

CUSTOMISED SOFTWARE DEVELOPMENT

Investment in customised software is often a critical and costly matter that easily can go wrong if not controlled and managed carefully in all phases of the development and maintenance phase.

With ProXit your investment is safe our experienced team of IT professionals guide you through the difficult steps of software development insuring that your software becomes a success.

In a changing world the demand for flexible software is crucial. Companies are aware of how important a factor software development is in a company's competition strategy. They have realised that those companies that quickly adapt their software to changes in market and organisation benefits from positive market advantages.

ProXit is your partner that provides you with high quality software that grows and adapts to changes in your market and organisation. One of our goals is to provide our customers with scalable and reliable solutions that function not as an obstacle but as a base for growth, now as well as in the future.

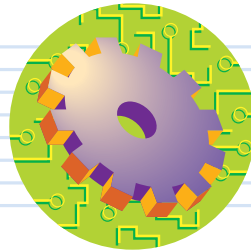
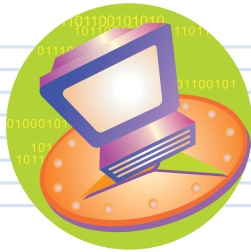
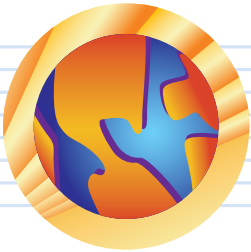
The development and maintenance of customised software is a continuous process of improving and enhancing the program in order to meet customer demands. In our development we put a great deal of effort in making our software as general and component based as possible. General functionality is separated from customer specific functionality in order to insure reusability and maintainability. General functionality is gradually improved as our component base expands and new technologies are developed.

In this paper we will present you with a concept of what ProXit is capable of developing and how it is done, so you know what you can expect and demand from us as your partner.

ProXit has developed a network of IT professionals specialised in customised software development. ProXit has consultants in Europe, Asia and plans to expand into US.

The 1st of January 1999, ProXit has opened a research and software development centre in Kuala Lumpur the capital of Malaysia. Malaysia has been selected, because it with the introduction of the MSC (Multimedia Super Corridor), a few years ago, has become a





strategic area for research and development within the telecommunication industry.

With this new software development centre, ProXit has centralised its development in one location to create a centre of excellence focussing on high quality software and economical development. As an outcome of this ProXit are now capable of providing its customers with highly skilled IT professional at affordable prices.

In ProXit we are employing multi-cultural personal with experience in handling software development projects in developing countries, and further more applied an organisation suitable for remote development, so that the customer can communicate directly with local consultants and customer service without having to call long distance for customer support.



CAPABILITY

The success of a software development project often depends on the capability of the organization that develops the software. Capability in terms of skills, experience, resources and technology.

In ProXit, capability is our most important factor in the preparation for a successful project. That is why ProXit has recruited expertise and applied the most advanced technology and techniques in our development process, so we today can provide our customers with custom made solutions within a broad range of application areas. Below we have mentioned a few of these

application areas that we are capable of handling.

■ DATABASE SYSTEMS

Based on Oracle's powerful database server, we provide portable and scalable database solutions and client interfaces for both thick and thin clients. With advance data modeling, we provide the newest in applied database technology, such as an object-oriented approach, three-tier separation of data and user interface. As well as distribution and fragmentation of data.

■ TELECOMMUNICATION SYSTEMS

ProXit provides expertise in making a range of telecommunication support systems. Such as assets inventory systems, planning tools and systems for data collection and data analysis. We also provide expertise in applying and setting up secure web interfaces for this kind of systems.

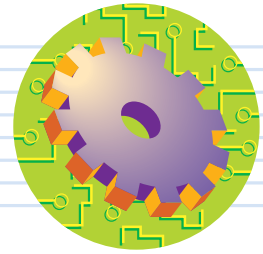
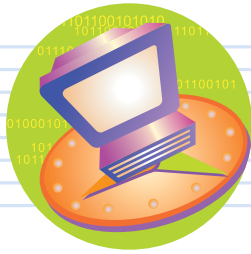
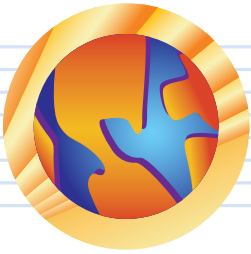
■ OFFICE AUTOMATION SYSTEMS

Based on Microsoft Office we provide expertise in applying office automation. By creating Templates, Macros and VBA scripts for use in Word, Excel, Access, MS Project and Visio in order to simplify and minimise workload for the user. In addition we also provide expertise in integrating Microsoft Office with your legacy or administrative system.

