Why an implementation memento ?

Our experience has shown us that **the implementation speed varies from simple to double** depending on the methodology used for implementation. The methodology is therefore crucial to reap the full benefits of an implementation.

**Keys benefits of an efficient methodology are**:

1. **Faster company growth.**
    Frequently the implementation process is decelerate because of a bottleneck issue related to HR. As an example, a key project's manager is usually in charge for every steps of the implementation. With the consequence that this high level manager – already fully engaged in one project - can hardly works on another one. This situation forced some companies to refuse projects.
    To grow faster, you must reduce dependence on high-level managers by the distribution of management between multiple profiles.
2. **Quicker delivery.**
    ERP integrations are complex. An efficient methodology allows you to specialised roles and get trained employees that are quickly ready to deliver.
3. **Risk mitigation.**
    By working through a systematic approach, you can continuously improve yourself.

To integrate Open ERP, two radically different approaches can be applied. The **package approach** is an integration mode that is low cost, generic, with few developments to be done. This approach goes from Open ERP generic to customer's needs. An important point here is that your finality is not to describe the client's current processes but an Open ERP solution. At the opposite a **custom approach** is used when the client's business is weakly cover by Open ERP generic. This approach goes from customer's needs analysis to Open ERP solution. it is usually reserved for very large projects.

In the following, we describe a methodology for the package approach.
After reading this memento, you should have a clear vision on how to improve your efficiency and the profitability of your Open ERP projects by applying a package approach.

Implementation phases:
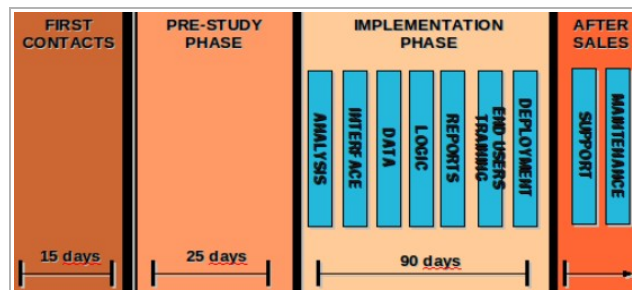
A typical project time line

A typical implementation project is made of four main phases, each links to specifics goals, responsible, tasks and deliverables. They are described in the following.

Important note: pre-study phase, implementation phase and after sales services are associated to specific contracts (see supra).

To make this memento maximum benefit, we have placed in it many links to valuable templates (quotes, mind maps, project scope board, etc.). Hoping that this will enable you to facilitate your implementation projects, we hope you enjoy reading!

PHASE 1. FIRST CONTACTS (½ – 1 day)

Introduction
The first contacts between parties are the occasion for both parts to create a first opinion about their counterpart. Could it be a true opportunity? Does the investment worth the case? Etc. The aim here is to impress with the value of the product, the quality of your method and to show the fields of the possible improvements Open ERP will provide.

During the first contacts, it is important to clarify the request:
If the lead is interested only, for instance, in CRM and sales management,   present Open ERP as a suite of integrated softwares solutions for business management. Indeed a client may be interested only in one or two modules at first but add other management systems later on. So, the message to get across is that the different Open ERP features can be installed gradually, thus limiting the risks.
If the lead wish an Entreprise-wide System, then present the global solution that Open ERP provides.

Tip: If you have too much unqualified leads, a good mean to test a lead's interest in the product is to invite him to come in your office for a demo instead of you moving on site.

Goals   ✔ Help the customer to take a decision
             ✔ Sell pre-study
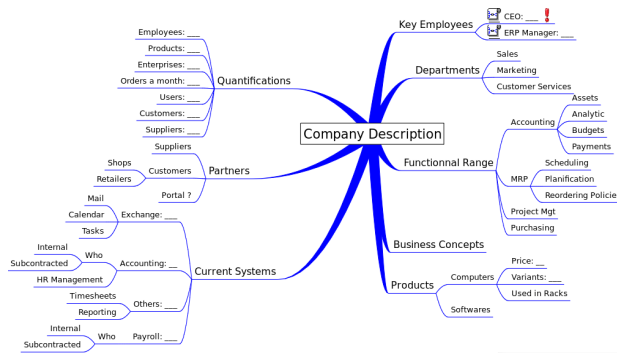**Responsible** A **s**alesman is responsible for this phase.

