# Report on NTT

About the Company
- NTT is a global technology and business solutions provider
- The company believes in applying technology for good and provides services that help clients accelerate their growth and develop new business models
  - Services includes digital and business consulting, technology and managed services for cybersecurity, applications, workplace, cloud, data center and networks
- Their mission: to provide services that improves people lives and clients success
- NTT produces $109 billion in revenue, has more than 310,000 employees in over 80 countries and regions
- Their services are delivered in over 190 countries and regions and they serve 80%+ of Fortune Global 100 companies and thousands of other clients and community around the world
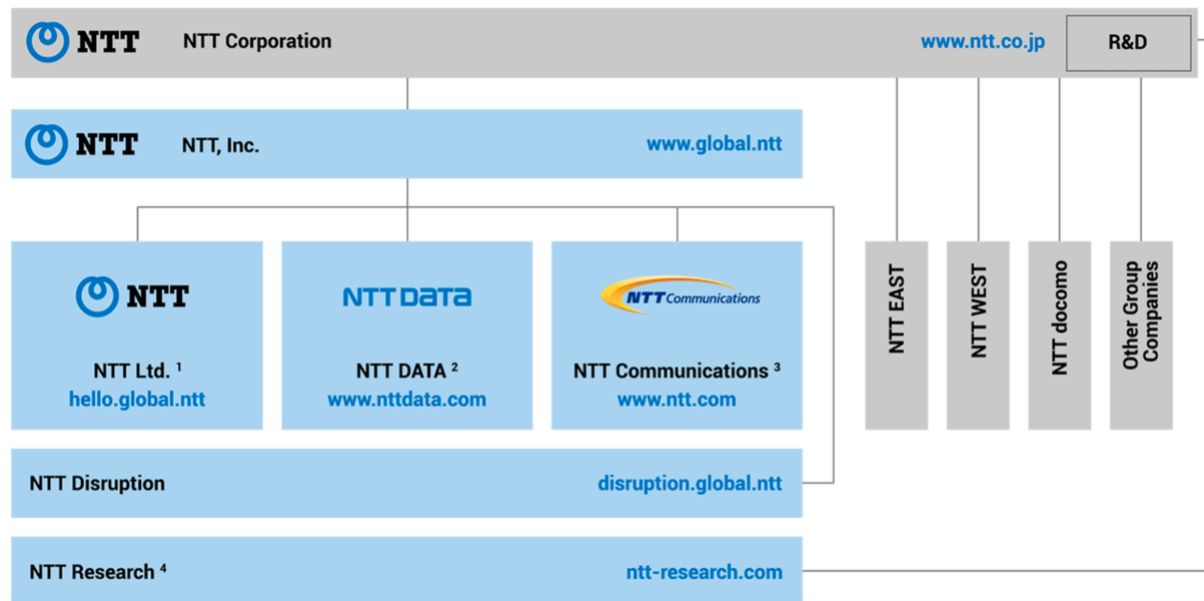
- They are the winner of 2018 Technology Services Industry Association TSIA STAR award for Transformation of Support Services
- In 2018, they received the ABSL Diamond award for Business Innovation in Global Delivery Center Prague
- Industries which the company is affiliated with: financial services and insurance, healthcare and life sciences, retail and CPG, public sector, manufacturing and automotive, telco, media & sports/entertainment, travel and transportation

Expertise
- Managed Services

- Security
- Cloud Communications
- Cloud Infrastructure
- Global Data Centers
- Consulting Services
- Support Services
- Technical Services

Managed Services
- Part of their business model is implementing SMART solutions by helping business:
    - Analyze their data
    - Discover powerful insights and trends
    - Generate predictive analytics
    - Make data-driven decisions
    - Enhance situational awareness
    - Improve responsiveness
    - Determine efficient assignment of resources
    - Save costs
- They also provide services that help companies navigate moving forward into a digital future
    - Smart communication for smarter workspaces
        - Cloud communications that enable collaboration for improved efficiency, productivity, and engagement
    - Business-aligned technology services
        - Simplifying the management of day-to-day operations
    - Managed Hybrid Infrastructure Services
        - Delivering a unified experience throughout hybrid IT environments
        - Offer comprehensive management and monitoring of on-premises, cloud, and hybrid infrastructure
        - NTT's highly trained vendor-accredited experts, processes, and tools manage the day-to-day operations of ones IT infrastructure
        - This allows a company to focus on strategic objectives
    - Managed Security Services
        - End-to-end security infrastructure and operations management
        - Threat detections services, enterprise security monitoring, security device management, security operation center-as-a-service (helps reduce business risks, administrative burden and costs, with flexible compliance reporting and detection of cyberthreats), web application firewall-as-a-service, vulnerability management
    - Managed Network Services
        - Proactive, automated, near real-time monitoring and operational management of multivendor, multi-technology enterprise networks

