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DATAART PROFILE

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OVERVIEW

DataArt is a leading provider of high-end software development services for financial, telecommunications, media and travel industries, with a large engineering base in Eastern Europe. By applying a solid combination of offshore talent with deep industry-specific knowledge, DataArt helps clients to optimize time to market and to minimize software development risks in mission critical and knowledge intensive systems.

In 2006-2008, DataArt was named one of the top emerging outsourcing providers worldwide by BusinessWeek, CMP's Global Sourcing 100 and by International Association of Outsourcing Professionals. Headquartered in New York City, DataArt runs state-of-the-art R&D centers in Russia and the Ukraine and maintains offices in London, UK.

Founded in 1997, DataArt is a full-cycle software development company, providing dedicated service at every stage of the project – from the initial specification to final stages of development and 24x7 support. DataArt's New York headquarters oversees sales and communications strategy and provides client and project management leadership.

DataArt's four development centers in Eastern Europe employ world class talent and utilize proven development methodologies assuring timely delivery of advanced technology solutions for our customers. All of DataArt's software engineers hold a Master or a PhD degree from top engineering schools and possess over five years of industry experience. DataArt is a Microsoft Gold Certified Partner and has been voted the Best IT Employer by multiple industry groups.

MAJOR MILESTONES

DataArt continues its growth, steadily increasing revenue and further expanding its development force in Eastern Europe. In 2007/08 the company achieved the following milestones:

- Selected to Rising Star category, Global Sourcing 100 by IAOP for the third year in a row
- Named Top Ten European Service Provider by CMP's Global Services 100 for the second year in a row
- Continued revenue growth at 70% annually
- Opened two R&D centers in the Ukraine, in the cities of Kharkov and Kherson, doubling total workforce
- Secured a minority stake private equity investment
- Established advanced training program in finance, quantitative engineering and financial technology
- Reached 2,000,000 billable hours mark
- Launched Online Travel Solutions practice
- Launched Microsoft Dynamics CRM practice
- Signed several major new clients, including Misys, CitiIndex, Standard & Poor's, Hedge Speed Technologies, Cyrus Capital Management
- Received Mobility Solutions and Business Process Competencies as Microsoft Gold Partner
- DataArt Financial services practice grew at 150% rate
- Featured in several cover stories in the industry press



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BOARD OF DIRECTORS/MANAGEMENT TEAM

Eugene Goland, President (New York)

Goland is a founder of two profitable technology companies with offshore operations, including Mail.ru – the largest online portal in Eastern Europe with over 50 million users. Goland has over seven years of top executive experience combined with various C-level roles. As CEO of Mail.ru, Goland structured the company's operation to become the first profitable company in the sector, while preserving the market share (30%) and growing together with the market. He holds MS in Computer Science from NYU, and an Executive MBA from R.H. Smith.

Michael Zaitsev, CEO (New York)

Zaitsev is a serial entrepreneur with a broad network of contacts in the investment and business communities of the U.S., Europe and Russia. He is a co-founder and former VP of Business Development of Mail.ru. Previously, Zaitsev launched and managed operations of a number of successful ventures in Russia, including WebWorks LLC, an international Internet consulting firm with offices in New York and Moscow. He holds an Executive MBA from Harvard Business School.

Michael Zavileysky, COO (St. Petersburg)

Zavileysky has been Chief of Russian Operations at DataArt since 1998, and became DataArt COO in 2003. He is the driving force behind DataArt's expansion into the regions, and currently oversees operations of all four R&D centers. Zavileysky has been a member of the Board of Directors since 2002. His core responsibility is human resources and risk management, as well as business development. Zavileysky has a Master of Science degree in Physics from St. Petersburg State University, and holds an MBA from Stockholm School of Economics. He is an author of over 40 papers and articles, and a frequent speaker at industry events.

Alexei Miller, EVP (New York)

Miller is Executive Vice President at DataArt, and has been with the company' since 1997. He has been at New York headquarters since 2002. Miller has been instrumental in building the company's Financial Technology practice, which he currently leads. He is in charge of building and managing a framework of outsourced projects for financial clients' mission critical and knowledge intensive systems. These include order management and allocation, portfolio analysis, risk management, CRM, real-time market data access and support for STP infrastructure. Miller holds MS in Mathematics from St. Petersburg State University. He is often quoted in the media on the subject of financial technology outsourcing and is a frequent speaker at international industry events.

