2006, p12]

pricing procedures, innovative screen layouts, pioneering the appliance of a technology to a new field etc.

- Clarity of scope: The more all elements and details are already known at start of the project, the better the project can be sliced into distinct deliverables and pick, pack and shipped offshore.
- Size of engagement: Setting up Distributed Delivery is requiring investments in management, training, infrastructure and methodology and communication. This overhead is easier to bear for large projects, although – subject to the services and experience of the organization – might be acceptable for small projects as well.
- Engagement duration: Similarly, overhead incurred in setting up a stable offshore operation is easier to bear over a longer project duration.
- Complexity of engagement: A Project which crosses several lines of managerial responsibility, has high dependencies on other projects or external partners, relies on new, non mature technology is less stable and therefore less suited for offshore delivery.
- Communication Infrastructure: The more advanced the communication assets available to the project are and the better the track record of the project community is to utilizing them the easier it is to offshore work.
- Culture affinity: Is the business ethic consistent with the course of the company and do work habits, attitudes match with the targeted offshore location?
- Skilled Resources available: Available Skill Capacity at short notice for fast ramp-up or ramp-down might not be available, making offshore an attractive option. For a major development operation, for example, it might be difficult to come up with a reliable number of developers needed prior to specifications being finalized. Still, any delay because of resource acquisition, staffing or on-boarding might not be compatible to project deadlines. In this example offshore can provide a more scaleable alternative.

Using the weighted average mean an indication towards the suitability of a delivery location can be gained.

The electrical equipment manufacturer went for full scale offshoring of all development, keeping a small number of offshore developers rotating between on- and offshore. More and more customizing was transferred to offshore after the template had been build. While using a hybrid delivery mode while during pilot project delivery, offshore customizing teams delivered the bulk of customizing in the vast deployment phase of this project.

Naturally, this model is subject to a number of severe limitations. Beside a significant covariance between some Criteria there are no-go thresholds not represented in the model. E.g. if the degree of user interaction for all parts of the project is extremely high, offshore will not be an option at all independently of the total score as all available advantages of personal, face to face interaction need to be used. On the other hand, these extreme circumstances will realistically just be given for a subset of tasks within a service that is considered to be offshored: Some Customizing objects or developments might be subject for a high degree of user interaction, and

	Offshore fit	Delivery location	
Weighted Mean	10	Sure bet	Offshore
	9		
	8	Recommended	Offshore
	7		
	6		
	5	Average fit	Nearshore or offshore
	4		
	3	Not recommended	Onsite or nearshore
	2		
	1	No way	Onsite
0			

Fig. 1.5 Recommendations based on results for evaluating delivery locations

others might still be a contender to be delivered from offshore. A project has to be sliced and packed even inside each streams and the evaluation weather to offshore or not has to made for each of those packages.

Furthermore, the model does not help in choosing the exact location of the offshoring centre. It delivers a recommendation regarding a delivery location category, but does not help to decide to – for example – if to choose Poland or Mexico as Offshore location. For such a decision other factors must be taken into account as well, such as political stability, local skill capacities, cost differentials, language and Cultural Proximity.

1.2.2 Client example: when offshore is not the answer

A European subsidiary of a global manufacturing company with 11,000 employees in 17 countries decided to outsource applications maintenance to cut costs. The applications mix covered legacy ERP systems and custom-developed applications, on a mainframe platform deployed across France, Germany, Belgium, UK, Ireland, Sweden, Spain, and Italy.

Discussions quickly uncovered a major stumbling block: end users needed local support in seven European languages. Despite some obvious cost savings, offshore service providers were clearly not the answer.

The problems were solved with a three-tier Rightshore® approach. Onsite, a dedicated group of functional consultants remained close to the business users in each of the eight countries, supported by specialists who speak the local language. Nearshore, a team of technical consultants located in France was able to fly out at short notice to support critical show-stoppers; while – offshore – the main service delivery team was based in India.

1.2.3 Client example: a perfect model and 47% cost reduction

A leading UK-based retailer was under severe pressure to cut costs right across the board. Offshore outsourcing seemed an obvious route to reduce IT budgets, but business users, worried about potential system downtimes affecting the movement of stock to stores, were not convinced. How would an offshore team relate to their business needs? The solution was a front-office/back-office model. A small onsite team rotates offshore every four months, carrying critical knowledge of the business out to the offshore operation, while the offshore team comes into the front-office, bringing technical skills to deal with any mission-critical problems in real time.