Tips:
(i) The Salesman may be a junior under the supervision of its Sales Manager.
(ii) The salesman may be accompanied by a Project Manager for major leads. I*mportant*: The Salesman is making the demo – he is the pro -, the project manager answers to sharp questions

First meeting
The important step on this phase is the first meeting. Here is its canvas:
❶ Presentation of the client → Listen
❷ Presentation of your company and product
        → *Slide show*

    → Online demo of OpenERP
❸ Questions to the customer about his business and needs
        → Company description

Company Description (mindmap)

Key Employees
- CEO: ___ ❗
- ERP Manager: ___

Quantifications
- Employees: ___
- Products: ___
- Enterprises: ___
- Orders a month: ___
- Users: ___
- Customers: ___
- Suppliers: ___

Departments
- Sales
- Marketing
- Customer Services

Functionnal Range
- Accounting
  - Assets
  - Analytic
  - Budgets
  - Payments
- MRP
  - Scheduling
  - Planification
  - Reordering Policies
- Project Mgt
- Purchasing

Partners
- Suppliers
- Customers
  - Shops
  - Retailers
  - Portal ?

Current Systems
- Exchange: ___
  - Mail
  - Calendar
  - Tasks
- Accounting: ___
- HR Management
  - Who
    - Internal
    - Subcontracted
  - Timesheets
  - Reporting
- Others: ___
- Payroll: ___
  - Who
    - Internal
    - Subcontracted

Business Concepts

Products
- Computers
  - Price: ___
  - Variants: ___
  - Used in Racks
- Softwares

❺ *Discussion about methodology and next steps*
   → *Slides about our methodology*

Deliverables

Within a few days following the meeting, you must send the following deliverables to your lead :

✎ *Fisrt meeting minutes and pre-study quotation*

✎ *Slides show on your product and the company*

✎ *Methodological slides*

PHASE 2. PRE-STUDY (8 days + options)

Introduction

Your lead has been converted! Great, it means that the pre-study contract is signed and a analysis of requirements will be conducted. It is more than ever the time to convince your client about your capacity to fit the needs with an Open ERP solution.

Goals
- ✔ *Reassure the client : needs fitting, ROI*
- ✔ *Get the full scope of the project to be able to quote*
- ✔ *Sell an implementation*

Responsible *Project manager (PM) & the client's project manager*

> Client's project manager: a person responsible for the ERP project on the client's side. He is the contact point with your company. Ideally the client's project manager should know the company well, both its specific quirks and its different standard cross-company processes. It is crucial the client's project has a sufficient weight in its organisation, since he/she endorse the role of validator of the deliverables.

Preparation *Knowledge transfer between salesman and PM*
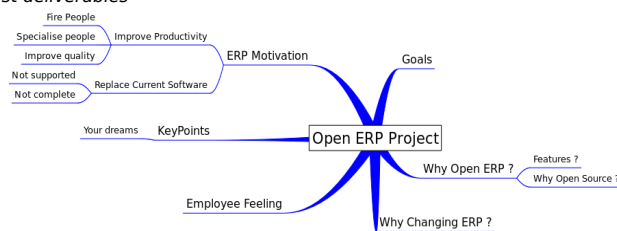
Training

The client's project manager should be trained now on Open ERP. Although, some customers prefer wait an implementation contract is signed before invest more, the training – given by a certified trainer - is a necessary step to establish an effective relationship with the integrator and to detect problems rapidly. The training received is functional. Optionally, on client request, it may be extend by a technical training.

Meeting & interviews

❶ *Meeting with the board executive of the client (½ - 1 day)*
Goal: get a dedicated analysis of the need:
- *→ listen & reformulate (use mindmap Open ERP Project)*
- *→ get feedback on first deliverables*

Open ERP Project (mindmap)

ERP Motivation
- Fire People
- Specialise people
- Improve Productivity
- Improve quality
- Replace Current Software
  - Not supported
  - Not complete

Goals

KeyPoints
- Your dreams

Why Open ERP ?
- Features ?
- Why Open Source ?

Why Changing ERP ?