- Provide skilled people, automated processes, and management tools to deliver consistent service levels and near real-time data-driven management insight
- Managed SD-WAN Services, Managed Services for Enterprise Networks, Managed Wired and Wireless LAN Services
- Managed IT Services
  - Comprehensive managed IT services that match existing IT investments and resources with client infrastructure support
  - NTT's IT platform solution is used to manage business processes and meet regulatory and compliance standards
  - They support business processes across IT, HR, sales, and procurement and provide a single view of real-time information across an enterprise
    - They may then provide recommendations to better align people, processes, and systems
  - Their ITIL-managed service desk also provides clients with a Client Service Manager and a robust team knowledge specialist
    - The service desk provides event, incident, and problem management resolutions and monitors IT processes, performance, and achievement of service level agreements
- Managed Collaboration and Productivity Services
  - Maximize investments in collaboration technologies and help people work productively together anywhere and anytime
  - Related services include:
    - Cloud services for Cisco
    - Hosted unified communication - a single, unified collaboration platform capable of delivering across multiple channels
    - Managed collaboration services - a single managed service covering Cisco, Microsoft, and other collaboration environments
    - Managed desktop services, managed productivity services
- Managed Application Services
  - End-to-end management of the enterprise applications
  - NTT's Managed Application Services improve system performance by up to 7 times that of legacy environments while ensuring a company's custom applications are available and secure
  - Services support custom business applications developed in a variety of web frameworks: Java, J2EE, ASP.NET architectures
  - Support services are available around the clock
  - Related services include:
    - Managed healthcare application services – scalable, agile, mission-critical ICT services for the healthcare environment enhancing security, governance, and risk compliance

- - Managed Oracle E-Business Suite Services – improve performance and reduce cost with complete end-to-end managed cloud services for Oracle applications
  - Managed Oracle Hyperion Services – minimize cost and complexity in Hyperion application environments
  - Managed Oracle JD Edwards Services – leverage JD Edwards Investments in the cloud with greater value, choice, and confidence
  - Managed Oracle PeopleSoft Services – scalable, secure, and cost-effective PeopleSoft hosting
  - Managed SAP Services – A comprehensive approach to managing core system functionality for SAP applications hosted on Azure
  - o Communications Lifecycle Management
    - Enhance the management of all communications expenses, allowing one to make better strategic decisions
    - Their ISO 27001 cloud-based platform and managed services provide companies with the insight into their communications service and asset lifecycle with data related to what they own, how much they spend, their utilization, usage behaviors, and adoption, allowing them to make more strategic decisions
    - NTT provides evidence-based suggestions
    - They look at optimizing network services, local and global voice services, enterprise mobility services, Internet of Things services, and conferencing and collaboration services
  - o Managed Customer Experience Services
    - Omnichannel customer journey delivering advocacy and improved customer loyalty through design-based engagement and connected conversations
    - They will help companies identify the optimum service solution to achieve their strategic business outcomes
    - They offer choice and customization of on-premise, cloud, or hybrid services
      - They will also plan and implement the migration of workloads to optimize efficiencies
    - Their tools and process monitor and manage multivendor platform and application SLAs
  - o Software-defined Infrastructure Lifecycle Services
    - New business demands are driving the need for software-defined infrastructure (SDI) to support applications, innovation, and agility
    - SDI should allow organizations to optimize their IT operations, increase efficiency and improve infrastructure availability while reducing costs

- NTT's SDI Services support multi-vendor, software-defined programmable infrastructure investment to ensure business demands are met
- Related services they offal
  - Lifecycle management
    - Simplifies lifecycle management across vendors by providing a consolidated view of ones license estate through NTT's Digital Wallet
  - Policy Deployment and Compliance
    - Delivery of consistent multi-vendor technical services for network redesign and deployment
  - Assurance and Operational support
    - Offloads operational management tasks from in-house staff, engages in problem management with root cause analysis, and provides recommendations and compliance management by leveraging the digital intelligence, automation and orchestration delivered through NTT's service platform
  - Business Outcome Management
    - Enables continuous and ongoing operational improvement in multi-vendor lifecycle management by providing recommendations to optimize purchases and improve compliance and performance based on NTT best practices

