Offshore Software Development at Infofin
An overview

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Contents

1 The Infofin Approach to Project Management

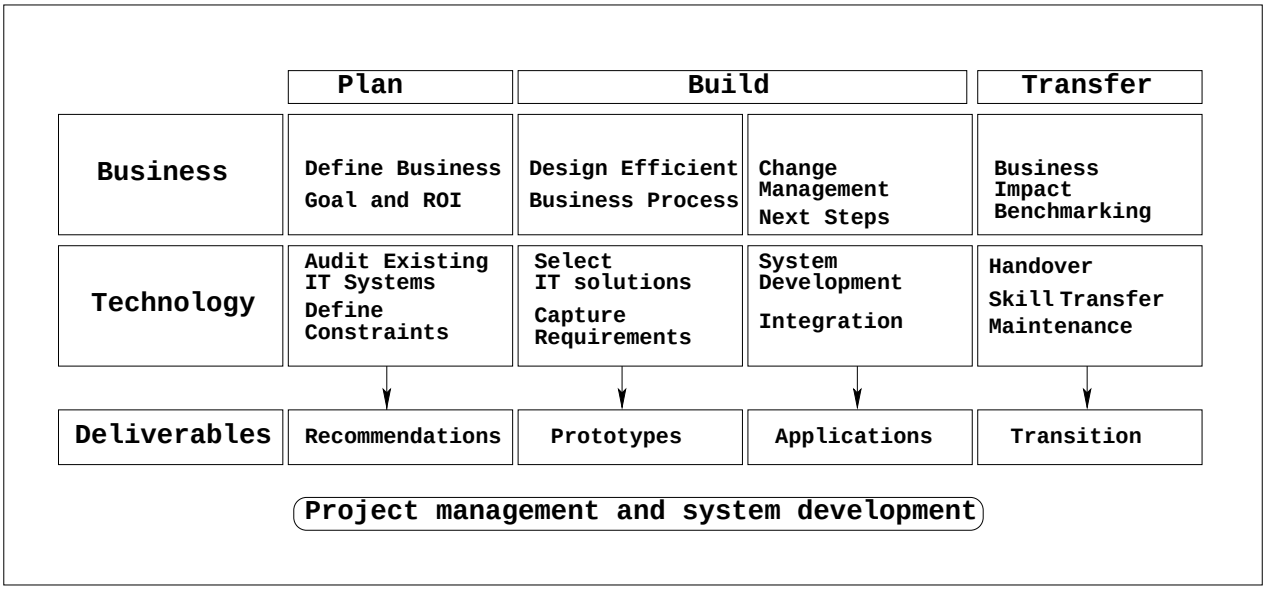
Infofin is dedicated to creating value through technology. We offer you a unique approach that combines business and IT consulting to identify, scope, plan, build and transfer innovative IT solutions.

Our methodology enables customers to leverage current IT investments while transforming their business into an open and adaptable e-infrastructure.

Clearly, this approach helps us to identify, validate and plan new initiatives, scope out the best technologies early in the process, which ensures that the IT solution reaches the business goals set by the client to derive the maximum benefit out of the investment. Simultaneously, we start the process of transferring the skills through every step of the project, empowering the client to effectively manage the solution.

Global Approach to Project Methodology We apply the Infofin methodology to our projects. This strengthens our knowledge and competencies, while guaranteeing the quality and consistency of our solutions that clients have come to expect from Infofin.

Converging Business Requirements with IT



Leveraging the Unified Process for Project Management The Infofin approach has been combined seamlessly with the Unified Process to derive major benefits in managing and implementing projects. This approach provides the client a better, more secure feeling of control of the project, while serving as a foundation for getting feedback to prevent sidetracking. Key elements of the process are:

- Business case development
- Benchmarking and option analyses

- Risk-driven project management
- Iterative analysis, design, development and testing (use case-driven development)
- Integrated quality assurance gates
- Benefits management (post-project auditing)

These principles ensure benefits to the client from day one. We carefully articulate and scope the projects based on the business goals and focus on deploying solutions successfully. At each iteration, we allow the client to decide when to move to the next phase of the project. **Put simply, a lengthy requirement specification, often outdated at delivery due to change requests from the client during the development, is not encountered by following the Infofin methodology.** This effectively enhances the realized benefits from project launch to post-implementation optimization.

