



## T-Mobile: Nearshoring Partnership

**Client:** T-Mobile

**Business domain:** Telecommunications

### \* Background

T-Mobile International, a wholly-owned subsidiary of Deutsche Telekom, was established in December 1999. Since then, it has positioned itself as one of the largest international mobile communications carriers. It is the first to operate a trans-Atlantic mobile network based on GSM (Global System for Mobile Communications), the world's most successful digital wireless standard. T-Mobile subsidiaries and affiliates were among the first operators worldwide to use future-oriented technologies like GPRS, UMTS (3G) and W-LAN.

Today T-Mobile ranks amongst the global market leaders in the mobile telecommunications industry. As strategic business segment of Deutsche Telekom for mobile telephony the company is concentrating on mobile telephony markets in Europe and the USA. At the end of 2004 over 120 million people used the mobile services of companies in which T-Mobile or Deutsche Telekom have majority or minority stakes.

StarSoft cooperates with T-Mobile's branches in UK, Austria, Czech Republic, the Netherlands, and Germany. Our collaboration started in May 2004 when, looking for a contractor to overhaul the legacy website chain across its European national companies, T-Mobile selected StarSoft based on its strong experience in developing and implementing web-enabled and eCommerce solutions.

### \* Scope of cooperation

StarSoft operates a dedicated offshore development center (ODC) for T-Mobile in its office in St. Petersburg, Russia. The current size of operations exceeds 170 FTEs. T-Mobile plans to further expand its operations with StarSoft in Russia. In Q2 2006, StarSoft opened a new development center in Kazan, Russia where some of the T-Mobile projects were placed.

The activities of the ODC cover many areas of business with more than 20 projects running concurrently. Below are some of the business domains covered by this relationship:

#### **Customer Relationship Management (CRM)**

CRM systems developed & maintained by StarSoft ODC staff allow T-Mobile customers to:

- Buy mobile phones, accessories, pay plans and related services
- Create, terminate and manage telecom services contracts (mobile phones, Wi-Fi internet access)
- Perform self-management of individual and corporate accounts
- Access marketing information (promo actions, available customer benefits)
- Monitor mobile phones usage
- Request mobile phones' repair under warranty
- Configure and manage mobile devices setup
- Access billing information online





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**eCommerce**

- **eShop**
  - Development of a new unified, highly customizable business platform used as the main online sales vehicle for tariff plans, handsets and accessories across T-Mobile National Companies (NatCos) in Europe
- **eBusiness portals**
  - Web-based solutions enabling individual customers and employees of large corporate customers to self-manage their accounts (and monitor individual usage for corporates)
- **Service & Retail**
  - Web application platform enabling account management and warranty repair services functionality by sales personnel at T-Mobile retail shops
- **Mobile phone configuration**
  - Web application enabling individual customers and technical support staff to configure and set up their mobile devices
- **Intranet**
  - Set of modules for T-Mobile intranet (e.g., an electronic billboard)
  - Customization of the MS SharePoint-based workflow management solution
- **Content Management Systems**
  - Development of the new scalable framework enabling the integration of various web resources into business portals
  - Web based application combining search & data presentation functionality used by call center operators to answer various customers' questions. The solution is integrated with the customer eBusiness portal Content Management System as a knowledge base.
- **Interaction with T-Mobile dealers & partners**
  - New SOAP-based middleware component allowing dealers secure access to T-Mobile billing systems (replacing the old CORBA-Tuxedo based system)
  - Web application that presents information regarding T-Mobile authorized dealers/retailers reaching sales targets, as well as the corresponding bonuses and discounts for each dealer
- **Marketing**
  - Server-based application for specific marketing purposes, such as calculating & assigning marketing promotion program bonuses based on certain account parameters (call duration, amount of credit on customer account, etc.)
- **Customer invoice preparation system**

**Technologies:**

- **Programming language(s):** *Java, Java Script, C++, C#, Perl, Shell, XML, XSLT, WDSL*