Alexey Filimonov, CTO (St. Petersburg)

Alexey Filimonov has been the head of production in DataArt's R&D offices since the company's inception. Filimonov's expertise and knowledge led to DataArt's participation in Microsoft .NET Early Adopter Program (.NET EAP), which resulted in company's certification as a Microsoft Certified Gold Partner. Filimonov holds a Master of Science degree from Saint Petersburg State University of Information Technology, Mechanics and Optics.



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DATAART HISTORY

DataArt (www.dataart.com) was founded in **1997** by a group of software developers in New York City and St. Petersburg, Russia. We believed we could offer our talents in Information Technology to the growing global market. DataArt's initial achievement was the establishment of client-centric values and the policy of attracting the best IT talent. The creation of a professional IT outsourcing organization coincided with learning the specifics of the rudimentary concept of "off-shoring"

In **1998** we launched a number of initiatives to address off-shoring risks. We developed a web-based project management tool. Now in its third generation, the tool allows real-time collaboration, reporting and planning. A number of our clients found the tool so useful that they decided to use it for their internal needs as well. We have initiated the still surprisingly rare feature of hour-by-hour reporting between DataArt's team and our clients. We setup a 24/7 support line as we strive to allocate immediate attention to all issues. In some cases, we shifted the work-day of the development team to be on the same schedule with our client. We realized the importance of a centralized and accessible location, and rented a Park Avenue office in New York City. **Mail.ru** was launched, currently the largest Web portal in Eastern Europe with over 50 million users.

Having focused our skills on the Internet technologies, in **1999** we started winning sizable jobs. This was a period of rapid growth as the company expanded to almost 200 employees. It also provided us with a few good lessons in what not to do during high rates of expansion.

2000 was the year of the NASDAQ meltdown. This meant downsizing for our clients as well as for us. We decided that our top priority was to keep the core team. While some downsizing was unavoidable, we all took salary cuts in order to keep as many people on board as we could. This was a painful experience but it served to further refine our values and to teach us many important lessons. We consider this time to be a decisive period in the company's maturity. This was the year we established partnerships with a number of major software vendors, the most noticeable of which is the involvement with Microsoft .NET. When Microsoft introduced its .NET Early Adopter Program in November of 2000, DataArt was selected from fewer than 40 software companies worldwide to participate.

In **2001** we realized that times had changed and that the Internet business was not the only market for our services. We focused on brick-and-mortar businesses and started to invest in education and technical excellence. This was the year we won a large scale project from the city of New York.

In **2002** we established franchise offices in London and Silicon Valley. This was an important milestone in the quest for achieving a local presence while engaging in the off-shoring model. Today, partnerships are a very important component of our model and are bringing in a significant share of the new business. It was in 2002 that we realized business analysis is another necessary component of our service offerings. We invested in learning the specifics of various industry verticals while tailoring our processes and offerings to fit our client's special needs. We established effective feedback channels and acquired knowledge in the printing and medical office automation sectors.

The initiative to better understand the clients' needs led DataArt to the renewed success in **2003**. For the first time since the NASDAQ meltdown, we resumed the expansion of our development team. We hired a full time English tutor for an on-going language program. We have established working relations with the American Chamber of Commerce and several Industrial off-shoring organizations. Dan and Bradstreet assigned a "financially strong" rating to DataArt.

2004 was a breakthrough year for DataArt, as the company doubled its revenue and achieved a tremendous success in two key areas – dedicated service offerings for Small and Mid-size Businesses (SMBs) and for asset management institutions (hedge funds). We established a long term relationship with over 20 new clients; grew our



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team to 165 people, moved the R&D center to a new state of the art 13,500 square foot office and passed a 50,000 billable hours mark. DataArt won the Russian Software Excellence Award for Employer of the Year.