Employee Feeling

❷ *Interviews with keys managers/users (3 days)*
Goal: get a description of all departments activities
- *→ Interview session:*
  - *2 hours of interview by departement*
  - *1 hour for writing / cleaning*

  - *½ hour for reviewing with interviewee*
- *→ Report interview on Interviews mindmap ↴*
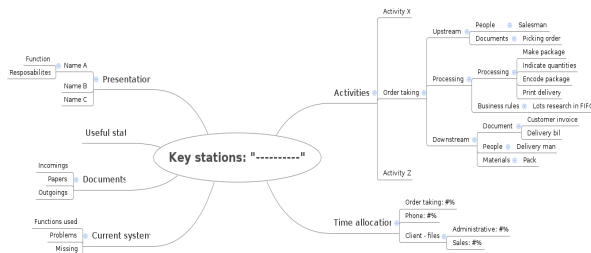
If some process remain uncleared, help yourself with an (open sources) process designer. Draw the flow and ask the interviewee its feedback.
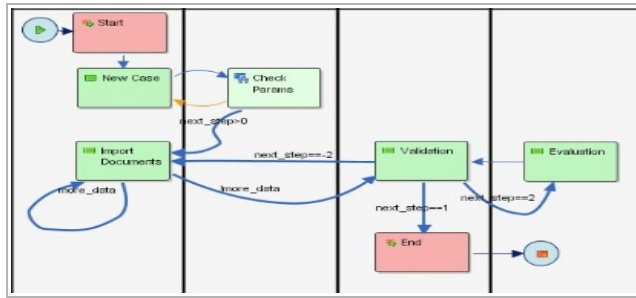
Use Case - A flow diagram sample

<u>After each interview</u>, the mind map and the diagram(s) must be validated by the interviewee. Since each interview reveals some of the functional perimeter of the project, complete the project scope with requirements gradually (see <u>Project scope</u> below↴).

The project scope
Altogether, the interviews permit you to delineate the whole project scope. When all the requirements have been placed in the project scope fill in the field Open ERP cover, and the field estimated effort (see **<u>Project scope</u>**):

<div style="text-align:center">Project Scope</div>

Id.	Functionality	Description	OpenERP cover	Estimated effort	Rank value
1	CRM	Standard applications OpenERP Modularity of pricelist Profiling (client type, product type, zone, salesman) ...	80,00%	2 days	10
2	DMS	...	100,00%		10
3	Sales	...	65,00%	4 days	8
4	Stock	...	...	...	...
5	Accounting	...	...	...	...
6	...	...	...	...	...
	...	...	...	...	...
				Total:	

Ask then the client's project manager to rank each requirement according to its priority level (from 1 for cosmetic to 10 for top level priority).

Tip: A good negociation practice when the contract is discussed is to not decrease the price but the number of features to be implemented.

Option 1 Interviews of end users (3-5 days)

<u>Context:</u> When the client's project manager does not know perfectly all needs or when there is a need to prepare the employees to the change, you can suggest to plan interviews with (some of) the end users
<u>Process:</u> The interviews sessions are the same as the one describe upon.

Option 2 Implement a use case (3-10 days)
<u>Context</u>: When the client is not sure OpenERP perfectly fit the needs or when you need to convince the managers, a use case is the best way to attest to Open ERP solution.
<u>Process</u>:

- Writing of use cases with the client's project manager
- Testing / parametrization (Who: PM)
- Presentation to client (Who: PM)
- Validation (Who: client's project manager)

> <u>A 'use case'</u> describe a business process applied by business actors to achieve their goals (e.g., manual payment processing, expense report approval, manage corporate real estate).
> Ideally, the use case cover a flow large enough to be representative of a whole process. It illustrates a standard business process with a short text and a diagram.
> See a tutorial on:
> http://www.cragsystems.co.uk/use_case_tutorial.htm

Tip:When selecting a use case, the best option is to choose a case fully cover by Open ERP, which is more attractive and convincing for decision makers.

Deliverables

- Mind map Interviews
- Project scope → A scope summary
- A quote for the full project → Example of integration quotation
    - Fixed price
    - Estimate for time and materials
- Planning → Example of integration planning

✎ *Integration contract*

PHASE 3. IMPLEMENTATION (90 days)

Introduction
Now, we are in! The two first phases make a success: the implementation contract is signed. Some negociations could still last for a while but the phase to come is no more a sales step. At this phase, a solution will be designed, developed and deployed.

Phase 3.1.   Analysis

At the end of this phase, the customer can see the final result! This allows a fast feedback.

Goals   ✔ Describe and validate the solution: screens and processes
       ✔ Review quotation (optional)
       ✔ Deliver a reviewed planning

Responsible PM & Client's project manager

Solution design
For any requirement not covered by Open ERP at 100% (See project scope.xls), a task (with its attachments) is created in OpenERP by the PM.