2 Software Development methodology at Infofin

1. **Identifying and appointing key persons**

   Our cooperation with clients is based on a ”communication channel” approach. This means that the client appoints someone who will be our single communication point for all official project-related issues and we assign a project manager who will be the only person for all official interactions between Infofin and the client.

   Key people

   - Infofin’s On-site Co-ordinator and Project Manager
   - Client’s Project Coordinator/Manager

   Role of Onsite Coordinator

   - Understand Client’s Business and processes
   - Provide effective Communication
   - Update Client on Project Progress
   - Handling deliveries

2. **Project Initialization**

   This stage starts by studying the initial system requirements provided by the client. Jointly, with the client’s IT staff, Infofin’s project manager conducts extensive sessions for identifying requirements and eliminating possible misunderstandings. Future users of the system are also interviewed.

   The project manager and the client’s IT-staff define Configuration Management issues, approaches to sharing/delivery of code, sharing information about defects, managing changes and mapping them to specifications, etc.

Deliverables

- Configuration Management Document
- Project vision and goals

3. **Defining requirements and deliverables**

   The objective at this stage is to identify system requirements and their priorities in order to make a high-level design, system prototype and to plan stages of development.

   If applicable, requirements for user documentation and/or on-line manuals are identified.

   Stages of project development with deliverables corresponding to every stage are defined.

   We develop the project requirements document, outlining functionality of the system and non-functional requirements (e.g. performance).

   In parallel, we form a project team with identified skills. Business and technical project knowledge is transferred to the development and test teams.

   Deliverables

   - System requirements
   - User requirements documentation
   - Stage Plan document
   - Project Requirements document

4. **Design and planning**

   This stage starts with the high-level system design, i.e. conceptual architecture of the system. The next step is to create the Functional Specifications Document describing possible system configurations, major algorithms, internal and external interfaces, etc. In case of an interactive system, we build an UI Prototype. The test team leader is responsible for test planning, i.e. creating a list of test cases. We develop the structure of user documentation. Detailed planning of development is finalized at this stage.

   Deliverables

   - Project plan - defining deliverables, milestones and responsibilities.
   - High-Level Design Document
   - Functional Specification Document
   - HTML UI prototype
   - Development and test plans
   - Master Test Plan document

5. **Confirmation of the project**

   Based on the acceptance of the HTML prototype, architecture and choice of technology, the development team under a Project manager will draft a plan for the execution of the project giving time and cost estimates.

Deliverables

- Time and cost estimates.

6. **Development and Quality Assurance**

   The development stage includes low-level system design after which routine coding and Quality Assurance procedures can begin. In parallel, dedicated technical writers develop user documentation.

   - Ensuring Quality

     Delivering quality consistently is of utmost importance to Infofin. Quality control activities, reviews, inspections, and tests are integral to our development processes. We have employed stringent quality assurance processes and methodologies based on the recommendations of Rational Unified Process and CMM Level 3 specifications. In line with the quality requirements, we practice standard software development methodologies and practices which involve principles of Function Point Analysis, Design Patterns and UML.

   - Incremental development

     Development of the application takes place in progressive phases or increments. Incremental delivery permits experimentation of complex solutions and modifications through hands-on exposure to the delivered component.

   At this stage regular contact is maintained with the Client Project manager(CPM).

   - The CPM is kept updated of the project status through a project website which shows him the latest schedule and status of the project.
   - Regular voice chats are established to update and confirm requirements.
   - A web-based bug tracking system is accessible to the CPM, to enter and track system deficiencies.
   - A robust version control system like CVS is in place to manage issues arising out of multiple versions.