DataArt also launched several important initiatives in 2004, including the founding of Offshore Outsourcing Best Practices (www.OOBP.org) community and the establishment of a joint career center with the St. Petersburg State University where we developed the Econo-physics program.

In **2005** DataArt increased its overall revenue by 50%, which amounted to 300% revenue growth in the last three years. DataArt strengthened its focus on servicing financial firms and technology companies. We formed a dedicated financial group, DataArt Finance, and signed several key clients in the niche. We established a long term relationship with 33 new clients and maintained client retention rate at 90%. DataArt increased its resource pool in Russia and opened a regional U.S. office in Jacksonville, Florida. The company joined several industry associations, including International Association of Outsourcing Professionals (IAOP), with Eugene Goland becoming Chairman of SME Global Sourcing Chapter. DataArt's efforts were widely covered by the media, including Hedge Fund & Investment Technology and Waters magazines.

In **2006** DataArt continued its growth, increasing revenue and further expanding its development force in Russia. In January 2006, DataArt was listed among 15 Emerging Outsourcing Players worldwide by Business Week magazine. DataArt opened a new facility in the city of Voronezh, Russia, increasing development capacity by 30%, and introduced several new offerings, including SAP and Business Intelligence consulting. The roster of important clients expanded to include BNP Paribas, ValueLine, Plastyc (upsidecard.com) and CityIndex among others. In December, the company reached a one million billable hours mark.

DataArt has strengthened its knowledge based initiatives, publishing a joint research with Hedge Fund & Investment Technology magazine on outsourcing trends in financial technology, and exhibited at several industry events, such as IAOP in Florida, and Marcus Evans Outsourcing conference in London. DataArt was once again recognized by the industry for its achievements: the company was selected to Rising Star category by Global Sourcing 100 (IAOP), cited by leading research analysts as a company to watch, and featured in several major publications, including Business Week.

In **2007**, DataArt almost doubled its development force by opening R&D centers in Kharkov and Kherson (Ukraine). Continuing its dedication to servicing Capital Markets sector, DataArt established advanced training program in finance, quantitative engineering and financial technology, and consequently Financial Technology practice grew 150% in 2007. In January of 2007, DataArt has been selected by CMP Media to "Global Services 100" list, and took two top spots: #4 Emerging Global Service Provider and #4 Emerging European Service Provider, and was also selected to Rising Star of Global Sourcing 100 by IAOP, for the second year in a row. DataArt has also passed the mark of 1,500,000 billable hours and received Microsoft Gold Certified Partner Status.

In **2008**, DataArt was once again voted the top 100 Service Provider by Global Services 100 and by IAOP's Global Sourcing 100. Aberdeen Group named DataArt a Best-in-Class R&D Outsourcing Provider. In February, DataArt secured a minority stake private equity investment to sustain the company's dynamic growth. As Microsoft Gold Partner, DataArt received two new competencies, Mobile Solutions and SOA & Business Processes. DataArt launched two new business practices, Online Travel Solutions and Microsoft Dynamics CRM. Continuing to support education initiatives, DataArt launched DataArt Labs, a joint project with Kharkiv National University and Kharkiv National University of Radio Electronics, which has successfully completed its first projects. In the Spring, DataArt completed an analyst tour, the first in the company's history, which put the company on the radar of all major research groups, including Gartner, Forrester, IDC, Aberdeen Group and Tower Group.



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INDUSTRY EXPERTISE

FINANCIAL

DataArt offers advanced technology expertise and significant cost savings through the use of its offshore software resources, and specializes in enterprise application development, system integration and mathematical research. DataArt makes customized software a viable alternative for Investment Management organizations, as compared to costly off-the-shelf products or in-house development options.