A task is a short description of the solution - <u>not the need</u> - with the full specifications of screens changes and notes on features to be improved:

<u>Task Id</u>.: MRP_1 - Manufacturing order: useability improvement

<u>Note:</u> to consult full specifications of

We need to improve the manufacturing order form in trunk. The main reasons are: ability to easily manage partial productions, lots & serial number encoding, scrapping wrong products.

this sample task see:

Full specifications of screen to change:

Technical notes: /
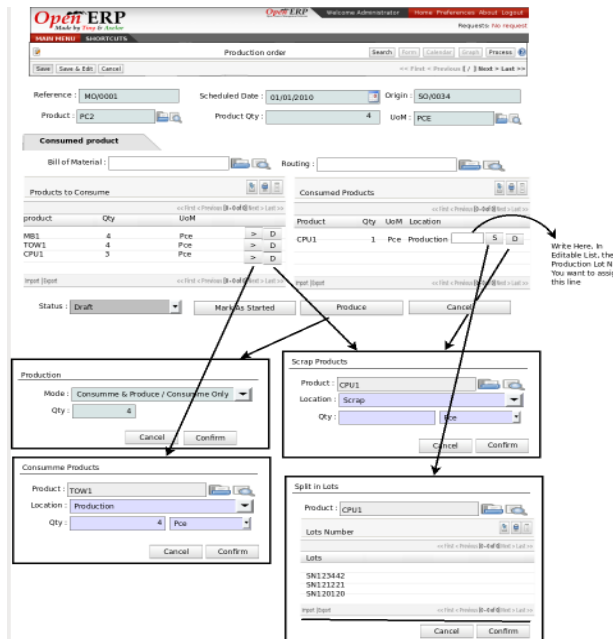
https://bugs.launchpad.net/openobject-addons/+bug/506017
Once all the tasks – or solution design - have been reviewed by the client's project manager ask him to sign the update **project scope.xls** with mention « tasks approved » (update the document with a column with the links to tasks Id.).

Tip: If it does not seem possible to describe a task within 10 lines, split it into sub-tasks.

Two tools can be used for solution design

1. **The diagrams editor Dia**

Dia is a screens and workflows designer.

For screen design, an Open ERP interface was developed. It allows you to import in dia Open ERP views (shapes and screens) and to modify them on purpose.

<u>Steps to install the Open ERP interface of Dia:</u>

➔ extract the plug in dia in your home directory. This zip is available following this link: *plug in dia*

➔ then log as super_user and put the file *OpenERP.py* under ~/.dia/python

➔ after extracting dot_dia in your home directory, start Dia as a normal user. All shapes are under sheet "OpenERP Interface Sheet"

To load OpenERP views,

➔ click on the menus Tools > Load Open ERP

➔ now specify proper URL, database name, login user and password

➔ select a view to import

Then you can see your imported view in a current diagram:
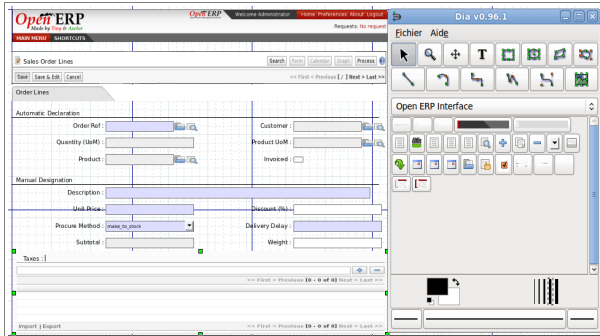
2. Use Case

See Phase 2, Options 2.

Deliverables

✎ Open ERP analyse → *Example of project specifications*

✎ A reviewed quotation (optional)

✎ An updated planning (optional)

Phase 3.2.	Interface

After this first development step, the client will be able to test the solution and organize workshop with end users for quick feedback and task reviewing

Goals   ✔ Develop all screens and menus
  ✔ Generate demonstration data
        → **The result is visionable since this stage**.
  ✔ Get them validated by the client through workshop
  ✔ Annex to contract:
    ■ When the customer wish to change initial specifications after viewing interface
    ■ It implies a feasability study
    ■ Tell the client about the impact on budget and planning

Tip: Entire value added is given at the end of this phase. Thanks to a quick feedback gaps are detected as early as possible.

Responsible Developers & PM

Development of screens

The developer is in charge of the developments. On the ground of specifications he should be able to conceive all the screens. The task may consist to create new screens or adapt existing one in Open ERP.
The PM checks the developments and demonster a scenario to the client.

Scenario

A scenario to show the match of developments with specifications (see also use cases)

Demo Data

• Goal: illustrate the scenario with real data conformed to the client's business
• Data should be generic to a sector to make them re-usable
• Install module 'Recorder' so that you can record data in a separate module.

