

# Software Development Project Experience – Case AstroSoft & Jydacom

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# Agenda

- AstroSoft and Jydacom in brief
- Projects summary
- Team
- General Jydacom side requirements and development methodologies
- Project management
- Communication issues and tools
- Solutions for communication problems on each project phase
- Results

# AstroSoft in brief

- Founded in 1991
- Privately owned
- Operates as software development services supplier
- Headquarters in St. Petersburg, Russia
- 3 development centers in Russia
- Number of employees 350+
- 200+ software-engineers
- Gross annual revenue 16 M USD
- Microsoft Gold Certified Partner
- Entrance on international market in 1998
- Finland – one of the key markets
- 16 active customers in Finland
- Providing custom software development services in business application and embedded systems area

# Jydacom&Buildercom in brief

- Jydacom is a leading software solutions and ERP provider for the construction industry in Finland
- Buildercom Oy is Jydacom Oy's subsidiary, providing ASP-services for the construction industry and real estate management and maintenance
- Founded in 1981
- Privately owned companies
- Offer solutions for cost estimation and control, financial management, supply management and eBusiness
- Located in Jyväskylä and Espoo
- 60 software and construction experts, Turnover 6MEUR
- References – Jydacom ( over 600 construction companies in Finland )
  - Peab Oy, Klujatalo Oy, Kalliorakennus-Yhtiöt Oy
- References Buildercom ( over 200 customers /4000 companies / 20.000 users )
  - Senaatti kiinteistöt, City of Helsinki, Stockmann, Asuntosäätiö

# Projects summary

- Collaboration started in December 2007
- Projects with Jydacom are Business Applications on Microsoft .Net platform.
- Communication and documentation language – English
- Application's language – English, later Finnish&Russian
- Aim – to develop application framework which has to provide unified way of work for all built in applications.
- 2 projects implemented:
  - New application framework on ASP.Net
  - Work reporting project – web system + mobile application  
Mobile ASP.Net

# Team

## Jydacom

- Business Manager and Customer Expert
- Web-services developer

## AstroSoft

- Project manager
- Architect
- Senior developer
- Developer
- Tester

# Team (general roles)

## Customer –

**Coordinator/Project Manager** tasks assignation for Dedicated Center team, monitoring of activities, revision and approval of project related documents.

## **Business area expert -**

clarification functional and business requirements. Revision and approval functional specifications and requirements including user interface prototypes. Performing functional and usability testing.

## **Software expert –**

clarification of technical, functional and architectural requirements. Revision and approval of the functional specification, software architecture, and user interface prototype, and performing functional testing.

## AstroSoft

**Project Manager** – projects organization from development partner side and monitoring activities. Revision and final approval any projects related documents.

## **Team Leader-Software Architect/Expert-**

functional specification elaboration and user interface design, interactions with customer for any technical questions, and development of software architecture. Architectural supervision and approval all technical decisions in cooperation with Software Expert from Customer.

## **Developers –**

software and component implementation, installation package development, unit testing and defect fixing.

## **Testers –**

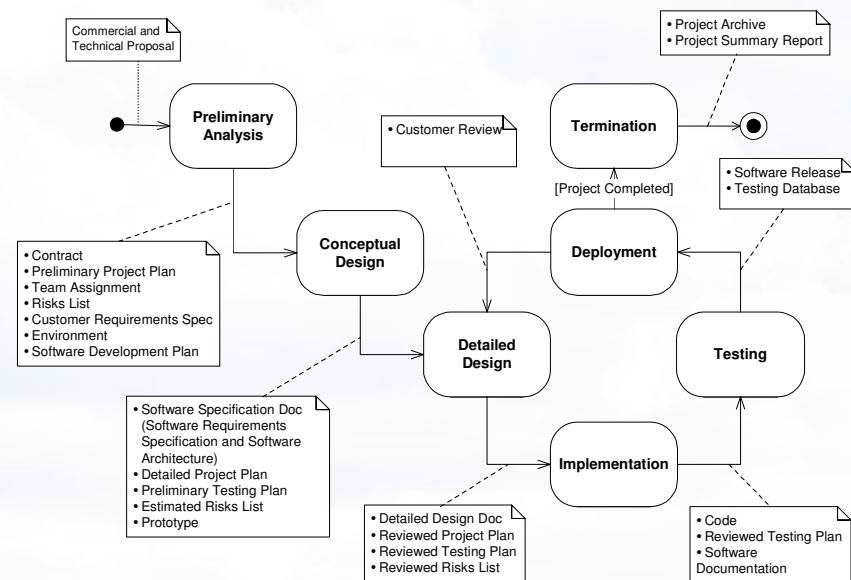
development of test cases, performing functional testing, and defect tracking.

## **Technical writers –**

user guides and on-line help system creation.

# General Jydacom side requirements and development methodologies

- Uniform approach applied for all projects
- Capability Maturity Model / Rational Unified Process (CMM) / (RUP) project model adopted by AstroSoft were chosen



# Project process methods

- Flexibility of project model
- Team weekly meetings (Architect and Business Analyst)
- Tester engagement from earlier project phase (Design)
- Regular internal project inspections
- Use of Team Foundation Server as key project development management system

# Communication issues and tools

- **Internet communication tools** – Skype, msn messenger, ICQ, share view etc.
- **Microsoft Team Foundation server (including SharePoint portal)**
  - Software Development process management system
  - organization of software development process
  - real-time control
  - deep integration with development tools
- **Software Development Plan**
  - Template was developed by AstroSoft taking into consideration RUP, ISO recommendations
  - Describes not only main cooperation issues, but also goals, scope, implementation plan, model, infrastructure for each project
  - Key roles and responsibility definition
  - Delivery plan
  - Communication plan
  - Risk management approach and initial risks list
  - Change management approach
  - Acceptance procedures overview

# Solutions for communication problems on each project phase

- Pre-project collaboration – *first face-to-face meeting, common understanding of the problem*
- Project starting – *Project Team meeting, Software development plan creation, TFS*
- Architecture design and implementation – *often communication with Customer – both on-line and face-to-face, Project supervision, weekly meetings, SharePoint, TFS*
- Stabilization – *personal meetings, demo-versions*
- Project finishing – *Postmortem meeting*

# Results

- Projects are performed in time and budget
- Required quality is reached
- Processes are defined and documented
- Templates are worked out (reports, requests, follow ups, SDP, Microsoft Project)
- Ready for continue collaboration
- Satisfied customer

# Successful approach combines

- Predictability, quality, speed, reliability
- Established project process approach
- Clear communication policy
- Transparency of project process

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