The key areas of DataArt expertise are:

- Cross-asset Class Trading
- Portfolio/Risk Management
- Reconciliation
- T&C Storage (Security Master)
- Market Data
- Market Analysis
- Structured Finance
- Investor Relationship Management
- Compliance

DataArt develops mission-critical, custom-tailored solutions for most demanding areas of investment process:

- Order management and allocation
- Portfolio analysis
- Multi-dimensional P&L measurement
- Risk management, VaR
- Scenario calculation, stress tests, sensitivity analysis
- Cross-assets model coverage
- Executive Reporting and Decision Support
- CRM, Investor reporting, Management and Performance Fees
- Global Security Master
- Multi-source pricing
- Real-time market data access

Enterprise application development for Hedge Funds and Funds of Funds;

- Support of all stages of enterprise system development – requirements analysis, architecture and design, build, test and operation.
- Interface with business users or virtual extension of a client's in-house technology team
- Unique development methodology based on a combination of local financial expertise, offshore development resources and the use of advanced technology for seamless communications

Systems integration with third-party software or data providers.

- Implementation of data connectors for popular systems, including Bloomberg, VPM, Sophis, Portware, FMC, RiskData, MACE, Tradar, Reuters RMDS & DataFeeds, and many others;
- Support for enterprise-wide STP infrastructure

Financial and mathematical modeling

- Access to top-of-the line math and computer science talent in St. Petersburg, Russia



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- Affiliations with world-famous math schools – St. Petersburg State University and University of Fine Mechanics and Optics;
- In-house educational program focused on financial modeling

TELECOMMUNICATIONS

DataArt's expertise in telecommunications technology is in two areas: Computer Telephony (CT) and Telecommunication Networks Monitoring. Key offerings are network performance analysis systems, telephony network testing systems, embedded, configuration and terminal software for PBXs, telephony API providers; call centers; telecommunication systems integration. DataArt has expertise in the following telecommunication solutions and technologies:

- Telephony network test systems
 - Development of the configuration of test calls traffic of various Analog, TDM and IP protocols (CAS, ISDN PRA and BRA, SIP, H.323, etc.), including erroneous behavior
 - System performance analysis and voice quality diagnostics
 - Billing Chain Verification System
 - Online network status monitoring
 - Sophisticated system of results and statistic representation
- Soft PBX component solution
- Software components of integrated communication platform
 - Operator's Smart Terminal
 - PBX Configurator
 - Online status monitoring, statistics
 - CRM and ERP modules development/integration

DataArt's customers in the Telecom Systems are Motorola (<http://www.motorola.com>), Spirent Communications Inc. (www.spirentcom.com), and HTC (www.htc.com), one of the world's largest telecommunications equipment manufacturers in the world.

MEDIA & PUBLISHING

Media and Publishing is an industry with well-established traditions and principles of production, where time and quality are key concerns. DataArt has been developing applications that permit template customization based on the standards developed by the industry's leaders, including picture formats, and color schemes.

DataArt develops applications that help manage the workflow of creating sophisticated books, brochures and magazines. Even if starting with a set of disjointed materials, clients can now manage the overall process, approve every step and have a high quality print-ready product. DataArt delivers the following set of solutions:

- Production process automation system
- Variable Data Printing system which includes printing template design capabilities as well as a server solution for templates processing.
- Online design and workflow management package for creating & managing publications
- Online advertisement creation package
- Portal for information sharing between registered clients/companies



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ONLINE TRAVEL SOLUTIONS

DataArt online travel practice was built by senior technical talent with expert knowledge of commercial needs of our customers. DataArt's proprietary development methodology leverages existing modules and standard interfaces to reduce development time and cost.

- Booking Engine
- Inventory Management
- Payment Systems
- Dynamic Packaging
- Web 2.0 and Travel 2.0
- Social Networking
- Mobile Applications
- Search Engine Optimization
- Content Management
- Integration with Existing Infrastructure (CRS, back office, reporting and data warehouse)

E-LEARNING

Through a number of projects, DataArt has built expertise in developing E-Learning software and delivers interactive and flexible solutions for:

- Content management
- Learning process management
- Test and grade management
- Industry-specific standards (including SCORM and AICC)

Areas of specific expertise include printing processes, variable data printing, Adobe Industry Standard, workflow management.

TECHNOLOGY EXPERTISE: Microsoft.NET, Unix/Linux, Java, Oracle

1. Microsoft.NET (core expertise)

DataArt is Microsoft Gold Certified Partner, and has a dedicated Microsoft .NET R&D team, responsible for researching the latest software releases, testing new technologies and sharing the knowledge with the rest of the team. Members of this group have attended numerous technical seminars organized by Microsoft in Russia and the U.S., and possess years of expertise developing on this platform.