At the end of the first twelve months, the retailer reported a 47% reduction in application maintenance costs.

1.2.4 Enabling Rightshore® : distributed delivery framework

To enable the distribution of services across multiple locations, work needs to be orchestrated by one shared model across all locations, i.e. by a framework for distributed delivery.

A distributed delivery framework is a standardized set of procedures, tools, best practices and guidelines. It helps optimize the distribution of work from onshore to offshore and facilitates clear communication, methods, and process consistency between all the stakeholders and teams, around the globe. It enables com-

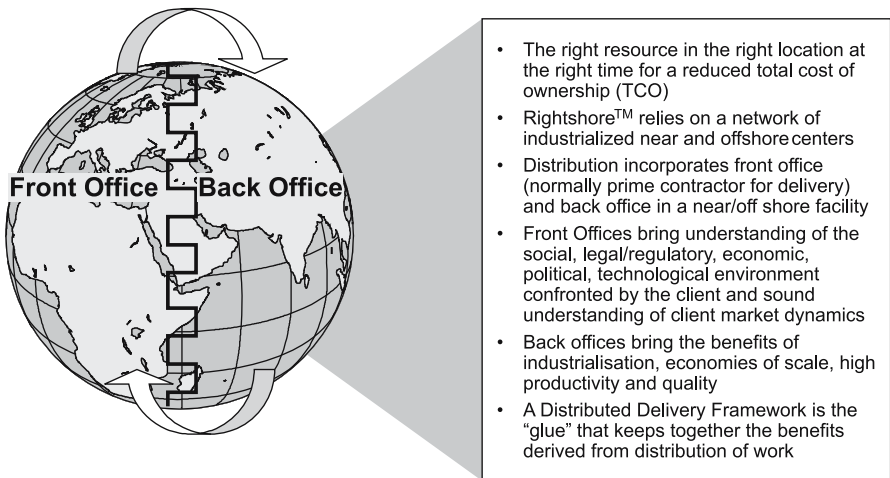


Fig. 1.6 A Distributed Delivery Framework provides a solid foundation for Rightshore®

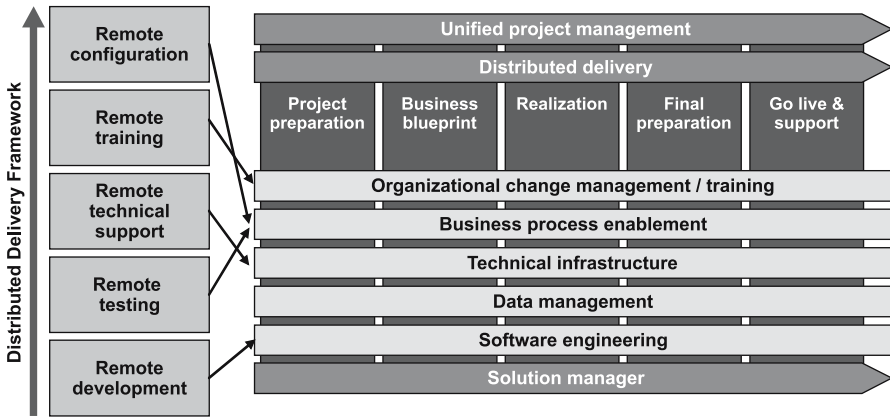


Fig. 1.7 Linking a Distributed Delivery Framework to a unified Project Management Model for ERP implementations

panies to bring more complex work to offshore countries at lower cost and lower risk.¹⁵

Technically, it creates the communicational infrastructure supported by a set of communication tools, for example VOIP calls, video conferencing, or tracking systems.

A distributed delivery framework needs to be embedded into a companies IT service delivery model.

Conclusion

Offshoring IT services for ERP implementations can be done from a range of geographically distributed locations. Depending on the nature of the required service, each delivery option will reap different cultural, political, proximity, and cost benefits. The evaluation whether or not to offshore should be done for every service (customizing, development, testing etc.) at package level. However, there is one important prerequisite: in order to have all delivery options available, a company needs to invest into building a common distributed delivery framework, or engage a partner who aligns distributed delivery centers based on such a framework. The capabilities needed for this are elaborated in the second half of part one of this book. But before that, let us take a step back and look at the macroeconomic impact, the business rationale, and cultural implications to open up the field before jumping to the “micro” level, i.e. project perspective.

