

Tieto's growth solutions

– accelerating customers' business renewal

@TietoCorp#tietoinvestors

tieto

Lifecare – leveraging digitalization for seamless care

WHAT IS IT ABOUT?

- Holistic **solution for entire care** chain, incl. primary care, hospitals, elderly care, home care and social welfare
- Comprehensive portfolio for all education disciplines from daycare to compulsory and adult education
- Citizen empowerment through self-service portals and welfare technology

KEY FACTS

- Over 1 500 customers
- Tieto's own IPR based on Microsoft technology stack
- **50 years experience in the care industry**

OUR AMBITION

- **#1 in the Nordics with substantially increased market share**
- Growth ambition 10% (CAGR 2016–2020) (9% in 2017)

DIFFERENTIATION

- We provide an end-to-end solution for the entire care chain
- Modular solution, open interfaces without data lock-in

Largest end-to-end solution provider in the Nordics

Healthcare and welfare

Sales ~ 180 mEUR in 2017
(Reported in Industry Solutions)

MARKET DRIVERS

- Aging population, increasing demands under strong budget and resource constraints
- Citizen engagement via personalized, proactive services and mobile first
- Seamless and integrated care through the patient journey
- Transformative national care reforms throughout the Nordics
- From reactive to preventive and predictive care leveraging AI and big data
- Market growth 3-4%

COMPETITION

- Competitors includes Cambio, DIPS, Epic, Cerner, CGI

CASES

REGION VÄSTRA GÖTLAND

Nordic's first digital pathology solution streamlines the cancer diagnosis process, dramatically increasing quality and reducing time from initial referral to diagnosis. Improved treatment outcomes.

TAIVALKOSKI MUNICIPALITY

Our role-based solution supports clinical pathways and cuts unnecessary steps – more time for patients and improved patient safety

HOME CARE FOR AN ENTIRE CITY

Intuitive planning and coordination tools for care workers delivers dramatic resource optimization – 25% efficiency increase

Case Management – to make information the most valuable asset for customers

WHAT IS IT ABOUT?

- A user-friendly standard solution for
 - ✓ **Case, document and records management**
 - ✓ **eArchiving**
 - ✓ **Automation of public sector processes**
- Driving improved services while reducing handling times and costs based on automation and compliance with public sector standards and legislation

KEY FACTS

- **Around 15 % market share in the Nordic countries**
- Solutions used by more than 500 organizations, mainly in the public sector
- Tieto's own IPR built on Microsoft standard technology

OUR AMBITION

- To grow annually by 10%
- Leading actor in building the digital circle: Governmental commitment to build end-to-end platform enabling seamless digital service flow, turning information in the most valuable asset

DIFFERENTIATION

- **Leading cloud vendor with continuous releases of new functionality**
- Only vendor supporting all national standards across the Nordics
- Integration in Microsoft Office and Outlook driving high user adoption

Leading in the Nordics

Public sector

Sales ~ 45 mEUR in 2017
(Reported in Industry Solutions)

MARKET DRIVERS

- Nordic market of around EUR 350 million growing annually by 5–8% – one of the fastest growing software market segments
- Demand for increased public sector efficiency
- Increased awareness that business supporting tools must be user friendly and easy to deploy
- Compliance and security, including GDPR awareness

COMPETITION

- Evry, Acos, CGI, Formpipe

CASES

CHURCH OF SWEDEN

Digitalizing its document and case management - everything from registering incoming cases to handling documents – enabling employees to work in a more mobile, structured and efficient manner.

GOVERNMENT OF FINLAND

Governmental commitment to build end-to-end support for the legislative process.

TRONDHEIM MUNICIPALITY

A digital-first approach with faster deployment of eServices through standard software compliant with national initiatives – for example, building permissions and eArchiving.

Banking solutions – full-stack solution as a service providing excellent user experience

WHAT IS IT ABOUT?