   Deliverables

   - Deliveries with levels of functionality corresponding to the Stage Plan Document
   - User Documentation

7. **Commissioning**

   Commissioning involves the installation of the final system on the client's infrastructure, field testing by the client's personnel and processing feedback from the client's field testers.

   Deliverable

   - Final system delivery
   - Feedback from the client's field testers

8. **On-going maintenance**

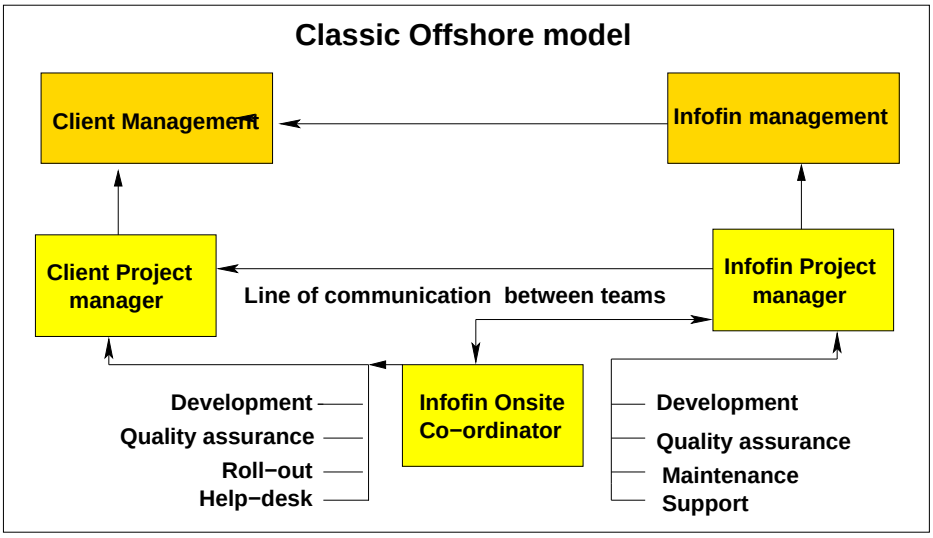
   We implement additional features requested by the client and fix defects found during the warranty in line with the maintenance contract.

   Deliverable

   - Maintenance releases and patches

3 Delivering quality software

Infotech Financials (Infofin) undertakes software development at its modern development centre in India, and has executed a number of projects for its clients in the United States, India and the Middle East. The core competence of Infofin lies in delivering quality software solutions at reasonable costs owing to Infofin fully leveraging the advantages of executing development of software at its Mumbai facility in India. Our philosophy is to partner with our customers, bringing dedicated attention to the project in order to deliver high-value, complete solutions.