■ INTERNET / INTRANET APPLICATIONS

ProXit provides expertise in making information from your legacy or administrative system available on the Internet. In addition we provide the necessary security and user interface.

ProXit also provide expertise in making and applying automatic mail reply and notification systems.



ProXit utilises a range of modern development tools for the development of IT solutions. Among the most significant development tools you will find PowerBuilder, Delphi, Visual C++ and Java for Front-End development and DHTML, Javascript, PowerBuilder/CGI, JSP, ASP for web development.

- Sybase PowerBuilder
- Borland Delphi
- Microsoft Visual C++
- Sun Java and JSP
- Microsoft Visual Basic
- DHTML/Javascript/ASP

Given the software development tool and operating system framework our applications are engineered for:

- Rapid Application Development (RAD)
- Object Oriented Programming (OOP)
- Object Link and Embedding (OLE)
- Object distribution based on ActiveX
- Support for DCOM
- Internet support

ProXit is also committed to work with the most advanced database technology. Therefore, our database standard is Oracle version 8.x. We can also interface with virtually any database using either a native interface or ODBC as our communication method. This allows us to connect to all industry-standard databases such as Oracle 7.x, Microsoft SQL Server, Sybase, Informix and others.

The Sybase and Oracle environment support a substantial range of platforms and operative systems. ProXit are therefore capable of supplying application for most industry-standard platforms depending on the complexity, requirement and application domain that the development project evolves around. However, as a guideline, we provide expertise in application development for the following platforms.

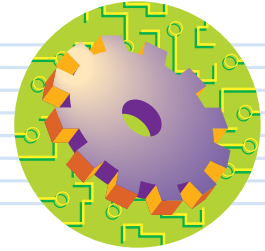
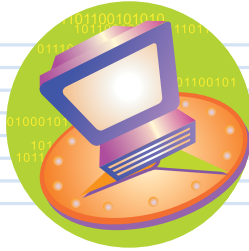
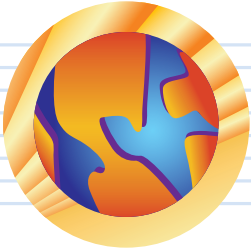
- WINDOWS 95/98/NT/2K
- SUN Solaris

DEVELOPMENT METHODS

Customised software development is a managed and controlled process that requires a great deal of effort, understanding and commitment between customer, user and system analyst. Especially for large and complex systems it is mandatory that the software development process is handled with professionalism or else it might have seriously negative impact resulting in development delay, and customer dissatisfaction.

Software development with ProXit reflects different customers' needs. We therefore offer two different methods of communication between the customer and the ProXit representative. These methods are Dialog and Contract based communication.

Dialog based communication is usually used by customers with little or no experience in software development and is therefore dependent on the ProXit consultant to guide them through the development process - understanding, guidance and tolerance are the keywords for this form of communication.



Contract based communication is used by customers with internal or external IT professionals that provide a defined customer requirements specification allocated to software. Deadlines, budget, and resource management are keywords for this form of communication.

The methodology we apply is specifically minded for managing and controlling a software development project that focus on customers and end-users opinions and co-operation in a flexible and controlled manner without losing the focus on time, resources and money.

■ **CONTRACT BASED**

Contract based software development is especially for customers with existing or associated IT professionals that support the organisation in specifying a system specification.

Based on the system specification a contract is negotiated between the customer and our consultant.

Through the development phase the customer is informed about the progress of the project through progress reports and meetings with our consultant.

Additional requirements are added to the initial contract and system specification after being approved by the development team. An addendum is made to the contract based on the additional requirements and incorporated into the development project.

■ **DIALOG BASED**

Dialog based software development is meant as an alternative to contract based software development to support customers that have no experience in software development, and have the need for external support in order to control the development process.