- **Full stack banking solution as service** – with focus on Nordic SME customers
 - ✓ From modernization to end-to-end services, incl. BPO
 - ✓ **“Turn key” bank**, including all main areas from core banking to Digital Customer Experience

KEY FACTS

- We are among few strategic suppliers for Nordic SME market
- Fully leveraging the **extensive footprint in lending and leasing** by Emic, acquired in 2016, in the Nordics (among top3)
- Including best-of-breed products from Tieto and partners such as Temenos

OUR AMBITION

- To grow annually by 10% (12% in 2017)
- Leading actor in driving Nordic banking ecosystem

DIFFERENTIATION

- **Best-of-breed technology**
- Own IPR and BPO
- Integration capabilities, full stack, cloud

Gaining share

Financial Services

Sales ~ 60 mEUR in 2017
(Credit solution
EUR 20 million)

MARKET DRIVERS

- Standard, simplified products and services to ensure cost efficiency
- Regulatory changes, including PSD2 and GDPR
 - ✓ Ensured compliance to national and international regulations and standards
- Fintech players entering the market
- Interest in BPO continues to grow

COMPETITION

- SDC, Evry, CGI, Crosskey

CASES

AKTIA

Ease, reliability and speed, visible e.g. visible as faster and better handling of loans, through the modernisation of the banking system. Additionally, client is aiming at annual savings of EUR 5 million in IT costs.

FOREX BANK

Tieto's banking solution, comprising online and mobile banking, helps FOREX with Nordic expansion: helps the client keep its leading position in travel money and improves time-to-market – additionally, Tieto renewing the customer experience in their digital channels.

Payments – expansion through international payments, cash mgmt and card software solutions

WHAT IS IT ABOUT?

- Pre-packaged software-based industry solutions for
 - ✓ **Advanced liquidity and cash management** solutions for Virtual Account Management needs of large banks and corporates in Europe, enabling virtual liquidity and cash pooling
 - ✓ **Retail payments**, incl. **instant payments, switching and card solutions** for financial institutions (e.g. Issuers, Acquirers and Clearing houses) – as well as for national infrastructure projects (e.g. National Switching for central banks)

KEY FACTS

- Modular platform based on modern software technology
- Retail Payments and Cards: **globally among top5** with 80 installations in over 30 countries
- Virtual Account Management segment: **global market leader**

OUR AMBITION

- Globally recognized player in payments and cash management solutions
- Annual growth of 10%

DIFFERENTIATION

- Market leading functionality, incl. intercompany loan, centralized multientity payment and collection and funds allocation
- Modular software platform
- Proven scalability

Globally
among top5

Financial Services

Sales ~ 50 mEUR in
2017
(Reported in Industry Solutions)

MARKET DRIVERS

- Digital disruption of global Payments market, driven by real-time money, seamless customer experience and new technologies such as Blockchain
- Cashless economy, use of cards and instant / mobile payments
- Faster time-to-market, accelerated by open APIs
- Regulatory changes, including PSD2 and GDPR

COMPETITION

- Corporate Payments: FIS, D&H, Fiserv, Cashfac, Montran, Clear2Pay
- Retail Payments and Cards: ACI Worldwide, OpenWay, RS/2, TSYS, FIS, BPC
- Instant Payments/Switch: VocaLink, NETS, IBM

CASES

ING BANK

Globally awarded for its smooth, agile cash management solution, provided with our Virtual Account Management solution

KENYA BANKERS' ASSOCIATION

Kenya's first switching platform based on our software. This will help the client develop instant payment services for the 45 member banks

RAIFFEISSEN BANK

Running Card Suite for several countries for acquiring and Issuing

BANK RUSSIAN STANDARD

Running comprehensive set of products in area of Consumer Financing and Merchant acquiring

Production Excellence – Accelerating business with the leading industry solutions

WHAT IS IT ABOUT?