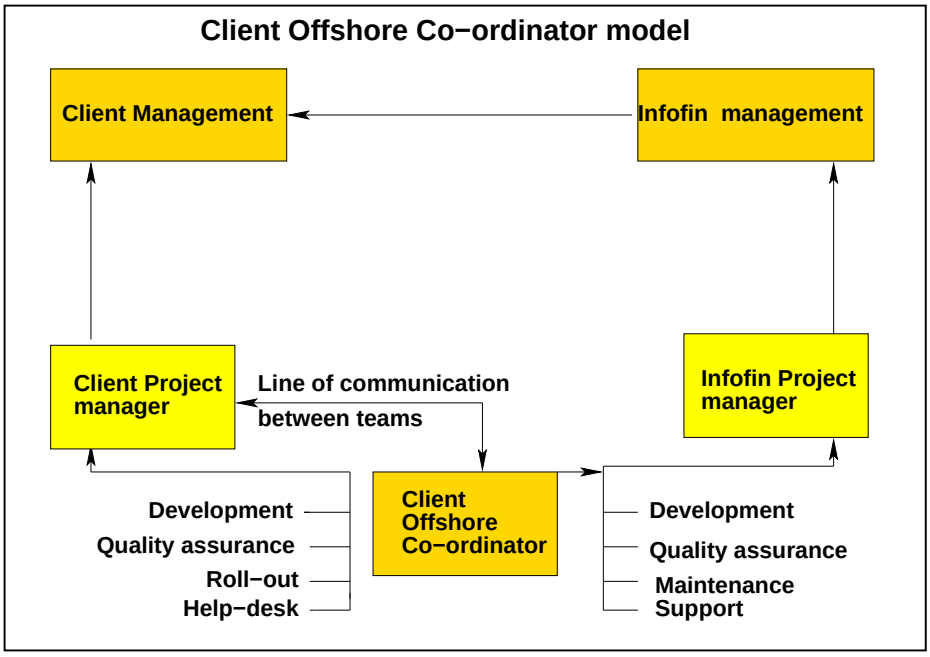


3.1 Advantages of offshore development

Some of the advantages of offshore development are listed below:

- Project costs come down considerably.
- Fewer time and cost over-runs on project deadlines and budgets.
- Faster and more flexible deployment of resources.
- Shorter learning curves, owing to high levels of expertise in technology and domain.
- A faster time-to-market for the client.

3.2 Offshore Development Centre (ODC)



In view of the benefits of off-shore development, Infofin prefers to set-up dedicated off-shore development centres for clients and their specific projects. We have state-of-the-art infrastructure, including advanced computing and communication equipment at our Mumbai development centre and use tested methodologies to manage and execute projects on time with significant cost benefits that are associated with offshore development.

3.2.1 Advantages of ODC

- Clients focus on their core business while outsourcing the non-core activities.
- Specialised pool of technology and domain resources, dedicated to working exclusively for the Client.
- Combination of teams onsite and in India can provide faster deliveries.
- Faster recruitment, training and deployment of resources.
- Comprehensive Security Policy to protect infrastructure and client's Intellectual Property Rights.

3.3 Reducing risks in offshore development

- The scope of work needs to be clearly defined and phased-out for development, so that projects do not face time and cost over-runs.
- A good communications infrastructure is crucial, such as good Onsite Coordinator, connectivity to the Internet, email, etc., between the client's site and the outsourced location.

4 Guarantee of the Approach

- On-time completion of the project.
- Delivery of a high-quality system meeting the exact business requirements
- Development of a flexible and easy to use system.