Responding to COVID-19
- NTT Ltd. offer agile solutions for business continuity through these difficult times
  - Helping companies secure remote working for their staff
  - Helping companies ensure a secure, high-performing network during times of uncertainty
  - Helping companies transition to virtual and home working with remote CX agents
  - Helping companies switch planned events to digital events
  - Helping companies manage security staff shortages
- NTT DOCOMO and NTT Communications announced that they would provide customers who are 25 or younger with some data communication services free of charge to support the use of online learning using smartphones
- NTT Group's Corporate sports teams and fitness trainers have collaborated to produce a series of fitness videos which have been made available to view free of charge
- In March, each NTT Group company in Japan announced that it will extend payment deadlines for customers who are having difficulty paying their bills for services by filling out an application

NTT Data Healthcare
- More than 50 years of experience in the healthcare services
- Annual research and development investment of about $3.6 billion
- NTT Data healthcare solutions support nearly 80 million doctors, patients, and employees in the U.S. alone
- In 2019 they ranked the 2nd largest and most experienced global IT services provider in healthcare by HfS Research and number 1 in ranking for providers and the greatest geographical coverage
- In October 2020, they were recognized by Everest Group as a leader in its Healthcare Provider Digital Services PEAK Matric Assessment 2020
  - They were recognized for their ability to deliver services successfully and the impact it has created n the market
  - They were specifically cited for their Nucleus for Healthcare solution as well as their collaboration on a COVID-19 Patient Monitoring solution
- Services:
  - Health Plans
    - Their health plan services connect both members and providers
    - Helps clients make their health plan smarter and predict patient care before its needed by harnessing digital solutions
    - They provide business intelligence and analytics for health plans, business process solutions, healthcare staffing solutions
    - They also provide services related to enrolment and billing, health plan consulting, and platform enablement
  - Healthcare Providers
    - Help clients improve patient outcomes, create exceptional patient experiences, transform medical delivery processes and lower costs
    - They do this by providing services related to business intelligence and analytics, enterprise IT and security consulting, healthcare consulting services, managed cloud and advisory services, nucleus for healthcare, enterprise imaging and analytics, patient engagement
  - Life Sciences
    - Their goal is to help organizations gain the most value from their investments
    - Help clients make precision medicine and value-based contracting a reality, helping people live longer, healthier lives
    - Related services include: Commercial operations, HCLS insights powered by Nucleus, Learning solutions, PAIS Solution for Life Sciences, revenue management managed services, and supply chain integration and analytics
    - Nucleus for Healthcare is a single platform for data integration, automation, and AI
      - It aligns digital initiatives along the healthcare value chain while focusing on outcomes

- Clients include: Harvard Pilgrim Health Care, East Tennessee Children's Hospital, Community Health Plan of Washington
- In August of 2019, NTT Data Services announced a collaboration with Google Cloud to develop next-gen healthcare solutions designed to improve patient experience, while creating more efficient operations and reducing costs for providers and health plans
  - They are working together to deliver digital offerings in cloud, analytics, and AI that enable providers to gain better access to insights and solutions needed to foster better patients outcomes
  - These solutions will also help health plans better engage with members and providers

