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# What's the next big thing in telecom and media?

Chances are we're already working on it!

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Knowledge. Passion. Results.

**tieto**

A green tree with a thick, gnarled trunk and a full canopy of leaves is growing out of the back of a silver laptop. The laptop is open and viewed from a low angle, showing the back of the screen and the keyboard area. The background is a solid, vibrant blue.

## The search for growth and the need for efficiency

Tieto provides professional services and solutions for some of the world's leading telecom operators, mobile device manufacturers, network equipment providers and media companies. Our team of more than 6,000 telecom and media experts has unrivalled expertise in delivering growth, efficiency and tangible results.

**With Tieto as a selected development partner in the Nordic region, a leading Electronics company has rolled out a Connected TV concept. The Connected TV concept enables customers to find and enjoy internet videos and other services directly on their TV screens, without the need for a dedicated IPTV network or extra TV boxes in the home. TV viewing habits have changed over the last few years. Today TV programs can be viewed via computers instead of the traditional TV set.**

Almost all media companies offer Web-TV in large or small scale. Two successful examples are the BBC with its iPlayer and Swedish Television with SVT Play. Now it's time for the next step – to bring Web-TV back to bigger TV screens in the living room again with TV experience in terms of quality.

#### **OTT TV brings internet video content to the TV screen**

The Tieto offering includes advisory services, implementation services and application management of OTT TV (Over the Top TV) solutions. OTT TV delivers internet video content to TV sets over the open internet but with a TV quality experience. In addition to the OTT TV services, the internet connected TVs open up a number of possibilities, and Tieto can help its customers by either adopting existing services or by creating new ones.

#### **Important user experience issues to be considered**

The user experience should not be disturbed by interrupted movies or freezing screens. The video quality issues are addressed by using adaptive streaming that makes it possible to deliver video with the best possible quality dependent on available bandwidth and terminal capabilities.

Accessing the internet on the TV set in the living room creates special requirements for the user interface compared with using a PC. With a relaxed user on a sofa 10-feet away from the screen you cannot have too much (or too small) text on the screen, icons must be large enough and easily navigated with up-down-left-right buttons.

”

With Tieto as a development partner we know that we get the right people, competence and experience in the area of Next Generation TV. ”

Leading electronics company

### Results in brief:

- Fast time to market
- Great user experience
- Successful launch of the innovative Connected TV service

# Do you want to watch internet videos on your TV?

Chances are it's time to see us.



**Tieto has developed a multi-channel advertising solution that provides telecoms companies with a multitude of new revenue streams, as well as the possibility to engage and interact with their subscribers on a completely new level. The latest module on the solution package is active idle screen solution for internet content and social media services.**

Telecom operators, focusing on new growth from the continuously increasing convergence of e-services, mobile solutions, content and IT services, are facing lots of challenges:

- How to build successful advertising business and integrate advertising into new channels?
- How to monetize internet and social media services?
- How to increase customer satisfaction and prevent churn with new innovative mobile services?
- How to engage consumers to an interactive dialogue and collect feedback and profiling information?

A leading telecom operator in the Nordics got the answers by applying our new technology – a multi-channel active idle screen solution for internet content and social media services (e.g. Facebook, Twitter) onto the home screen of the consumer's mobile device.

The whole solution – provided as a service from Tieto – enables quick and easy preview of personalized content and advertisements on the device directly. And the solution provides telecom companies with a multitude of innovative new revenue streams, as well as the possibility to engage and interact with their subscribers on a completely new level.

The end-to-end solution is based on Tieto's competence and experience within device, media, operators and advertising areas; our ability to create an innovative and creative concept; and our flexibility and capability in delivering the concept.

The mobile application runs on Symbian S60, Android and Maemo devices (Android version is also available). A content and social media aggregation server fetches the content and social network updates from the internet and pushes personalized content to the mobile application.

Tieto multi-channel advertising solution enables our customers to create and manage targeted advertising campaigns on all operator channels. It can be used to run targeted advertising campaigns on the idle screen of the mobile application.

”

We appreciate Tieto's ability to create an innovative and creative concept and bring new ideas as well as Tieto's flexibility and capability in delivering the concept. ”

Leading telecom operator

## Results in brief:

- Increases end-customer satisfaction and prevents churn
- New advertising revenues
- More effective advertising management
- New business model for operators to generate revenues and analyze customer behaviour

# Can a mobile work even when it's idle?

Chances are we've got the hardest working solution.