The dedicated Microsoft .NET development team enjoys full support by Microsoft through our dynamic partnership program.

Technical Capabilities

Extensive technical support from Microsoft coupled with DataArt's own R&D, allow the company to remain at the forefront of Microsoft .NET technologies. Our capabilities include:

- Web Service Extensions, SOAP customization, XSD usage
- Enterprise Services (distributed transactions)
- Custom Remoting (marshalling, channeling, security)
- Reflection (dynamic emitting of assemblies, CodeDOM, custom attributes, auto generation of Web Service proxy)
- AppDomain management (custom assembly resolving), Garbage collection, GAC.
- Use of Enterprise Instrumentation Framework



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- Reporting (Crystal Reports, Microsoft SQL Server Reporting Services)
- WinForm (custom controls, asynchronous data and message processing, custom designers, XP look-n-feel)
- 2D Graphics, GDI+, font management
- WebForms (custom frameworks, controls, caching, client dHTML-to-web services collaboration, XML/XSLT)
- WinServices (complex multithread processing)
- Security (windows authorization, code access permissions, cryptography usage)
- COM Interop, PInvoke, IE, MS Office and shell integration
- Multithreading (synchronization, thread-safe UI, thread pooling, com interop apartments management)
- Serialization (custom, selective, versioning support)
- Deployment (web deployment, auto-upgrades)
- Globalization (multi-language application support)
- Configuration (custom section handlers)
- Compact Framework (Web services collaboration, SQL Server CE)
- Detached database processing (advanced DataSet management, caching, synchronization, automation of data access layer)
- Dynamic binding to MSSQL db schema

Sample Microsoft .NET Projects

- Open Investors Relationship Management System
- Hotel Performance Analysis System
- Medical Office Automation System
- Web Services Management Platform
- Workflow Design Package

2. Unix/Linux

DataArt has a team specializing in development and administration of UNIX applications and has completed a number of complex projects, including Mail.ru – the largest e-mail provider in the Eastern Europe with over 11 million users.

Technical Capabilities

Linux, FreeBSD, Sun Solaris; C / C++ / Java / Perl / PHP / shell scripting; Large-scale web portals (millions of users); Fault tolerant solutions; Multithreading and IPC; Apache HTTP server modules; Open Source databases (MySQL, PostgreSQL); Commercial databases (Oracle and MS SQL); Custom e-mail processing, filtering; X windows (GUI) applications; Profiling and optimization; Secure communications (SSL/TSL), cryptography; Kernel development; Java development for UNIX

3. Java

DataArt is recognized for its expertise in Java development, has mastered a variety of technologies, and is a partner of several professional Java user groups in Russia, in St. Petersburg and Voronezh

Technical Capabilities

J2EE (Tomcat and OC4J); Struts/JSTL and Velocity; XML, XSL, FO (a good example of utilizing XML and XSL is production of PDF-formatted reports using the XSL-FO open standard and its open-source adaptations on Apache FOP); JDBC, JNDI, SQL server (Oracle, MS SQL, MySQL, PostgreSQL); Hibernate; J2ME; Applets (platform- and browser-independent, for both Internet Explorer and Netscape, under MacOS, Windows and UNIX/Linux)



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4. Oracle

DataArt has always used Oracle technologies as a powerful tool for implementing enterprise solutions. We are proud to report that we possess over 56,900 hours of total Oracle experience, including projects in Internet services; Telecommunications; Publishing; Asset Management; Workflow Automation and Job Tracking; Billing While working on these projects, DataArt has mastered all the features of the Oracle platform, including interMedia, Oracle Text and object capabilities introduced in the latest releases of Oracle Database Server. Apart from the standard Oracle Developers Suite products, DataArt utilizes .NET, Java, C++ and third party reporting tools for developing client-side applications. We've made good use of Oracle Application Server for the creation of three-tier architecture applications and of Oracle Discoverer for the development of analytical systems.