- Optimizing, harmonizing and automating the key processes in Pulp, Paper, Board, Tissue, Converting and Packaging
- **Business renewal based** on a standardized next-generation **ERP solution integrated with best-of-breed industry components**

KEY FACTS

- **Globally leading solution** in our segment with a market share of over 40% and 250+ installations
- Well-recognized **industry software** with Tieto TIPS brand
- **Forerunner in SAP S/4HANA implementations** with industry templates and pre-integrated apps enabling our customers to drive optimization and differentiation

OUR AMBITION

- Expand our position as the globally leading vendor in existing and selected new segments with continuous double digit growth
- Based on existing footprint, become preferred industry partner in business renewal for production focused companies

DIFFERENTIATION

- Globally recognized brand in the industry based on leading applications and constant improvement
- Preferred partner through packaged and integrated full stack offering: from ERP down to automation interface
- Industry focus: understanding of customers' business processes leveraged in our applications and integrated SAP solutions

Globally leading in our segment

Process industry, esp. Pulp & Paper

Sales ~ 35 mEUR in 2017
(Reported in Industry Solutions)

MARKET DRIVERS

- Competition and digitalization require more agility and accuracy – calling for renewal towards better integrated processes and IT systems
- Renewals driven by consolidation and M&As in mature markets – strong IT demand by emerging niche players driving differentiation
- Investments to improve service levels, operational efficiency and to reduce production costs
- Annual growth of the relevant market 5-8%

COMPETITION

- Production Systems: ABB, Honeywell
- System Integration: Accenture, IBM, CapGemini, WiPro

CASES

GLATFELTER

Growth enabled by an integrated IT solution that combines best practice SAP ERP with highly industry-specific planning running on TIPS.

METSÄ BOARD

Global renewal of mill/factory systems - covering production management & optimization, inventory management, sales system, interfaces and automation.

LECTA

Full-scale business system renewal – harmonization and integration of global systems (SAP ERP & MES) driven by Tieto.

Hydrocarbon Management

– the world's #1 solution

WHAT IS IT ABOUT?

- Global software in **the production management and hydrocarbon accounting (HCA)** area – fortified by a predictive tool through the acquisition of Petrostreamz
- A significant player in the upstream and midstream segments of oil&gas
- End-to-end accounting of hydrocarbon (oil and gas) quantities, qualities and ownership from wells via transportation systems until sold to first-buyer

KEY FACTS

- **Recognized by IDC as a global leader in Hydrocarbon Accounting^(*)**
- Global market share of around 40%^(**) and more than 500 licenses sold
- Recognized as global best practice by all large oil companies (super majors, majors and large independents) within HCA domain

OUR AMBITION

- Sustain global leadership within Hydrocarbon Accounting (HCA) domain
- Grow Energy Components business and expand into the Hydrocarbon Management (HCM) area by utilizing hydrocarbon accounting and production data to increase customer business value within decision support

DIFFERENTIATION

- Enterprise software backed by a global service organization offering full Energy Components life-cycle management services
- Fit-for-purpose for all types of operations, allowing Energy Components to be the single chosen HCA solution across global asset portfolios

^(*) Source: IDC Energy Insights 2013

^(**) Source: Rystad Energy market study, 2015

Globally #1
in our segment

Oil & Gas

Sales ~ 40 mEUR
in 2017
(Reported in
Industry Solutions)

MARKET DRIVERS

- Oil price expected to remain low
- Drive to establish new – significantly lower – cost base for all key business processes in the industry
- Cost reducing initiatives and services are in high demand
- Conversion from internal to external low-cost services are attractive
- Environmental shift from oil to gas creates new opportunities

COMPETITION

- HCA Systems: SAP, Schlumberger, P2E/Merrick, Energysys, Quorum
- System Integration: Accenture, IBM, WiPro, TCS, Accord, independents

CASES

CHEVRON

4th largest super major

Application management for the entire Energy Components portfolio across all Chevron assets globally – acting as a driver for Tieto in a highly attractive services niche.

YAMAL

Russian LNG export operation

Deploying Energy Components for managing the extraction and liquidation of gas, optimizing the value chain to sales point, considering all physical constraints and commercial obligations.