Dialog based software development is a dialog between the customer and the system analyst, in which they together specify the guidelines requirement and specification for the software.

The system analyst uses interviews with end-users, prototypes and test of old or manual systems, in order to write the system specification. The customer's management and the development team approve the system specification before an offer is negotiated with the customer.

Through the development phase the customer is informed about the progress of the project through progress reports and meetings between the customer and the consultant. The system analyst uses these meetings to clarify existing demands and specify new user demands.

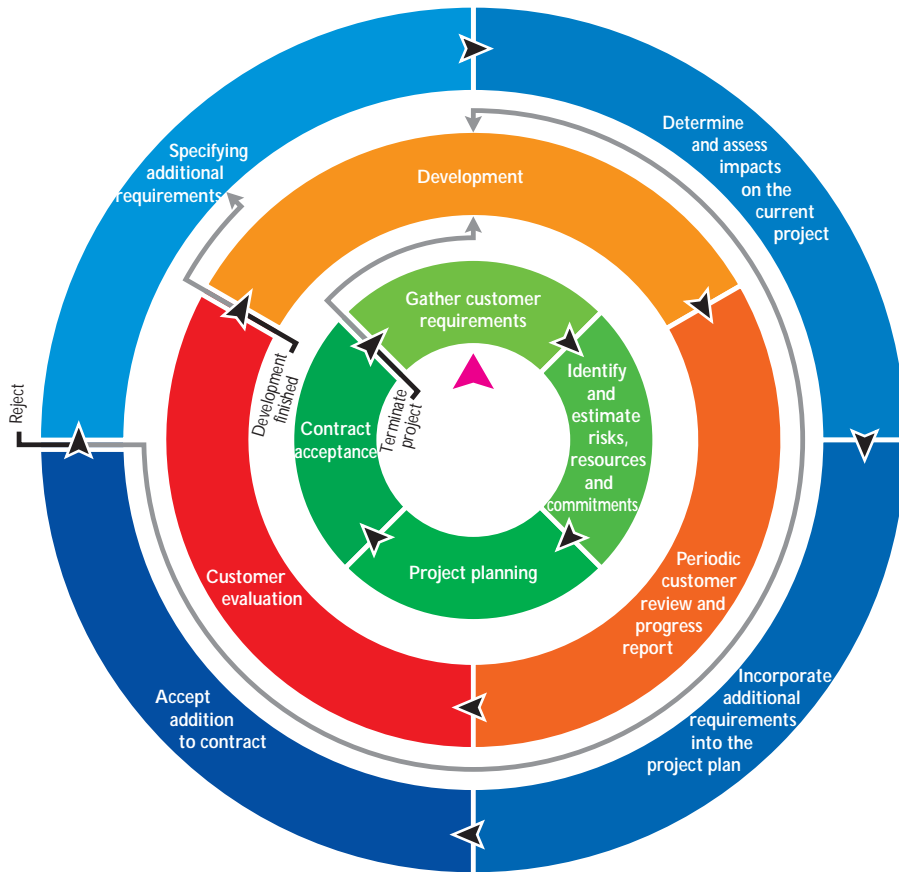
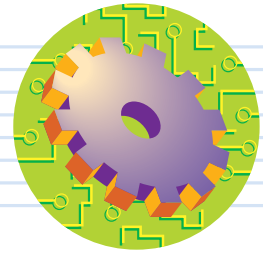
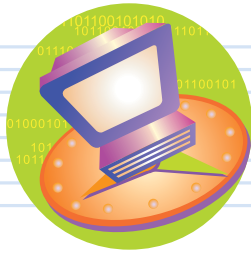
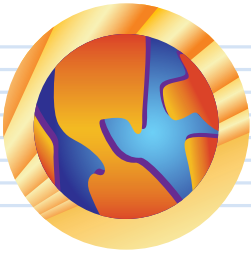
New user demands are specified and added to the system specification after being approved by the development team. The contract is reviewed and approved by the customer's management before incorporated into the development project.



THE DEVELOPMENT PROCESS

ProXit value our customers' opinion, we have therefore developed a methodology that is minded for managing and controlling a software development project, which focus on customer and end-user views and co-operation. The model is a combination of the standard evolutionary method and 4GL development.