Technical capabilities

Oracle Database (SQL, PL/SQL, object capabilities); Oracle Text; interMedia; Oracle Discoverer; Oracle Application Server; Oracle Portal; Reports Developer; Forms Developer; JSP & PSP; OC4J; Oracle e-Business Suite (modules FA, ABM)

DataArt is an expert in migrating data to Oracle databases and porting various applications to the Oracle platform.

Overview of Development Process

General Approach

Our objective is to provide the opportunity to not only add business value but also enable you to reach your goals in a cost effective manner. DataArt's offshore software development model specifically addresses the needs of software companies who design cost effective solutions. Our number one priority is to understand your needs so that we can deliver excellent service at competitive costs. DataArt provides significant system engineering and application design capabilities effectively and consistently. This is the reason that we are capable of maintaining long-term relationships with our clients. Simply put, DataArt produces results by focusing on your requirements and supplying what you need when you need it.

We recognize the need for well established requirements management process. DataArt has specific procedures for eliciting and documenting requirements as well as managing change requests. We follow certain fundamental principles when making any corrections:

- Changes must not affect the integrity of the system
- The system must be consistent, both in the working procedures (i.e. data entry, reporting, etc.) and user interface. Therefore, all changes must be done in alignment with the style of the existing system
- A change must be properly documented and change development must be planned and executed
- A list of changes must be traceable
- Software code repository must permit rolling back to any previous system version
- Deploying an updated system should have minimal or no affect on the normal work cycle

Methodology Overview

DataArt follows the best principles of project development methodology established by industry-leading Rational Unified Process and MSF. While this methodology demands the greatest attention to requirements management, design, quality assurance, etc., it provides for the flexibility that custom software projects require. If a client has an existing development process or established documentation standards, DataArt will adjust its processes, making sure that the level of quality is not compromised.



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We have standards in place for Configuration Management, Code Styles (all code produced follows coding styles) and Project Documentation.

Projects are done iteratively; most iterations consist of the following phases:

Envisioning

During the envisioning phase, the team and the customer define or refine the business requirements and the overall goals of the project.

Alignment of business and IT priorities in this phase is crucial, and the team will spend time understanding how the architecture will be used. During this phase, the team also begins to identify threats and mitigating risks. The envisioning phase culminates in the vision of the approved milestone, which indicates that the team and customer agree on the project direction.

Major Deliverables:

1. Vision document
2. Project proposal with preliminary estimates

Planning & Designing

During the planning phase, the team plans the development process and makes requirements more specific. The end of the phase is marked by the approval of the project plan by the customer.

Major Deliverables:

1. Project Plan (Tasks with costs and schedule)
2. System requirements allocated to software
3. Design Draft
4. Test Plan
5. Risk Plan

Developing

During the developing phase, the team moves from project planning into the project itself.

Major Deliverables:

1. Build with complete scope covering
2. Code with inline documentation
3. Detailed Test Cases

Stabilizing

During the stabilizing phase, the team collects and integrates feedback on the released version, resolves project-related issues, enhances the architecture, and prepares for the next version.

Major Deliverables:

1. Release
2. Technical Documentation
3. Testing Report
4. Release Notes



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Use of Third-Party Components

There are two possible scenarios:

- In the event that we already have all of the necessary licenses (the case for many popular standard components); nothing further needs to be done.
- For specific and unique components, we need to continue in attaining developer-level licenses.

Approach to Quality Assurance

Overview of Quality Assurance Practices and Processes

In the Process Engineering area, DataArt orients itself towards the ISO-IEC 12207 (Software life cycle processes) and CMM (Capability Maturity Model) international standards. The same is true for product quality control (Quality Control, QC).

The following processes that ensure Quality Control are implemented at DataArt:

- Test planning
- Test designing
- Test implementation
- Test execution
- Test evaluation

These processes run parallel to and independently of other software development processes, like Business Modeling, Requirements, Analysis & Design, Implementation and Deployment. Planning, documenting, and reporting provide for measurability, controllability, and manageability of testing processes.