**Over 400 European newspapers and magazines are produced with the help of IT solutions from Tieto. For many media companies advertising revenue is one of the most vital aspects of their operations. This is certainly the case for one of Sweden's largest media consultancies, MittMedia. They use Tieto's advertising system, "Cross-advertising", to enable advertisers to reach their different target groups in various ways.**

MittMedia publishes 17 magazines and reaches 700,000 readers daily with advertisements in paper magazines, internet magazines and mobile news services.

**One system – several media**

MittMedia had developed its advertising from newspaper advertisements to banner ads, radio advertising and mobile ads but there were still further opportunities for development. Valuable time that should have been spent on sales was being used to manage bookings in the different administrative systems. Tieto's proposal was a flexible and scalable solution that could be used to manage every facet of advertising.

**Integrated and all-encompassing need not be complicated**

MittMedia currently uses about 20 modules from Tieto's Cross-advertising system, to integrate work processes such as booking, ad production, statistics and invoicing. Administration is minimal and invoicing is much faster. In addition, this complete solution means that it is easier for sales personnel to offer several media combinations. And since sales staff can book a whole advertising campaign in one place in the system it is much simpler to extract statistics on advertising revenue.

**Less administration, enhanced customer service**

Besides the advantage of having less administration, advertisers can count on better service. This

enables more time for selling and more accurate statistics for different media combinations, which results in more effective advertising efforts. It is quite simply a good investment for everyone. MittMedia chose Tieto's solution after seeing how the multi-channel system can be adapted according to changes in the advertising market. On top of this, our commitment to MittMedia's business development and the fact that we are the market leader within multi-channel systems for media consultancies were both highly significant factors.

” None of us have all the answers to what the future holds for the advertising business but together we are continuously working to improve our solution for managing the business of advertising. ”

Jan-Olof Strandberg, Strategic business developer, MittMedia

Results in brief:

- Less administration
- More time for selling
- Better advertising service
- Better statistics

# Did you get a newspaper this morning?

Chances are we helped to make it happen.



**Tieto's Global R&D Services capability helped a leading global mobile device manufacturer to undertake a period of sustained growth, whilst at the same time reducing operational costs by 30%. Our unique approach enables companies to demonstrate that simultaneous growth and efficiency doesn't have to be a contradiction.**

How do you cut and grow at the same time? As one of the leading lights in mobile devices ecosystem, device manufacturers must constantly innovate while at the same time operate in the most efficient manner possible. Often, growth and operational efficiency are assumed to be somewhat contradictory terms. Device manufacturers must continue to be at the cutting edge of technology and adoption trends – but how to do this in a challenging business environment?

With operations on all continents, one device manufacturer needed to grow their operations at the same time as OPEX was under heavy pressure. Doing more with the same was not an option – a new, more innovative and cost-efficient R&D delivery set-up was required.

**A multi-site delivery set-up across three countries**

Our proactive offer to the customer was to explore ways to improve the operational efficiency, while at the same time improving productivity. We realized that our customer required quick response times under all circumstances and offered to replace the existing project setup, which was previously 100% based in Northern Europe, to a new, more efficient multi-site delivery set-up across three countries.

In the improved setup, one part of the team is located close to the customer for faster response

times and the majority of the execution is carried out in our offshore centres located in Ostrava, Czech Republic and Chengdu, China.

Due to the synergy with similar work done previously at our sites, we engaged experts for the assignment that could take over the work and actually improve efficiency, rather than waste our customer's valuable time and money in an expensive and slow ramp-up.

” Instead of focusing on only the hourly price, we looked at the big picture, which is efficiency and productivity, this time achieved by a multi-site delivery set-up in three countries. ”

Global mobile device manufacturer

Results in brief:

- An immediate 30% reduction in operational costs (the reduction is expected to continue)
- Overall productivity improved (measured in features implemented and response times)

# What's the most efficient way to achieve growth?

Chances are it's the one that saves you 30%.



**With more than 400 Qt open source professionals across the globe, Tieto can provide extensive experience in developing applications, device software platforms and products. We can help you to cut time-to-market, reduce development time and costs, and create innovative new revenue streams.**

A lot of mobile device and consumer electronics application development effort has to be reserved for developing rich user interface applications on different operation systems and device platforms. This is expensive and requires lots of development and maintenance capacity – and this often leads to exceeding project budgets.