NTT Nucleus for Healthcare Solution
- On July 20, 2020, NTT DATA Services announced a new alliance with Teladoc Health, R1 RCM, Enli and VisitPay to build **Nucleus for Healthcare –** a framework that incorporates best-in-class solutions to help accelerate clients' digital transformation journeys
  - Their goal is to empower healthcare organizations to maximise quality and cost outcomes in the emerging value-based healthcare economy while creating a seamless experiences across the healthcare continuum
- Teladoc Health
  - A word leader in virtual care – they directly deliver millions of medical visits across 175 countries each year through the Teladoc Health Medical Group
- R1 RCM
  - A leading provider of technology-enabled revenue cycle management services which transform and solve revenue cycle performance challenges across hospitals, health systems, and group physician practices
- Enli Health Intelligence
  - A market leader in population health management information technology
  - The company developed software tools for value-based care analytics and care coordination
- VisitPay
  - A leader in patient financial engagement
  - The company's third-generation cloud-based platform is used by the nation's largest and most innovative health systems to deliver transparency, choice, and control to patients managing healthcare payments and transactions
- Nucleus for Healthcare provides advanced digital capabilities across the care delivery continuum
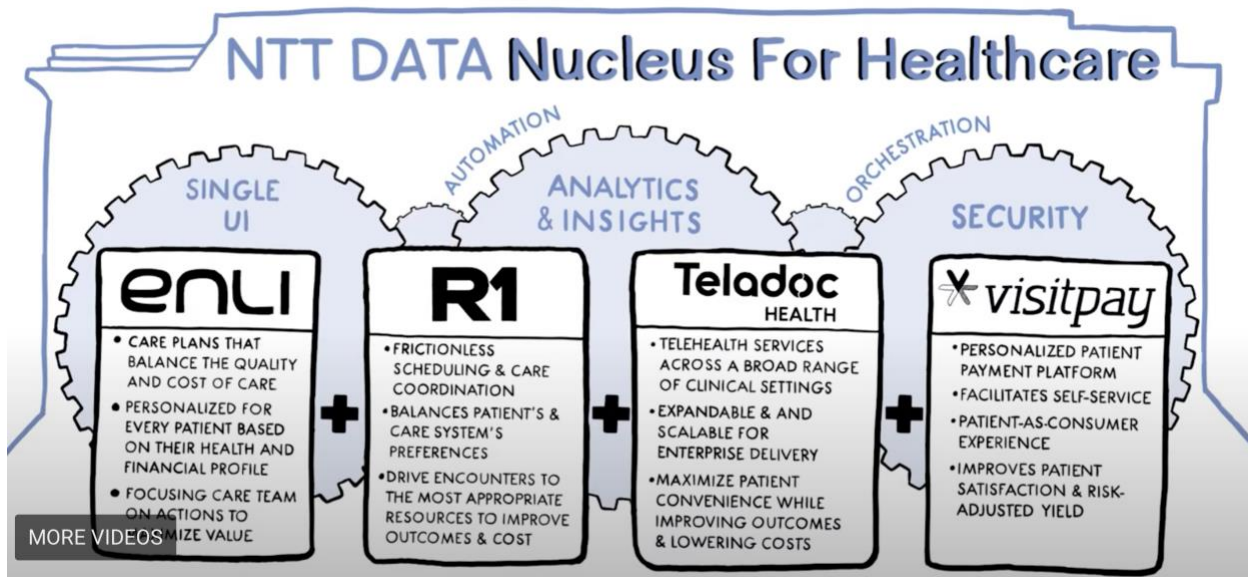
- It is powered by NTT DATA's cloud-based intelligent enterprise platform
  - This provides analytics, automation, and systems integration capabilities
- NTT Data Service's robust analytics and insight engine, protected by industrialized security and data protection frameworks and delivered through a simple, consistent, and thoughtfully designed interface, strengthens the connections between clinicians and care teams with their patients
  - This transformation allows clinicians and care teams to focus on the work they love while making healthcare more accessible and affordable
- Hospitals can use Nucleus for Healthcare to accelerate their digital agenda using healthcare-focused digital services.
- NTT DATA's Healthcare Nucleus can help healthcare providers with the following things:
  - *Efficiency*: improve patient and caregiver satisfaction and loyalty while maximizing network capacity
  - *Experience:* Orchestrate patient care plans and scheduling according to value-based care outcomes that benefit patient and provider
  - *Engagement:* empower clinicians and care teams with new and easier ways to engage their patients transcending physical locations and geography
  - *Growth:* Drive revenue growth for healthcare systems and reduce costs across the value chain
  - *Care:* Allow clinicians and care teams to focus on patients while making healthcare more accessible and affordable
- Due to the COVID-19 outbreak, more focus is being put on virtual care and healthcare providers are being forced to jump on the digital bandwagon to meet the demands faced by the healthcare ecosystem

