



Getting Ready for Offshore Outsourcing

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Software Outsourcing to remote centers has shown a rapid increase in the last 7 years. India alone has seen a growth from less than \$100Million to over \$6Billion during this period. There are several factors that have contributed to this growth:

- **CHANGING ECONOMY** The economy is undergoing transformations – from hyper growth to recession. Outsourcing becomes a necessity in either situation. In a growing economy outsourcing helps to quickly ramp up resources onto development or support activities while internal development works to meet the needs of the market. In a slow economy work still needs to be done and companies look for low cost alternatives to help get the work done.
- **SHORT AND MEDIUM TERM FLUCTUATIONS IN THE MARKET.** Outsourcing helps to manage these fluctuations as outsourced teams can be quickly assembled or disassembled.
- **CORE COMPETENCE vs. SUSTAINING EFFORTS.** Vertical integration or “doing it all” has its limitations in an economy that is changing fast. Enterprises are re-inventing themselves, introspecting to identify what is core and what is peripheral or non-core. All operations that are non-core

are being outsourced to Companies offering competence and cost advantages. This has happened in Manufacturing. This is happening in Software. Technology Companies are looking at what part of their work is core and retaining these, outsourcing the rest. For enterprises, running of the business is core, the IT systems that encapsulate the business processes and the metrics for different operations are critical, its implementations and Maintenance though can be outsourced.

- **INCREASING PRODUCTIVITY.** Low cost outsourcing lowers the overall cost of development increasing productivity
- **CHANGING BUSINESS MODELS.** Business models are rapidly evolving to an increasing e-Economy. Enterprises are outsourcing parts of their manufacturing to a growing list of supply/chain partners. The new demand channels and the supply/chain have to be integrated with internal systems. All inward facing applications have to be made outward facing and offer conveniences or functionalities that may never have been planned.
- **GLOBALIZATION OF BUSINESS.** Globalization brings in new locales, new laws, different business practices, business models and business processes. These change internal systems. Finding Agencies that understand a "locale" quickly helps to align the processes to the new locale.
- **MOBILIZING LARGE TEAMS AT SHORT NOTICE** Building teams take time and money. On the other hand Companies that take projects on contract operate in countries that are not resource constrained and have built their core competence in mobilizing large teams, training them and making them productive in the shortest possible time.
- **ENHANCED CUSTOMER SATISFACTION.** Outsourcing presents an opportunity to create teams in geographies that can respond in real time to customer problems. Teams can be built to provide 24x7 support to customers at low operating costs.
- **END OF LIFE PRODUCT SUPPORT.** Some companies outsource end of life products support to outsourcing agencies. This frees the companies to focus on current efforts. Software companies outsource product porting and maintenance on Tier 2 and Tier 3 platforms keeping Tier 1 platforms implementations for internal teams.
- **GLOBAL DEPLOYMENT** Companies outsource to regional teams for global deployments and rollouts of their solutions.
- **MISSING COMPETENCE.** Enterprises lacking skills in certain disciplines outsource to get the benefit of skilled teams.
- **SPECIAL NEEDS.** The Year 2000 conversions and the Euro conversions are examples of events that have led to increasing outsourcing. Companies that have undertaken such remediation and conversions can now maintain these applications.

- **PRODUCT RE-ENGINEERING AND RENEWAL.** Applications that are written in legacy languages or operating environments that are end of life require to be renewed to new languages and operating environments. Such renewal can be outsourced.
- **MIGRATION** from monolithic to n-Tier Applications can lead to outsourcing
- **TESTING, QA AND MAINTENANCE** are well suited for outsourcing

WHAT IS BEING OUTSOURCED AND BY WHOM

Outsourcing is not limited to IT but spans an entire spectrum of the Industry.

HARDWARE, TELECOM AND NETWORKING COMPANIES

- Systems Integrity Testing – any new release of software is tested rigorously to detect any problem prior to its roll out to the field
- Maintenance and Bug fixing – Any bugs that are detected in the field or during testing are fixed per a determined schedule.
- Porting of software to different operating systems
- Internationalization of Software
- Maintenance of end of life products
- Testing for Conformance to standards or interoperability with other equipment
- Verifications of Application Specific Integrated Circuits (ASICs)
- Development of Device Drivers
- Customer “specials”
- Performance testing
- Development of Network Management Systems and Applications
- Testing of protocols
- Geo centric conversions

PRODUCT SOFTWARE COMPANIES

- Testing – whitebox, redbox, blackbox
- Porting to different operating systems
- Maintenance and Bug Fixing
- Internationalization of Software
- Customer Specials
- Generating of Automatic Test Beds
- Network Management enabling
- Bridges to other applications
- Re-engineering and renewal of Applications (C to C++/ Java)
- End of Life Product Maintenance