Qt Development Frameworks allows open source and commercial software developers to code less, create more and deploy everywhere.

#### **Qt – an industry leading cross-platform application framework**

Qt Development Frameworks (formerly Trolltech) creates and markets Qt, an industry leading cross-platform application framework. Nokia acquired Trolltech in June 2008 and renamed it Qt Development Frameworks as a group within Nokia.

Tieto is a Qt Alliance Partner with Qt competence centres in the Nordics, EMEA and APAC regions. The Tieto Qt offering includes projects, productization, consultancy and outsourcing services as well as training covering the specifics of multiple software and device platforms.

With over 1,300 experts and a 15-year track-record of working in cooperation with our global customers in Mobile Devices and Consumer electronics R&D, Tieto has extensive experience in developing applications, device software platforms and products.



”

Whether the customers want to cut time-to-market, create new revenue streams or enable rapid delivery of new services – we are the partner of choice. ”

Mika Yletyinen, Tieto (Sr. Vice President and Head Mobile Devices)

#### Results in brief:

- Shorten R&D lead-time from idea to product
- More innovative products, solutions and service enablers can be created
- Lot of savings in product software development
- Reduced maintenance costs
- Increases accuracy in project budget planning

# How do you make an astounding mobile UI in less time?

Chances are our Qt gurus can help you.



# The professional services company with an end-to-end view.

## **Telecom Operators**

### **– Accelerate time to revenue**

We can help you to increase customer satisfaction, optimize service delivery, maximize service reliability and accelerate time to revenue, and deliver new revenue streams in content, services and advertising. Our global delivery model improves IT efficiency, using our extensive knowledge and network of experts.

## **Network Equipment Providers**

### **– gain the best Total Cost of Ownership**

With one stable business driven interface close to our customers and our Global Delivery Model we can support you in every step of your product life cycle, to improve your Total Cost of Ownership (TCO). Lead-times and quality improvement will also improve your business growth. With Ericsson, Nokia Siemens Networks and Alcatel-Lucent as our key customers we are a leading R&D supplier within the Network Equipment Providers segment.

## **Mobile device manufacturers**

### **– Build tomorrow's user experience in mobile devices**

Device sales and new revenue streams are intimately linked. Delivering fantastic user experiences, efficiently and with multi-site delivery capability is the core of our business. For over 15 years, we have provided unrivalled innovation, efficiency and operational capability, with world-class competence in Symbian, Android, LiMo, Maemo and Qt as well as integrated end-to-end mobile internet services.

## **Media companies**

### **– Get ahead in the media race**

The new digital services ecosystem offers new ways to interact, profile and gain direct access to consumers. We combine solid industry expertise with a profound understanding of new technology to provide the best value IT services on the market.

Our experience in media and telecom helps customers to turn innovative ideas into action. Tieto's in-depth knowledge about the latest technology, platforms and trends ensures cost-efficient development of new services. Allowing Tieto to manage IT infrastructure lets media companies focus on their core business, making them more efficient.

**Providing good service can be difficult when companies have a number of lightning-fast communication channels at their disposal – when customers first contact the company by e-mail or chat and then call about the same issue, for example. If customer services have an IT solution that connects all the information and makes it easy to find, it becomes easier to give customers the right answers faster – and to keep their promises of quality service.**

When one of Europe’s leading mobile operators was looking for a solution for handling customer service operations, we created a centralised platform for customer care management using several channels.

**Smart service management for 30 million customers**

This platform dramatically enhances the ability of companies to keep promises of quality service. Customer services have access to “all the facts” when a customer contacts them. In addition, it becomes possible to handle a great many issues during quieter periods as well as between calls, thanks to a specially designed distribution method.

Instead of placing personnel in difficult situations and customers in telephone queues, the IT platform helps to facilitate and improve customer service, ensuring there is a steady and efficient flow of problems solved and issues handled.

**Green light for intensified customer focus**

The solution shows that thousands of employees can be given immediate access to the information they need. Customer service questions and issues are dealt with quickly, with high quality and in the same order as they come in, or according to their classification and grade of priority. However, these changes are not only about supporting daily work processes and making them more efficient. In fact,

implementation of the IT solution has been conducted in combination with efforts to change attitudes and behaviour and has resulted in entire operations becoming much more sharply focused on the customer.