COVID-19 related Partnerships and Services
- NTT DATA has an Accelerating Smart Platform that helps businesses incorporate Smart technologies to go back to work safely
  - The platform can take data from any source and perform a "health check" to determine if an individual can safely return to work, school, or community interaction
  - It can also be configured to send notifications of possible exposure
  - The platform can help with occupancy and notifications, smart health checks, protection and social distance compliance, contract tracing, data analysis,
- NTT Data developed a fully mobile, end-to-end solution to test and trace City of Austin citizens, first responders, and testing site workers
  - The user experience begins on the city's public health crisis website, where a chatbot helps determine if one should get tested
  - It also guides people through registering, finding a testing location, and scheduling a test
  - The case tracker then records and communicates test results and manages a patient's care and follow up
- NTT DATA Services has partnered with Enli to deliver a COVID-19 Care Coordination (EC3) program
  - A patient management program designed to record, manage and monitor patients art risk for, or who have already contracted, COVID-19
  - EC3 program allows clinical users to assess symptomatic and high-risk individuals to determine if self-isolation is safe and practical
  - It also facilitates periodic care coordination check-in calls to detect worsening symptoms and possible need for in-person care
  - It is a secure, HIPAA-compliant web-based application and can be configured in 2 to 48 hours
  - Daily updates occurs in alignment with CDC guidelines and real-time user feedback
    - This allows clinicians to make informed decisions on when to discharge individuals from isolation
  - EC3 us built on Enli's Value Navigator platform and deployed by NTT DATA
    - NTT DATA serves as a systems integrator, providing technical, staff augmentation and consulting services
  - EC3 allows care teams to leverage an intelligent care plan to guide patients to the most clinically appropriate intervention
  - For health plans, EC3 provides member support by rapidly deploying evidence-based care management to meet the demands for COVID_19 management
- NTT DATA has partnered with Sharecare AskMD to deliver a COVID-19 chatbot screener – a helpful way for the general public to anonymously self-screen for the novel coronavirus

- o It is available for any organization in the U.S to embed or link to on their website for their own users to take anonymously
  - o At the hosting organization's discretion, it can then provide a customizable results summary screen to direct people to additional resources
- NTT DATA has partnered with DataWalk to deliver an intelligent data correlation platform for pandemic response management – a solution that harnesses data to give advance notice of the most likely evolution of the pandemic in a region and analyze the effectiveness of response
  - o The solution helps identify virus super-carriers and people at the highest risk of infection and predicts disease outbreaks and equipment or medical staff shortages
  - o It can also help verify frequency of testing and coverage for people who deliver essential services
- NTT DATA Services' Intelligent Data Capture for PPP processing helps financial services organizations meet the challenges of managing workflows, documents, and resources to speed processing and ensure compliance
  - o It combines data expertise, business processes and platforms to capture, index and package small business data to speed loan processing, improve data accuracy, and reduce risks for banks and for borrowers
- NTT DATA has a variety of call center solutions that can be deployed rapidly to help businesses respond to the needs of their clients
  - o Ex. facilitating access to critical systems to accommodate teleworking, introducing automation tools like chatbots, helping to add qualified staff to support exponential demand
- NTT Data offers a holistic listening and insights service that that seizes both social listening and social intelligence
  - o This solution gleans data from social media platforms and helps business gain the insight they need to support customers, constituents, and communities
- Nucleus for Unified Clinical Architecture (UCA) allows providers to contribute anonymized studies related to COVID-19 to promote research and development of image diagnostic technologies with use of AI through online collaboration
  - o This removes bias in AI training and algorithm evaluation
  - o It is predicated on NTT DATA Services Advocate AI program for provider evaluating AI in all types of clinical imaging
  - o By initiating a public effort around early detection of COVID-19 cases, the test data set will realize the development of decision support AI for COVID-19
- Cloud Accelerators
  - o The COVID-19 pandemic has made many organizations turn to cloud-based solutions
  - o NTT DATA's cloud accelerators can deploy complete cloud environments in 10 days or reduce recurring cloud costs in 30 days

- o They can improve client agility, user experience and speed to market through the rapid development of cloud-native applications or legacy systems transformations
- Automation services backed by Nucleus
  - o Help business accelerate their automation initiatives for contactless services and operations, while providing the intelligence to design new business models in a quickly evolving business environment
  - o Using NTT Data's proprietary toolsets and partnerships with niche vendors, businesses can automate their processes across platforms and industries

Recent News
- At the end of December, 2020, it was announced that NTT Global Data Centers American bought a 210,000-square-foot industrial warehouse in North Natomas, which could eventually be developed into its 4th, large-scale co-location centre in the region

NTT Corporation and SAP SE deepen their alliance -December 16, 2020
https://www.dbta.com/Editorial/News-Flashes/NTT-Corporation-and-SAP-Deepen-Alliance-144366.aspx
- NTT Corporation and SAP SE are forming a strategic alliance that creates a holistic partnership in which both companies serve as each other's customers, suppliers, and co-innovators
- They have already worked together for over 30 years
- NTT and SAP will look to co-innovate and jointly go-to-market with connected value chain solutions, which will result in a more unified and automated collaboration across customers, suppliers, retailers, manufacturers, and logistics providers
  - o The digitally connected value chain will help improve performance, transform the customer experience and enable new business models
- NTT plans to leverage its unique global value proposition to deliver services that complement SAP's software offerings as a global partner
- They also plan to automate a series of operations a well as advance the group's management ability through standardizing business processes and enabling data-driven business execution by adopting SAP S/4HANA and AP Ariba solutions