APA

#1 Australian pipeline operator

Supporting a significantly revised business model with complexities due to dramatically increased gas production, transport and export thereof – co-innovation by Tieto and APA expanding Energy Components business coverage.

Smart Utility – helping customers succeed on the future energy market

WHAT IS IT ABOUT?

- Customer Information System supporting automation of processes, e.g. **sales, self-services for customers, smart metering management, customer care and billing**
- Enhanced with new ecosystem services enabling business in new digitalized energy industry and tap into new revenue streams from emerging services such as solar panels, storage and E-vehicles

KEY FACTS

- **#1** in CRM and Billing for utilities in the Nordics
- **Over 1/3 of Nordic customers** managed via Tieto application
- Contributed to the roll-out of **>1 million Smart Meters**
- Own IPR with partner software, such as Microsoft, embedded

OUR AMBITION

- **Leading partner** for business renewal in in the Nordics and selected EU markets
- Grow faster than the market by a state-of-the-art SaaS offering for energy retailers and distributors

DIFFERENTIATION

- As the largest player in the Nordics we have a strong resource and competence base
- Customers provided with the full stack of Tieto IT services

Leading in the Nordics

Energy utility

Sales ~ 30mEUR in
2017
(Reported in Industry Solutions)

MARKET DRIVERS

- Regulation driving roll-out of smart metres, market data hubs and energy efficiency improvements
- Low energy prices result in increased competition –automation and digitalization needed to improve efficiency and customer care
- Analytics increasingly important driver due to micro generation and renewables – and connected houses
- Market growth around 2% (CAGR 2015–2020)

COMPETITION

SAP, Enoro, Empower, CGI

CASES

E.ON

Smart Utility to support the collection of meter values including field services in Skåne with around 150 000 meters – helps E.ON increase automation and increase customer quality while reducing costs

FORTUM SWEDEN

Smart Utility SaaS solution optimizing client's core business activities in billing, customer service and sales. The new system serving ~1.5 million customers

VATTENFALL

Smart Utility to support its Retail and Distribution business in the Nordics – digitalizing and automating core business processes such as sales, customer services, work flow management and billing.

Cloud services – bridging clients' IT with private and public cloud in a hybrid model

WHAT IS IT ABOUT?

- Tieto OneCloud, our multi-cloud solution, **integrates public cloud, private cloud and traditional technologies**
 - ✓ Next-generation cloud solution based on our private cloud capacity in own data centres combined with public cloud
 - ✓ Enables hybrid capacity services
 - ✓ **Enables cost-efficient business innovation, agility and effective IT operations** through seamless orchestration of clients' workloads across private and public clouds

KEY FACTS

- OneCloud, launched at the end of 2016
- Partners include Azure, AWS as well as a number of cloud-born applications such as Workday and Salesforce.com
- **Forrester named Tieto as a Strong Performer in hosted private cloud services in Europe**

OUR AMBITION

- To grow faster than the market
- Maintain our position as customers' preferred partner for business renewal

DIFFERENTIATION

- Strong partner for customers' business renewal, providing cost efficient IT combined with agile business development
- Nordic vendor with prominent technology knowhow, service capabilities and large customer base

Among leading cloud companies in the Nordics

Across all industry sectors

Sales ~ 110 mEUR in 2017
(Reported in TSM)

MARKET DRIVERS

- All businesses need to accelerate business change and drive efficiency
- Infrastructure cloud market growth of 15–20% comprises
 - ✓ public cloud adoption – growth 25–30%
 - ✓ private/enterprise cloud – growth 10–15%

COMPETITION

- Atos, CGI, Dell, DXC, AWS, Evry – local vendors such as Basefarm

CASES

LYSE

Tieto to deliver cloud solutions, infrastructure operations and data centre services – also involves significant R&D and innovation initiatives in a number of areas.

KESKO

Kesko and Tieto to strengthen partnership to drive efficiency through modernized IT and to develop digital services and customer experience further.