Note: The base_module_record module can be used to export a set of changes in the form of a new module. It should be used for all customizations (including demo data) that should be carried on through migrations and updates.

Branch bazaar on launchpad

Launchpad is a software collaboration platform that provides bug tracking, code hosting using Bazaar and code review among others utilities.

> ➢ *See https://**launchpad**.net/*

Your branch bazaar will contain at least 2 modules:

Module 'Profile'. *The purpose of a profile is to initialize Open ERP with a set of modules directly after the database has been created. A profile is a special kind of module that contains no code, only dependencies on other modules.*

Module 'Demo data'. *The data module is make dependant of the module profile to assure a automatic downloading of data each time the 'Profile ' is installed.*

Workshops. *The client gives its remarks and indicates what he do not accept and why (modifications to do to reach specifications).*
Once a development is accepted, the client signs for it.

Annex to contract
After the prototype's review, the client may want to change some of the specifications to cope more closely with its needs.
In this case, the developer notes the request and informs the PM that a change request has come.

Then,
1. *the PM design a solution, quote and plan.*
2. *once the client has signed the proposal, the development of the interface starts.*
Finally, the signed document is annexed to the initial contract.

Invoicing
As mentioned in contract template (see Phase 4), the PM send two invoices every month to its client:

- *One invoice for 'fixed' services and,*

- *One invoice for 'time and materials'.*

Deliverable *A working version on OpenERP that has all screens adapted to the customer need. Demonstration data are set.*

Phase 3.3.   Data importation (30 days)
Context
The importation process can start once the screens are validated since the db scheme is now fixed.
Workload for data importation is hard to estimate this is why the integrator sell the consultancy days in time and materials.
Data importation can be done in parallel with the remaining implementation phases.

There are different methods to import your data into Open ERP:
- *Through web-service interface*
- *Building a module with .XML or .CSV files with the content*
- *Using an ETL*

Whatever the technical solution choosed to import data, it is critical that the whole importation is done automatically using scripts, without any manual operations. As there will be several intermediary import, the import process must be strictly defined.

Responsible *The client is responsible for data import.*

The designated agent (the client's project manager or someone else with a technical profile) had received a technical training on Open ERP.

The integrator can sell days of consultancy 'time and materials' to help the client in the migration process

Phase 3.4.   The logical layer (1day/workflow)

At the end of the phase the whole solution will be working and tested by the customer. They will be no report yet , nor customer data in the solution.

Goal
The logical layer correspond to the implementation of all business rules and logic.
The goals here are: ✔ Develop logic,
✔ Test all use cases
✔ Test all buttons of the interface
Responsible *Developer & PM for testing final solution*
Deliverables
- *A working version is OpenERP that integrate all the business logic and computed fields*
- *The 'project scope' document properly completed by the client*
  - *each line in the column 'validate logic' is sign by the client*

Phase 3.5.   Reports (1-2 days / reports)

At the end of this phases, everything will work. The next step will be validate with customer's own data.

Context
The analysis has revealed the list of reports to adapt or to develop (see document 'Project scope'). During this phase, new Open ERP reports will be designed, developed, delivered and approved by the client.

Note: (i) There are two types of reports in OpenERP. Any printable document like a sales order, a purchase order, an invoice, etc. is a first type of report. Statistical reports (postgres sql object) are a second type.

Goals ✔ *Produce appropriated template of reports*
✔ *Get them approved by the client*

Responsible *The developer*

Design & development
It is appropriate to ask the client a copy of each report to be modified or add in Open ERP:

- *Reports from customers*
- *Reports or documents for internal use*
- *Reports and documents to customers.*

Then,
1. *Draw each report on a sheet*
2. *Ask the client to validate each template*
3. *Once a report is validated, start development*

Deliverables
- *All the reports template*
- *The 'project scope' document properly completed by the client*
  - *each line in the column 'validate report' is sign by the client*

Phase 3.6.	Deployment & parametrization (6 weeks)

Introduction
Deployment is the process of putting a Open ERP database into a production-ready state where it can be used by everyone for their daily work. You'd usually configure Open ERP and load data into it on one development system, train staff on that or another training system and deploy it onto a production system that has better protection against failure, better security and more performance.

Goals ✔ *Deliver product*
- *Test all cases*
- *Make parametrization (security rules, groups, ...)*
- *Make each delivery validate by the client*

✔ *Train end users*

Responsible *PM*
The PM should be present during _and_ after the delivery (see warranty) to assure a technical and a functional support.