DataArt offers various testing types:

- Functionality Testing
- Business Cycle Testing
- User Interface Testing
- Performance Profiling
- Load Testing
- Stress Testing
- Security and Access Control Testing
- Failover / Recovery Testing
- Installation Testing

Testing requirements that cover testing types, volumes, and other details are usually indicated concurrently with other specifications to the product.

Work Reviews

All project documentation is maintained in a centralized repository, accessible to a client over the web. This repository is supported by Source Safe. Typically, the project repository makes use of Microsoft Windows SharePoint services.

Basic principles that guide DataArt's handling of work review:



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1. We never leave the client without some deliverable materials for more than 2 weeks.
2. Secure previews are always made available upon initial request throughout the process.
3. We welcome early client feedback (making it easier to fix mistakes and misconceptions early on), working hard to provide material for preview and comment as early as possible. Our iterative development model is in line with this methodology very well.
4. Every deliverable is accompanied by a voice presentation by the project manager.
5. Our source code control system is usually made available for code reviews.

Approach to Communications

General Approach

Every project is assigned two responsible leaders:

- **Project Manager**

The project manager is the technical leader for the project. He is responsible for the technical success of the project, making sure that everything gets delivered on time and is of high quality.

- **Project Coordinator**

The project coordinator is responsible for all communication and documentation of the project. He is the single point contact for all client communication issues – reporting, updates to requirements, status tracking, etc. The project coordinator is a fluent English speaker. He acts as an advocate of the client's team to the development team and vice versa. The concept of a dedicated project coordinator is unique to DataArt and has worked extremely well in many of our past projects.

DataArt's project oversight committee, lead by senior management, monitors the progress of the entire project on a regular basis.

The project process is completely transparent. Time spent on the project is controlled through a web-based instrument (PM), and the customer is capable of reviewing it at any time. DataArt has a very strict policy on filling timesheet records, so the customer can be absolutely sure that the system shows the most current information. All project managers and coordinators speak fluent English.

We employ the wide range of communication tools, including Emails, Instant Messaging, telephone, video conference and web-based collaboration services.

Time Difference Management

The working day is altered to provide the most efficient coverage of our the U.S.-based customer's business day:

- Project manager (technical leader) has at least 4 hours that overlap with US business hours
- Coordinator (person responsible for all communications with the customer) has at least 5 hours that overlap and is available 24 hours via mobile phone.
- Development team and QA team can work one after another, taking advantage of the time difference.



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Language Issues Management

The development offices are situated in Russia and the Ukraine; therefore Russian is the developers' first language. However, most developers speak English. As a rule, all written project communications are in English (emails, reports, etc.). A project coordinator with fluent English is available 24x7.

Project Reporting

Project Coordinator sends a project status report on a regular basis, usually once a week. The project status report is emailed to the group of contacts on the client side as well as development team representatives. The status report includes the following information:

1. Project Plan (MS Project format) with task completion marked appropriately
2. Information on upcoming delivery (if relevant)
3. Summary of current outstanding issues and To do-lists for each side

For some projects, a tradition of weekly status conference calls is established, in order to exchange most recent status of the process and to quickly discuss outstanding issues.

In addition, the following status information is available in real time by DataArt's automated project control systems:

1. Information on hours spent on a task and tasks statuses – by DataArt's time tracking system
2. Latest documentation – at the project site (powered by MS SharePoint)

For most projects, the development server is available to the client for preview over the internet. This gives the client an opportunity to monitor "results" as well as effort, in real time.

Development Team

Team Structure

Several hundred specialists work in DataArt's four development centers: St. Petersburg, Voronezh (Russia), Kharkov and Kherson (the Ukraine). They are organized into several departments where each department specializes in specific technologies. For each project a dynamic team is formed which has all of the required skills for best execution.

The Periodic Table of the DataArt Elements





New York



London



St. Petersburg



Voronezh



Kharkov



Kherson

Hiring Criteria

1. Talented students seeking to gain industry experience and on-the-job continued education
2. Experts (MS, PhD level) with several years of niche expertise

Personnel Retention Policy

1. Attractive Compensation Packages:

- competitive salaries
- monthly bonuses
- healthcare insurance
- flexible schedules
- stock options plan
- relaxed work environment

2. Career Advancement Opportunities

- Challenging projects in specialized financial technology and telecom industries.