- 24x7 Customer Support

END USER / IT PROJECTS

- Applications development
- Remediation – Euro conversions etc.
- Maintenance of existing Applications
- Re-engineering/ enhancement of existing applications
- Enterprise Applications Integration
- ERP Reports development
- CRM development
- “Webifying” existing applications
- “Proof of Concept”
- Data Entry
- E Commerce Applications development
- Migration form one environment to another
- Global rollouts
- 24x7 support

SPECIALIZED APPLICATIONS

- Engineering Drawing Conversions from paper to electronic
- Medical Transcriptions
- Development of Electronic Catalogs
- GIS Mapping
- Structural and Thermal Analysis
- CAD/CAM/CAE
- Development of Application Specific Integrated Circuits (ASICs)
- Verification of ASICs and Microprocessors
- Development of Embedded Systems for specialized applications (Auto, Medical, hand-held etc)
- Development of newer protocols
- Layout and Routing of Hardware Printed Circuit Boards
- Development of Cell Libraries
- Development of Computer Based Training Courseware
- Call Centers
- Development of Integration frameworks

PLANNING FOR OFFSHORE OUTSOURCING

But before you take the plunge there are issues that you need to be aware of. There are steps that you need to take even before the first RFP is released. Here are some factors to consider:

- **Define your Outsourcing Objectives.** Any outsourcing is an investment. What are the long term goals for outsourcing? Is this a short term goal or do you envisage a large Offshore development Center? Will this lead to the Company setting up its own remote development center?
- **Create Milestones.** Define the steps that would lead to the eventual goal and set milestones to achieve these goals. The milestones may well be Outsourcing a pilot – setting up an Offshore Development Center with a partner – setting up a remote liaison office – setting up a remote company owned development center. Each of these may have sub-milestones. Define a time line for each of these milestones.
- **Appoint an Outsourcing Czar.** Outsourcing is difficult and that is to put it mildly. There are cross country issues, people issues, intra company issues, infrastructure issues. The operational Managers should be shielded from all of these. The Outsourcing Czar should be responsible for all of these issues. The Project Managers should focus on the work in hand. The Czar should have authority and report to the senior most Management – preferably the Chief Executive.
- **Bind Managers to the success of Outsourcing.** The first challenge in Outsourcing will be internal. Managers will be less than enthusiastic about any outsourcing leave alone outsourcing 20000 miles away. Tie in appraisals to the success in Outsourcing – Outsourcing will lower your costs or help in time to market, let Manager's participate in that saving. Outsourcing will be a challenge. Remind Managers that they were hired in the first place to find solutions and make things work. Outsourcing should have corporate ownership.
- **Create a Communications plan.** Outsourcing should progress in steps or phases according to a plan. Communicate success stories within the Companies. Share what went right and what went wrong so that mistakes are not repeated.
- **Build a Process Manual.** When work is outsourced the service provider has its own set of processes which will or may not match with your own. Your coding styles, documentation styles, approval processes, communication processes, acceptance processes will be different from the service providers. Create a process manual so that the transition is smooth. Define how deliverables will be accepted, how reviews will be done, frequency of reviews, control gates to be established during the development life cycle.

- **Identify a Pilot.** Always start with a pilot project. This allows both companies to refine the process manual.
- **Identify suitable projects for Outsourcing.** Carefully identify the type of projects that you wish to outsource. These should have a good chance of succeeding. Ideal projects for remote Outsourcing are those that do not involve frequent interaction or are not subject to frequent changes. New designs or concurrent engineering may not be good examples for remote outsourcing. Similarly GUI designs do not blend well for remote outsourcing due to the frequent changes anticipated in such activities.
- **Define Roles, Process Owners and allocate responsibilities.** During the development life cycle there are various participants from Project Managers, to shipping, procurement, network and system administrators. Define all roles, process owners and allocate responsibilities so that you see a team with an established workflow and a chain of responsibilities.
- **Define Audit mechanisms.** Define metrics and the audit process. Validate how you would capture metrics. Remember what cannot be measured cannot be improved.
- **Define Escalation.** When things go wrong as they usually will how do problems escalate for resolution? What is the resolution process?
- **Define what is important to you in this Outsourcing.** This will help you build the filters to screen vendors who will respond to your RFP. Are you looking for a CMM certified Agency? In that case do you have the mature processes and workflows that are part of the CMM process? If not will you become the bottleneck in the development life cycle itself? Strangely this has been a cause of failure or cost escalation in many instances.
- **Define how you will react to failure.**

In all of these building a process manual will be your single biggest challenge and will probably give you the best chance of making Outsourcing a rewarding experience. Take the assistance of experts in helping you build your process manual. It will be worth the expense. ConeXL has developed SmartSourcing – methodology that takes helps you build a process manual, raise a RFP and identify suitable Outsourcing partners.



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