NTT DATA Services to Acquire Hashmap to Advance Data-driven Analytics and AI Solutions – December 11, 2020
https://www.businesswire.com/news/home/20201211005328/en/NTT-DATA-Services-to-Acquire-Hashmap-to-Advance-Data-driven-Analytics-and-AI-Solutions
- NTT DATA Services entered an agreement to acquire Hashmap
  - o This acquisition will add deep technical expertise with modern data platforms to support analytics, AI, and machine learning
- Hashmap is a Snowflake Premier Partner and has partnerships with Databricks and several other leading cloud, data and technology providers

- These partnerships, together with NTT DATA's existing relationships with companies like Snowflake and Dataiku, will greatly expand its ability to accelerate clients' digital transformations journeys and establish a trusted data foundation to operationalize and scale AI
- Hashmap's strength in deep technical expertise across modern cloud data environments aligns with NTT DATA's strong digital capabilities
- Hashmap's clients span a range of industries, including financial services, healthcare, technology, and energy

NTT Launches London 1 data centre – December 14, 2020
https://www.information-age.com/ntt-launches-london-1-data-centre-tripling-uk-data-centre-footprint-123493098/
- Following the confirmation of a trade deal between the UK and Japan, NTT launched a new London 1 data centre
- It is expected that the new NTT London 1 centre will go on to employ 100 people with technical and operational skills
- The new centre is based in Dagenham, East London, close to an already established internet hub
- The new centre will have 25,600 sqm of 1T space and a maximum 1T load of 64MW once fully operational
- Its operations will provide businesses with physical and technical infrastructure that's supported by N+1 UPS systems and generator backup, while promising to only utilise guaranteed renewable power.
- In addition, London 1 includes a Technology Experience Lab, which will be used to test new technologies, and validate hybrid cloud services and innovations faster, at a lower cost.
- The technology provided by the centre will eradicate the need for compressors and refrigerants, which can have a significant impact on global warming, and will deliver a power usage effectiveness of 1.2, which is aligned with industry best practice.

NTT DATA Services Drives US$125M in Value with Procurement Solutions from SAP – December 8, 2020
https://www.prnewswire.com/news-releases/ntt-data-services-digitally-transforms-procurement-drives-us125m-in-value-with-procurement-solutions-from-sap-301181901.html
- SAP SE announced that NTT DATA Services has adopted the full suite of intelligent spend management solutions from SAP (including SAP Ariba solutions, SAP Fieldglass solutions, SAP Concur® solutions
  - The procurement solutions created an intelligent, dynamic and strategic function for procuring direct and indirect materials, services, and MRO
- Within the last 3 years, NTT DATA has driven US$125 million in value with the solutions it adopted

- SAP Ariba solutions help NTT DATA manage over $1 billion in spend with over 3,700 suppliers across more than 50 countries
  - SAP Fieldglass solutions help manage over 1,300 US based contingent workers
- SAP solutions have enabled NTT DATA to standardize purchasing processes and supplier management, enhance visibility into stakeholder priorities and supplier spend and performance, and maximize cost-saving opportunities through competitions and volume discounts

intelligence expands into Finland - December 1, 2020
https://www.nttdata.com/global/en/media/press-release/2020/december/itelligence-expands-into-finland-by-acquiring-leading-consulting-company

- itelligence transforms IT landscapes and business processes through the combination of innovative SAP software and technology
  - It supports SMEs and large enterprises in every phase of their digital; transformation
  - Their range of services includes IT Strategy and transformation consulting, software deployment and implementation, as well as application management and managed cloud services
- itelligence is part of the global NTT DATA group and employs about 10,000 people across 28 countries
- In 2019, itelliegence generated about 1 billion euros in total revenues
- itelligence is expanding its presence in the Nordic region as it takes over the consulting firm Pasafin in Helsinki, Finland
  - Pasafin was founded in 2005
  - It is a well-known Finnish consultancy business that decided early on to specialize in consulting services for cloud-based SAP solutions, such as SAP SuccessFactors for the field of human capital management
- itelligence will continue to pursue the ambition of being the preferred SAP Full Service Provider in the Nordic region
-