” The opportunity to map rapid changes in the process and just as rapidly to integrate them within the IT solution was one of the major motivating factors behind the development of the platform. ”

Global operators customer

Results in brief:

- Customer satisfaction index up by 25% after 6 months
- 3% increase average revenue per user after 4 months
- Higher degree of utilisation by customer services personnel
- Number of promises of quality service that are kept have increased dramatically



**The EquaTerra company recently produced a survey of two hundred IT companies and named Tieto as the best outsourcing supplier in Scandinavia. Telecom Italia reached the same conclusion a few years earlier, when Tieto was chosen as its partner for an extensive collaboration agreement. For Telecom Italia the direct results in Tieto's management of the BSS operation has lead to a cost reduction of 32%.**

Telecom Italia have more than 40 million mobile subscribers and 10 million broadband connections in seven countries. With several service providers in Service Operations, many of them small companies, Telecom Italia had high maintenance costs, services that were hard to follow-up and manage through the entire value chain, as well as a lack of overall control of the services and service providers' responsibility.

#### **Efficiency improvements and strong cost savings**

In 2007 Tieto proposed a vendor consolidation approach creating true and immediate value for Telecom Italia. This enabled efficiency improvements and strong cost savings in Service Operations, mainly for BSS applications, based on Tieto Application Management Services (ASM) model.

We are responsible for the application operations of the VAS, CRM, Prepaid and DW/MDW/CS processes. We also provide application management services in several different projects and operational services globally.

#### **A new level of control and agility**

This consolidation gives Telecom Italia a new level of control and agility through an ITIL based service contract, with SLAs for each ITIL area (such as Incident Management, Configuration Management etc) consisting of 66 KPIs to measure against.

So far, Tieto has so met every single predefined KPI during the contract period. After the first initial two years of work and due to the fact that we had met the promised targets, a new 4-year contract was signed at the end of 2008.

”

Tieto was chosen as a preferred partner for mobile processes and applications (Prepaid and VAS), due to its outstanding knowledge and established capability in these areas. Tieto is managing the service with good flexibility and significant cost savings. ”

Roberto Ferretti, IT service operations director

#### Results in brief:

For Telecom Italia the direct results in Tieto's management of the BSS operation has lead to:

- a reduction of employees handling the services from 900 FTEs to 750 FTEs
- a direct cost reduction of 32%

# What makes a great outsourcing supplier?

Talk to the IT company that has earned its customers' trust.



**Tieto's E2E Unified Communication solution for enterprises make it possible to use the same IT infrastructure for e-mail, instant messaging, presence information, web-conferencing and business voice. Telecom operators and Network Equipment Providers can benefit from Tieto's Unified Communication partnership framework enabling us to jointly minimize time-to-market.**

In a competitive market, agility and adaptability is increasingly becoming a key to winning the battle for customers in new emerging market segments, like Unified Communication for enterprises. The IT and telecom market merge is now underway and the coming years will see significant changes to the market place. The Unified Communication market faces new challenges – and telecom operators and network equipment providers need IT partners to minimize time-to-market.

Tieto has a unique partnership with Microsoft covering joint solution development as well as implementation services to secure integration to operator networks. In partnership with Tieto, telecom operators and Network Equipment Providers can explore synergies and provide increased competitiveness in a market with new demands on both telecom services as well as on IT-infrastructure.

**“Pay as you grow” with a flexible solution**

With limited investments (“pay as you grow”), Tieto's E2E Unified Communication solution offers low TCO for both larger and smaller enterprises.

A flexible IT-infrastructure is the base for achieving business agility and for this purpose we have developed a complete hosted service offering for Unified Communication with advanced integration capabilities to operator networks.

The key feature of this service is the capability to quickly deploy additional system resources when required, along with the ability to bill for services based on consumption.

**Multivendor know-how and end-user knowledge**

Tieto's unique values are based on know-how and end-user knowledge. With a broad competence base in all parts of telecom network, Tieto can ensure state-of-the-art vendor-independent support and the ability to take functional end-to-end responsibility.

With end-user IT support and Future Office/ portals as important parts of the Unified Communication offering, Tieto has an understanding of Unified Communication not only on network level.

