



# **Product Engineering** Telecommunications

When Execution Matters





TÜV Rheinland Group

# About Trianz

Execution is the art and science of turning strategic designs into measurable business results.

Trianz is a global professional services firm that helps senior leaders execute business and technology initiatives. A unique mix of business consulting and technology capabilities has driven our 100-percent success rate with our engagements.

We provide management consulting, technology engineering and operations outsourcing services to a diversified global client base. Trianz clients are result-focused executives and leaders in a range of marquee organizations from Fortune 100 corporations to emerging, rapid-growth companies. Our service offerings focus on the following areas:

- Operations Consulting
- Enterprise Applications Services
- Software Product Engineering
- Transformational Outsourcing





### For further information, please visit www.trianz.com

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Client: Europe's leading mobile entertainment Services Company, providing music entertainment services to telecommunication operators, media distributors & handset manufacturers.

Challenge: Leveraging its Virtual Engineering Model, Trianz has been providing an effective, appealing, scalable, reliable and importantly customizable device resident multi-media solution involving technologies like Digital Rights Management. After the engineering of the solution for various versions of Symbian and Windows Mobile, Trianz has been involved in supporting and maintaining the solutions comprehensively. As the solution was originally planned to be used in Europe, Trianz has been able to overcome the challenges raised through simulated environments and testings.

The complete ownership of the solution has been with Trianz, where the complete product engineering (detailed design, builds, releases, all levels of testing) is being taken care of for all the future planned versions of the solution.

Business Results: As a direct result of the engagement, the product release timelines are highly predictable, with the accompanying increase in the provision of new features driving customer satisfaction and retention. Trianz and the client have been working towards releasing the solution on more platforms to address the market need. The hybrid quality and related processes, taking into account both the process followed at Trianz and the client, have been adopted in this on-going engagement.



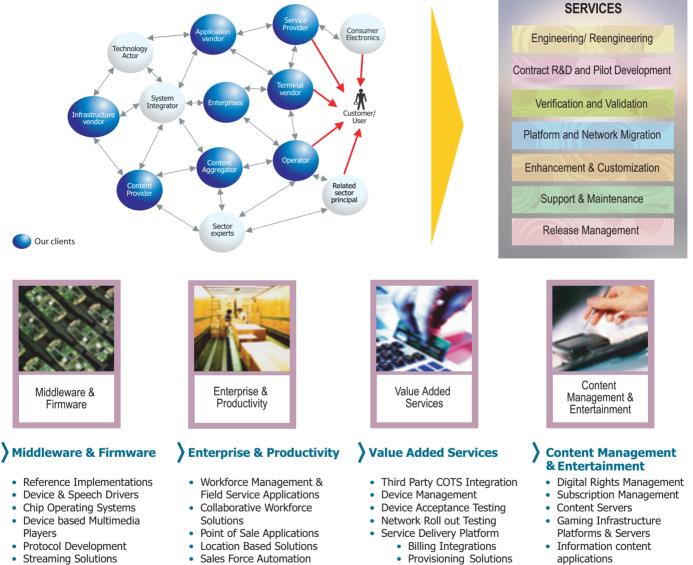
deploy cost- effective solutions for our customers." COO, Leading Mobile Entertainment Product Company

"Being a leading provider of mobile music entertainment services in Europe, time-to-market of new applications is the key to our growth strategy. Partnering with Trianz has been a rewarding experience. Their superior project management and impressive technical capabilities are helping us rapidly

Client Speaks

# **Telecommunications**

Trianz helps clients in the Communications and Wireless industry to build, sustain and grow their products and services. With strong credentials and industry experience, Trianz understands the interdependencies and symbiotic relationships amongst Operators, Application developers, Service providers, Handset manufacturers, Infrastructure providers, Content providers and Aggregators. Having assisted clients across the globe in more than 40 projects, Trianz has developed a deep understanding of the issues and challenges faced by clients in staying competitive and improving market share. Through Product Engineering services, Trianz has been helping clients of various profiles from Fortune 500 companies to emerging product companies, to innovate and reduce time-to-market.



- Messaging Solutions
- Document Routing Solutions

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Content Delivery

Management

Mobile Payments

Electronic Wallets Security Framework Messaging Solutions

Imaging SolutionsWireless Portal Solutions

Warehouse & Inventory

Time & Expense Tracking

Management

Asset Tracking

## Product Engineering Services: Overview

In the new global workplace, business leaders can harness talent worldwide to rapidly research, develop and roll out new software products and services. This global workplace gives product engineering organizations the ability to extend their operational reach and enhance their core R&D capabilities.

Serving the leaders of productengineering functions in large or emerging organizations, Trianz works as an extended collaborative partner to help our clients build, sustain and grow their products and services. Leveraging a pioneering framework, the Trianz Virtual Engineering Model, Trianz provides a variety of services that address the product life cycle and improve the client's products to achieve measurable business results. Trianz has deep expertise and capabilities in providing solutions for:

- Telecommunication
- Imaging, Printing and Scanning
- Software Platforms and Security Systems
- Embedded Design Independent Verification and Validation

#### **Product Strategy**

Trianz works collaboratively with clients in the early stages of product definition to provide insights and expertise on product specification, architectures, technology stacks and the product roadmap. We help clients conceptualize, plan and launch products that succeed in a competitive market. We specialize in:

- Execution strategy and planning
- Product integration and management
- Product specification design
- Contract R&D services
- Proof-of-concept and prototyping
- Technical feasibility analysis

#### Product Engineering and Life-Cycle Management

Trianz helps software product development companies by providing design, engineering and life-cycle management services. Our service portfolio, which addresses the demands of new product introductions and mature product growth, includes:

- Product architecture and design
- Development and Integration
- Quality assurance and testing
- Software maintenance and support
- Enhancements, porting and migration
- Globalization and localization
- Release management and support
- Technical documentation

#### Independent Quality Assurance Services

In addition to applying stringent quality standards on our engineering engagements, Trianz provides clients with a wide range of quality assurance services such as:

- Quality strategy and planning
- Full-range verification and validation (V&V) services
- Quality standards implementation (ISO 9001:2000, CMMi)
- Test automation

#### The Trianz Virtual Engineering Model

Leveraging strong execution expertise and program-management frameworks, Trianz has pioneered a paradigm in software product engineering that emphasizes a "core versus context" view of product engineering. While clients focus on core R&D, deep market knowledge, requirements definition, architectures and technology selection, Trianz takes ownership of the engineering life cycle. Operated on a mediumto-large scale, Trianz virtual engineering engagements deliver:

- Reduced engineering cycle times
- Faster "global" time to market
- Innovations through extended R&D
- Business flexibility and shared risks
- Total engineering cost optimizations
- Sustained profitability and growth

#### Product Engineering Delivery Infrastructure

Trianz product engineering teams work on a dual-shore, program-management model or a purely offshore-based engineering model. With a Global Technology Center of Excellence based in Bangalore, India, Trianz has built a world-class engineering organization to become an extension of the client engineering function. Trianz serves its clients through its use of:

- An ISO 9001:2000 and CMMi Level 3 certified quality management system
- A leading-edge engineering and supporting IT infrastructure
- Secure connectivity with data and IP protection

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