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- **IDEs/Compilers:** Eclipse, IntelliJ IDEA, JBuilder, Borland Core Architect, MS Visual C++, XML Spy, MS Visual Studio 2003 .NET, NetBeans
- **OS:** Windows 2000/03/XP, Linux, Sun Solaris
- **DB:** DB2, Oracle 8i & 9i, MySQL
- **Application & web servers:** BEA WebLogic 8 & 9, JBoss, Apache Tomcat, Microsoft IIS 5.0 - 6.0
- **Other technologies:** J2EE, JNDI, JDBC, JSP, JMS, JCA, Servlets, Hibernate, Struts, JMS, JRE/JDK, Java Dispatcher Tiles, XSLT, Cocoon, Avalon, DOM, SAX, Deli, JSP, EJB, Axis .NET, ASP.NET, ADO.NET, Web Services, SOAP, TIBCO Rendezvous, TIBCO Active Enterprise, CryptoTicket & Hash, XDoclet, Flash, CSS, sIFR, xHTML
- **Modeling Tools:** MS Visio, Rational Rose
- **Configuration management:** Borland StarTeam, Rational ClearCase, MS SourceSafe
- **Defect Tracking:** Mercury TestDirector, Rational DDTs, Rational Quest

### Quality Assurance

StarSoft maintains a dedicated Quality Assurance group with more than 40 FTEs working exclusively on testing tasks. T-Mobile continuously acquires and develops new software or enhances the existing software, which in turn is integrated with the CRM systems developed & maintained by StarSoft ODC staff. The QA group ensures smooth integration of new software assets with existing systems.

*Tools:* Rational Robot, Mercury WinRunner, Quick test pro, Mercury LoadRunner, Perl and Shell scripts

### SAP

T-Mobile is SAP's global success story, being the largest telecom SAP installation in the world. T-Mobile uses StarSoft's SAP development team to maintain and support the following SAP modules:

- EBP (Enterprise Buyer Professional)
- SD (Sales and Distribution)
- FI (Finance)
- CO (Cost Accounting)
- AM (Asset Management)
- PS (Project Systems)
- HR (Human Resources)
- MM (Material Management)
- APO (Advanced Planning Optimization)

*Technologies:* ABAP 4, Windows/Unix, Oracle, SAP Application Server v. 6.x





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### **Business Risk Management**

For its post-pay customers, T-Mobile uses a special Risk Server solution developed by StarSoft which performs real-time customer risk analysis by querying various databases nationwide and suggesting a decision on whether to approve a mobile transaction (e.g., a railroad ticket purchase).

The risk management solution for T-Mobile German combines 15 separate applications. It provides fast online evaluation of customer credibility. Customer risks are evaluated based on the purchase history and heuristic trends analysis. Additionally, StarSoft developed a tool for "test driving" new business rules from financial department (before they are launched into production).

*Technologies:* C++, Java 1.4.2, Sun Solaris, Tomcat, Oracle 9i, Oracle TimesTen, J2SE, JMS, JDBC, TIBCO

### **Business Intelligence**

StarSoft ODC provides T-Mobile's BI department with a group of experts possessing special skills in the Ab Initio ETL suite.

*Technologies:* Ab Initio, Windows, Unix, Oracle 9i, SQL scripts, Unix Shell scripts

### **OSS**

StarSoft runs several projects that support T-Mobile operations. A typical project called TSS involves development and maintenance of the Oracle database for call data and technical network data. The StarSoft team develops the original parser, mover and loader components.

*Technologies:* Pro C, C, Perl, TSL, Sun Solaris, HP-UX

### **Web analytics**

StarSoft analyst team collects, analyzes and presents data on the web shop operations to further drive e-commerce revenues.

*Technologies:* WebTrends ([www.webtrends.com](http://www.webtrends.com)).

### **\* Customer benefits**

*"Partnering with StarSoft is a rewarding experience, both technically and commercially. As our nearshore software development supplier, StarSoft consistently demonstrates professionalism, technological aptitude and creativity, and the ability to deliver complex software on time. The fact that StarSoft can work seamlessly across so many of T-Mobile departments is of real benefit to us: we have saved money without sacrificing quality or teamwork. A relationship of such mutual confidence is not easy to come by."*

*Matthias Hansen  
Executive Vice President, CRM Systems  
T-Mobile UK*