OUTOKUMPU

Tieto chosen to deliver next-generation infrastructure services – additionally, with Tieto's solution Outokumpu enhances its competitiveness by improving operational efficiency through global standardization and decreased time-to-market.

Customer Experience Management – to enhance user experience by improved and automated customer processes

WHAT IS IT ABOUT?

- We help our customers across industry sectors to **accelerate their business by designing and building digitally empowered user experience** – hence, help clients address quickly evolving customer behavior
- Holistic approach to provide customers with support from vision to value

KEY FACTS

- Clients across industry sectors, incl. Retail, Finance, Telecom, Manufacturing
- Major player in Finland, growing in Sweden
- **Tieto's own IPR built on standard technology**, incl. Hybris, Genesys, Microsoft, IBM

OUR AMBITION

- To grow annually by around 20% (26% in 2017)

DIFFERENTIATION

- Unique position based on competencies combining
 - ✓ **Holistic approach and end-to-end renewal**
 - ✓ **Agile methods driving continuous renewal**

Across industry sectors

Sales ~ 40 mEUR in 2017

MARKET DRIVERS

- Investing in user experience among top priorities for clients across industries due to the prompt transformation need – CX one of the strongest trends in the Nordic countries
- Nordic market growing annually by around 20%

COMPETITION

- CGI, Accenture, Siili, Solita and Reaktor

CASES

UPM

UPM provided with CX Cloud, next-generation customer experience solution improving the client's global marketing and sales through enhanced online experience.

INDISKA

A Swedish retailer, boosting its e-commerce offerings with new online shop powered by SAP Hybris. The new solution improves the online offering with an easy-to-use mobile shopping experience, a faster site performance, and a re-designed check-out.

KALMAR

Kalmar enhancing its future B2B eCommerce platform for better collaboration and enhanced user experience for customers worldwide – also helping Kalmar increase online sales and reduce sales administration.

Security Services – Visibility, Simplicity, Protection.

WHAT IS IT ABOUT?

- A 360° approach to predict, prevent, detect and respond to security threats of the digital era
 - ✓ **Visibility** – Awareness and actionable foresight
 - ✓ **Simplicity** – Complete turn-key security solution
 - Protection** – Best-of-breed security technologies

KEY FACTS

- **Vendor-neutral provider of managed security services**
 - ✓ pre-integrated package of security solutions
 - ✓ products and services from our own portfolio as well as from a broad a partner ecosystem
- Security Services unit started in January 2016
- Services used by over 100 customers

OUR AMBITION

- To grow annually by around 30%
- **#1 Managed Security Services Provider** in the Nordics by 2020

DIFFERENTIATION

- Modular, pay-as-you-go security services portfolio
- No vendor lock-in – truly next-generation managed security services
- Hybrid cloud capability – on premise, in the cloud

Across all industry sectors

Sales ~ 10 mEUR in 2017
(Reported in TSM)

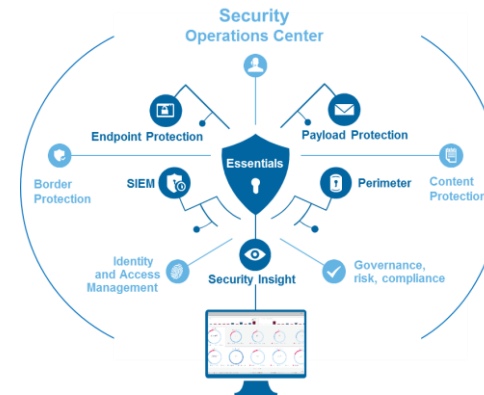
MARKET DRIVERS

- Nordic market of over EUR 4 billion growing annually by 10–15%
- Preparations for GDPR – market of ~EUR 2 billion in the Nordics

COMPETITION

- Atos, CGI, Dell, HP – and local players, e.g. Nixu, Sentor, Cygate, Combitech
- Some product vendors

Tieto Security Operations Centre monitoring business critical assets and security events 24/7



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