¹⁵ Elements of a distributed delivery framework are explained in chapter ‘Industrializing ERP Implementations’ in this book.

References

1. Capgemini (2006) European CIO Survey – view on future IT Delivery
2. Gartner (2006) Magic Quadrant for European Application Services
3. Gartner (2007) Dataquest Insight: India-Centric Service Providers Continue to impact the IT Services Market, ID G00150179
4. HSBC Global Research (2006) IT Services. Rethinking the European competitive landscape
5. IDC (2004) Research Report, “Worldwide and US Offshore IT Services 2 2004–2008 Forecast: Tracking the shifting offshore spending”

Chapter 2

Offshoring in India: Opportunities and Risks

Wolfgang Messner

Abstract India's success in the IT industry is mainly driven by three factors: human capital, a thriving industry, and the creation and utilization of synergies between knowledge-based sectors. However, offshoring exposes companies to different levels of risk compared to their home countries. Furthermore, India's growth is not unlimited, and its insufficient infrastructure and the number of criminal elements in the political arena are hurdles which will have to be cleared. The current expansion of the IT industry in India causes the market to overheat, with all the related challenges in terms of quality and costs.

2.1 India's roots of success

The 1990s heralded the age of globalization in the software industry. This decade saw the rise of the three Is: India, Ireland, and Israel, each of them specializing in different aspects of software delivery. India focused on offshore software development, Israel acted as an incubator of software products, and Ireland dedicated itself to localization and programming services.

India's success in the IT industry has been so extraordinary that many books, magazines, and newspaper articles are trying to make sense of how this developing country was able to become a glitzy technology powerhouse. Its triumph is mainly driven by three factors: India's vast human capital, a successful industry, and the creation of synergies between knowledge-based sectors.

2.1.1 Human capital

India's vast human capital is the first and most important driver of its remarkable IT offshoring success. The country's population has an average age of around 26, and India has started to look on its growing population as a potential asset. By 2035,

India is expected to overtake China as the world's most populous nation; India's annual population growth rate of 1.6% is twice as high as in China.

There are some 14 million young university graduates in India with up to seven years of work experience. This is 1.5 times the size of China's pool and almost twice that of the US. The India pool is topped up by 2.5 million new graduates every year. About 25 percent of all engineering graduates are considered suitable for employment in multinational companies.¹ However, in less specialized degrees such as the arts and humanities, only 10 percent would be considered. The proportion of suitable engineers in Central Europe is generally considered to be about twice as high.²

Around 1.2 million Indians hold engineering degrees from a four-year study program and an additional 2 million hold engineering diplomas from three-year programs. Thanks to the growing population in India, the suitable pool of talent is growing faster than in countries with offshore demand as well as in other countries on the supply side, such as China. Notwithstanding, forecasts suggest that by 2008 demand is likely to exceed supply. It is fortunate, then, that Indian engineers are more mobile than their counterparts in other nations, which means the IT hubs can attract employees from other cities.³

The quality of India's universities varies extremely. The top schools for technical education and management education, such as the seven Indian Institutes of Technology (IITs), the six Indian Institutes of Management (IIMs), and the Indian School of Business in Hyderabad (ISB), have world-class status and rank among the top universities in Asia. The IITs and IIMs are at position 57 and 68 respectively of the worldwide university ranking of the Times Higher Education Supplement.⁴ These universities take pride in stringent selection processes and accept only about two percent of applicants. Apart from these examples of educational excellence, there is a rather steep decline in quality in the remaining 200 universities and 12,600 colleges.⁵

NASSCOM – the IT industry association – collaborates with the government to increase the scope and scale of the IITs and IIMs. Companies have a vital role in IT education. Prior to assigning young graduates to customer projects, they offer between four and twelve months of corporate education. Besides specialized training on IT topics such as SAP, ABAP, Java, and office applications, the focus is on personal development, e.g. English communication skills and intercultural awareness.

2.1.2 Industry

India's industry is vibrant and ever evolving. But it has successfully created a top layer of several large multinational firms.

¹ Multinational companies typically look at language proficiency, quality of education, and cultural adaptation when deciding on the suitability of candidates.

² Cf. [Farrell/Kaka/Stürze 2006, p29]

³ Cf. [Farrell/Kaka/Stürze 2006, p31]

⁴ Cf. [Times 2006]

⁵ Cf. [Müller 2006, p72]