In our model we concentrate on manage the process of handling customer and end-user demands in a flexible and controlled manner without losing the focus on time, resources and money.



The diagram shown on this page is ProXit method for software development. The model is divided into three circles all indicating an iterative, repeatable and controlled process.

The green circle describes the early steps of the software development. Handling initial gathering of customer requirements and project planning.

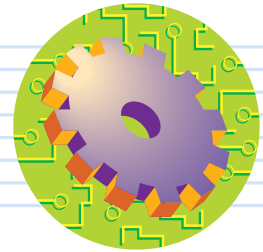
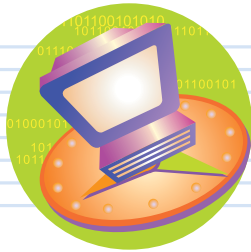
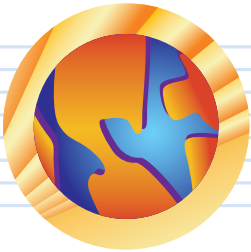
The red circle is the actual development of the software with periodically reviews and customer evaluation.

The blue circle describe the handling of requirements specified after the development project has started.

■ **REQUIREMENT ANALYSIS - GREEN CIRCLE**

The purpose of the requirement analysis is to establish an initial working plan and a software system specification and finally a contract that is agreed upon, before the development phase is instantiated. The circle consists of four phases.





The consultant reviews the requirements and terms together with users and management. These requirements are documented in a system requirement specification. The role of the consultant varies depending on the preferred communication form.

The consultant and the development team will formulate a development strategy, by identifying and estimating risks, resources and commitments for the project. Based on the development strategy the development team will formulate a Project Plan containing milestones, costs and phases.

The last phase is to negotiate a Contract of Acceptance with the customer management and the consultant based on the system specification and the project plan. The Contract of Acceptance will include commitments, Acceptance of responsibilities, cost, resources, obligations and other terms.

■ **DEVELOPMENT - RED CIRCLE**

The purpose of this development cycle is to implement customer requirements as specified in the system requirement specification, and further more keep track of the work progress and notify and clarify upcoming misunderstanding as the project progresses. The development circle consists of three phases.



Out through the development circle the customer is informed about the progress of the project through progress reports and meetings between the customer and the consultant.

The consultant uses these meeting to clarify existing demands and specify new user demands. The contents of such meetings and the frequency of the progress reports and meetings are stated down in the project plan.

The progress report and customer reviews are made so that the customer can keep track of the progress of the project and insure that misinterpretations, missing requirement and delays are identified and handled as early as possible. The progress report contains information on progress in accordance to schedule, budget and requirements.

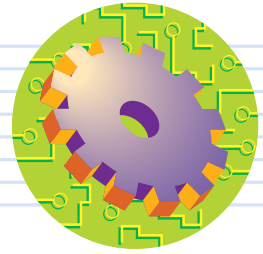
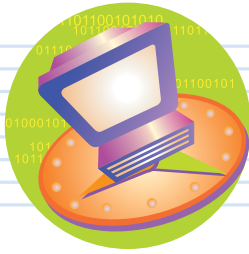
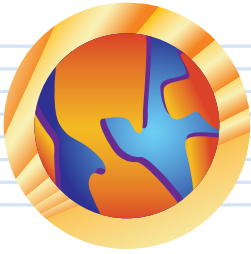
On a regular basis, usually in connection with the progress report or when needed the Quality Assurance and Project Management reviews the progress of the project to see if requirements and milestones are met and are on track.

■ **ADDITIONAL REQUIREMENTS - BLUE CIRCLE**

The purpose of the additional requirement phase is to manage and control the delicate matter of specifying additional requirements into an already planned project.

Usually additional requirements are identified during progress meetings or customer review; additional requirements can also be identified during a customer evaluation period or after the project has been completed. The additional requirement circle consists of four phases.





After the requirements have been identified, they are analysed in order to determine the impact on the current project. Impacts might be alterations of already developed modules or new development of additional modules resulting in impact on resources and development time.

Any impact is estimated and approved by the development team, Quality assurance and Management before incorporated into the project plan. An addition to the contract of acceptance is also prepared and renegotiated with the customer before the project plan is incorporated into the development project.



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