Deployment Options
To deploy Open ERP in a company, several options are available to you:
- an SaaS (Software as a Service) or on Demand offer which includes the equipment, the hosting, the maintenance and the support on a system configured to client's needs in advance,
- an internal installation, that have managed by the IT services of the integrator,

Deployment Procedure
The deployment of a version of Open ERP is make easier when the server has been configured in the production environment. The security of the data will then be a key element.
When you've installed the server you should create at least two databases:
- a test or development database, in which the users can test the system and familiarize themselves with it,
- a production database which will be the one used by the company in daily use.

You should test the data module in the development version and check that it doesn't require any more manual adjustments. If the import runs correctly, it shows that you're ready to load data in the production database.

You can use the Open ERP database backup procedure at different stages of configuration (see Installation and Initial Setup). Then if you've made a false step that you can't recover from you can always return to a prior state.

Since your data describes much of your company's value, take particular care both when you need to transfer it (in backups and across your network) and when you're managing the super-administrator pass- word.   Make sure that the connection between a PC client and the two servers is correctly secured.

You can configure Open ERP to use the HTTPS protocol, which provides security for data transfer

You could also use the PostgreSQL database directly to backup and restore data on the server, depending on access rights and the availability of passwords for the server.

End-users training
The training of end users can start when a developement database is ready to use.

Warranty
It will not work perfectly, directly ! During the next two - three months it is important to be present at client's site:
- to assist end-users
- to react rapidly when troubles are detected in production

After 2 months, everyone will be happy !

Phase 4. AFTER SALES SERVICES

Introduction
Maintenance and support are critical for your long term success.
The **support** aims to ensure that end users get the maximum productivity from their use of Open ERP answering questions to the use of the system.
The **maintenance** aims to ensure that the system itself continues to function as required. It includes system upgrades, which give you access to the latest functionality available.

Support Contract
The Open ERP editor sell support contracts to its partners. The partners can then sell their own support contracts to their clients or ask the editor to take this in charge.
The support contract is a fixed time contract; the amount of interventions is fixed in credits time (or interventions units).
The contract includes any request for a functional help or a technical help that is not bug fixing.
Example of functional help: a customer parametrize mistakingly the sales flow of his company and the sales order status did not evolved to a request status when pressing validation button.
Example of technical support: a customer develop a new accounting view in xml but made a syntax error involving the view does not appear properly.

→ **Request processing**

A request comes to support via email or the phone. It is then transmit to the quality team for problem characterization at a functional level. Two cases:

- *the problem is link to user misuse of the software*
  - *a functional help is provided*
  - *imputation of the analytic account of client*
- *actual bug*
  - *transmit the case to R&D*
  - *bug fixing*
  - *no imputation.*

- ***Maintenance Contract***
- *The two true parts with the maintenance contract are the Open ERP editor and the final customer; the integrator partner has a role of intermediary. However, some partner integrates maintenace in their suppport contract.*

- *The maintenance contract is a fixed price contract; the cost and the period are fixed.*
- *The objective of this contract is to guarantee a perennial solution of the delivery to customers*
- *It includes:*
- *Guarantee of version migration*
- *Bug fixing*
- *Management of security alerts*

- ***Guarantee of migration**. Once the yearly version's upgrade is available, the editor provide a system for automated migration. He also guaranties a unlimited technical support.*

- ***Bug fixing**. The maintenance contract includes an unlimited guarantee for certified modules.*

- ***Management of security alerts**. An alarm system on possible problems of safety measures was set up in order to hold our customers informed as soon as possible, and to provide a correction before the fault does become public.*

- *Finally, the maintenance contract provides the opportunity for the end user to work live with the Open ERP editor which will verify the quality of the modules developed by the partner through a **quality certification.***

- ***Brochures**:*
- ✎ *Maintenance*
- ✎ *Support*

- *If you wish more informations on support and maintenance contract, contact us at info@openerp.com.*

• CONCLUSION

- *The repetitive use of a same methodology helps to improve the follow up of projects and to increase speed of developements and quality of deliverables.*

- *The goal of the present memento was to give a general framework for OpenERP implementation in package approach.*

- *The method described here is compatible only with agile project management. Indeed the client is involved in all stages, with short decision cycles and high reactivity to client's feedback in order to reach a solution that fits the actual needs.*

  - *The strenght and perennity of Open ERP is grounded on its community. So, if you wish to give us a feedback on this memento PLEASE send us your comments at **http://edu.openerp.com***