” Unified Communication demands cooperation in the value chain and Tieto is a perfect partner that fits our needs. ”

Leading telecom operator

Results in brief:

- PBX and terminal independent as well as a possible PBX replacement
- Generates Mobile Centrex revenues
- Limited initial investments and low TCO
- Harmonize business models for Operator services and Unified Communication



**Tieto helped a leading network equipment provider to secure operational expenses and to increase customer satisfaction. Our unique and valuable multi-vendor know-how and internal mode of operations secured the customer's time-to-market goals.**

The customer was facing a very early introduction of a new product to one of their prime customers. The local organization was not prepared to take the challenge under observation of the customer. Additionally a complex swap out of different vendor equipment was required.

**The team oriented mindset allowed an excellent turn key migration**

Tieto enabled a know-how transfer from an R&D unit to a service unit in Germany. A hands-on and very team-oriented mindset allowed excellent preparation of the migration as turn key.

To continue the success of work package deliveries, with a well defined scope of work per packaged task, the requested items got implemented as turn key solutions again.

The existing team continued to secure quality and additional risk-mitigating actions since the project included the smooth replacement of competitors' products.

The following tasks and items were delivered within the migration of Nortel CS-Core to the leading network equipment provider CS-Core: New network element installation, commissioning, integration, migration preparation, migration support, cleanup activities, and the dismantling of old network elements.

” The success of the project was as well related to the valuable multi-vendor know-how of Tieto. This allowed a hassle-free introduction of the new product without wasting time and effort internally. ”

Leading network equipment provider

Results in brief:

- Secured the operational expenses of the overall project
- Increased customer satisfaction
- Secured time-to-market goals

# How do you reach your time-to-market goals?

Talk to the IT company with unique multi vendor know how.



**Tieto recently reduced one leading network equipment provider's delivery testing time from one week to just 12 hours. Our smart sourcing solution helps telecom companies to bring about huge resource efficiencies, providing a better return on their R&D investment.**

The telecom network market is maturing – turning from technology push to customer pull. In order to meet the new market demands, network equipment providers have to get a greater and faster output for their investment. To achieve this, they need the flexibility for fast ramp up and down with the right competence in order to reduce cost base, improve productivity and quality, shorten lead times and optimize the utilization of personnel, equipment and management costs. Tieto's global delivery capabilities have been integrated into the smart sourcing concept, which provides our customers' with a world class delivery machine.

**From one week to 12 hours**

One of our customers had quality problems in their deliveries and there was a need to run the test processes faster and more efficiently. Tieto increased the coverage for regression test from 15% to 70% and the time for testing decreased from one week to 12 hours. This allowed the customer to know the quality of the delivered products.

**Ramped up 50 experts in 5 months**

Another customer was short of resources with the right competence within the LTE BTS development area and searched for a solution that required resources mainly in China. Tieto ramped up 50 experts at several sites in less than 5 months. This allowed the customer to deliver the LTE product on time with excellent quality.

**Increased the quality**

A third customer had a shortage of resources for development of WCDMA Node B and at the same

time delivery and quality problems. Tieto increased the quality which affected the project KPIs, improved the quality of the system and turnaround time for corrections, at stretch level.

**First-class R&D competence**

Tieto's long-standing and deep customer relations have given us the opportunity to develop our competences, processes, environment and tools. Tieto have accomplished comprehensive first-class R&D competence in Access, Core and Service Network, Multimedia, OSS and BSS area.

” Very quick in resource ramp-up, recruited good persons with relevant background. Excellent project planning. ”

Global network equipment provider

**Results in brief:**

- test coverage for regression test increased from 15% to 70%
- time for testing a delivery decreased from one week to 12 hours
- 50 persons ramped-up at several sites according to plan in less than 5 months



# Not enough hours in the day?

Talk to the IT company that can turn 7 days into 12 hours.

## Tieto in **numbers:**

**#1**

For outsourcing in the Nordic region  
For Telecom R&D in Europe

**26**

Operating countries

**114**

Telecom networks use Tieto Signaling Solutions

**400**

Newspapers and magazines in Europe  
are produced using Tieto IT solutions

**6,130**

Media and telecom experts

**16,215**

IT experts

Tieto is an IT service company providing IT, R&D and consulting services. With approximately 16,000 experts, we are among the leading IT service companies in Northern Europe and the global leader in selected segments. We specialize in areas where we have the deepest understanding of our customers' businesses and needs. Our superior customer centricity and Nordic expertise set us apart from our competitors.