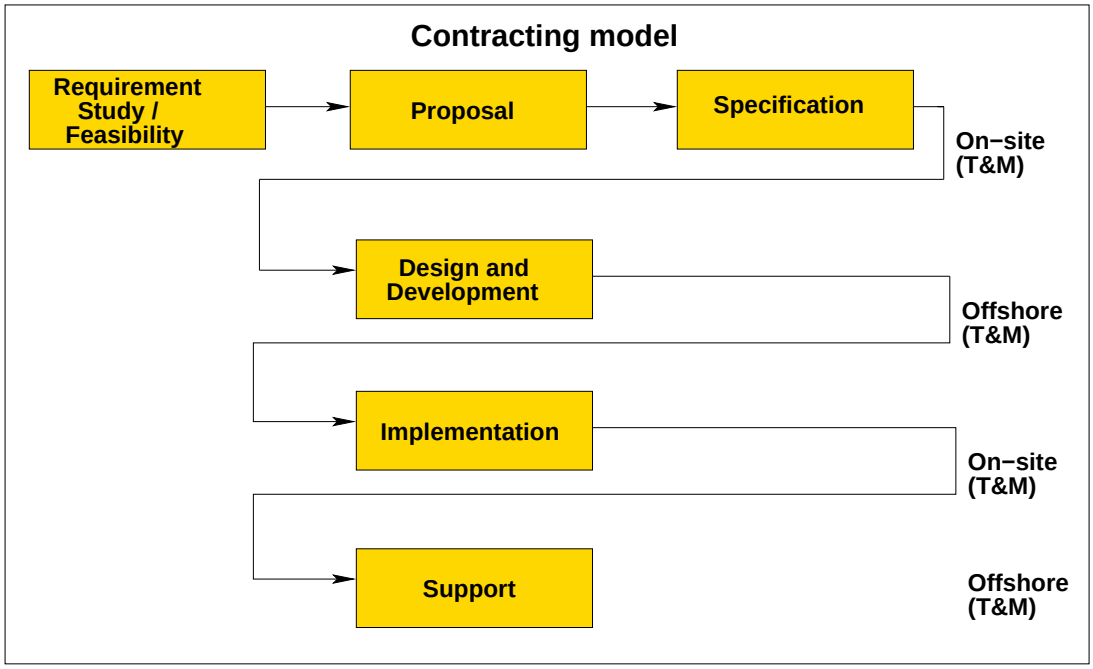
5 Outsourcing Models

In the new economy, we realize that customers are increasingly demanding the flexibility that best serves their unique business requirements. We also provide the option of selecting a combination of business models to suit various phases of a project cycle.

- **Fixed Time/ Fixed Price**

  Our fixed time, fixed price model offers customers a low-risk option and can be employed when the scope and specifications of the project are reasonably clear. This model guarantees on-time, on-budget delivery of projects. Deliverables, Costs and Time-lines are clearly defined in the Fixed Time/Fixed Price model. In fixed time, fixed-price engagements, Infofin follows a phased approach that includes scoping, development, implementation and business support. Combining the fixed time, fixed price model with our solutions center, we can offer customers a tremendous advantage on the cost front.

- **Time and Materials**



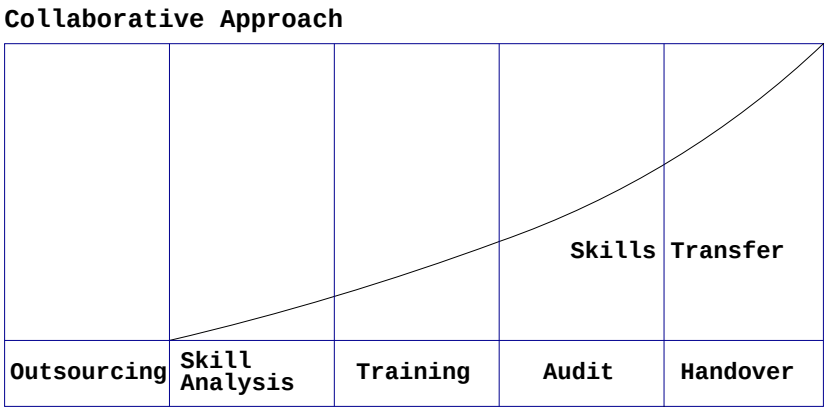
In this business model, Infofin forms project teams with the required team members, project managers, equipment and infrastructure based on project requirements. Customers pay a charge

per hour based on the size and composition of the team. This model offers the flexibility to balance team size and project workloads. Most of our services are delivered using this business model. Infofin could bid for partial phases of a project on a fixed time, fixed price basis and the remaining parts on a time and material basis.

- **Revenue/Risk Share**

  We have endeavoured to partner with our Clients, by offering unique risk-reward models for project delivery. Revenue/Risk Share models are popular amongst emerging businesses or technology companies, wherein Infofin can invest and share the development costs in return for jointly owning the Intellectual Property Rights (IPR) and sharing revenue/licensing fees. The risk and reward model is typically used during software product/subsystem development.

6 Infofin's Collaborative Approach



Our approach to IT services involves extensive collaboration between the client's IT team and the Infofin team. This approach is extended to analysing and advising on business re-engineering, IT planning and implementation issues including training the client's IT team to use and maintain new systems effortlessly.