3. Education Programs (Weekly and Bi-Weekly)

- English Language
- .NET program
- Technology Programs (Financial Expertise, Code Optimization, etc.)
- Econ-Physics Program (jointly with St. Petersburg State University)
- Corporate Finance & Marketing
- SME Market Education
- Corporate Communications

4. Loyalty Programs

- Stock Options Program
- Kids' Special Events

Scaling

1. Opened affiliate offices in Voronezh, Kharkov and Kherson with diversified resource expertise
2. Technology Expertise: .NET, Java, Oracle

Onsite Consulting/Visa Issues

1. Track record of B1/B2 and L1 visas
2. Long visa history with various developers (no incidents in the last nine years)
3. Excellent relationship with American Chamber of Commerce in Russia which often assists in expediting the visa process

Resume: DataArt has an extremely competitive positioning in the IT HR market in Russia and the Ukraine



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Security and Protection of Intellectual Property

Technical Environment

We use secure network architecture to ensure protection of all of our systems, networks, applications, and intellectual properties. This security architecture is used in various configurations throughout DataArt. The core architecture uses the following components:

- Connection Points – External routers provide a connection between DataArt’s network, the Internet and simple protection (based on packet filters) from traffic spoofing.
- Firewall is the first line of defense for our network to prevent unauthorized access (penetration) from external entities and to control internal traffic policy. Our Firewall policy is based on communications protocol, traffic source and destination, and protocol state restrictions.
- Network Address Translation function and Proxy improve the level of network security during communications between DataArt LAN and external resources.
- Tunneling. We use tunnels for connecting our premises with common computing networks through the public Internet. Our tunnels are built on IPSec protocol and provide traffic encryption with 64-bit key size.
There is a secure VPN between DataArt’s NYC, St. Petersburg and Voronezh office.
- PartSecure Segments. The PartSecure Segment is a segment of our network that is a protected firewall system. The computing systems on this network have direct access from/to Internet and are typically used only for demonstrating our products to customers.
- Authentication Authorization Accounting (AAA) Domain. A user (DataArt employee, customer, partner etc) gains access to computing resources after authentication (based on login/password and source control schemas). The user is also verified for permission to use the resource through an access list. All important user actions are logged. DataArt AAA domain is implemented using Microsoft Active Directory on Microsoft-based computers and other variants (local authorization, RADIUS-server) on non-Microsoft platforms.

Our network architecture allows us to provide VPN access for clients to project related information.

Security of Intellectual Property

From a legal perspective, DataArt ensures the necessary level of intellectual property security. DataArt is a well-established U.S. corporation with stellar references, good banking history and corporate insurance. All Russian employees are bound by an employment contract defining non-disclosure of client information.

Infrastructure and Procedures to Ensure Business Continuity

Backup

A backup solution for all DataArt premises is a backup server with tape device (DDS-3, DDS-4 or DLT). Backup and recovery procedures are established and tested for each type of data. The following are covered by backup:

- Data storages (database, file, mail, source-code servers)
- Servers and workstations (operating system data and workspace)

The backup tapes are stored outside of a company building in a safe box.



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Backup procedures run automatically, with periodic manual control based on daily, weekly, monthly and yearly backup sets. Also, at the end of a project, all project-related data (source code, documentation, databases etc.) is copied to a CD.

The list of backup data can be changed upon request by the project team (at the beginning or the end of the project, change of the computer environment, etc.) and validated by the system administration team on a periodic basis (once a month).

Recovery from backup is performed by the system administration team in cases of hardware failure or by request.

Disaster Recovery Plan

The disaster recovery plan addresses the following areas:

1. Hardware or software failures, data loss in the development or NYC office
 - 1.1 Dedicated system administrator is responsible for hardware, software or data failures. He restores data from backups that are stored out of the office. He is also responsible for synchronizing information between offices.

DataArt maintains several server sets:

 - 1.1.1 Development and demo servers in each R&D center respectively
 - 1.1.2 Demo servers in the New York office
 - 1.1.3 Demo servers at independent provider in St. Petersburg (Metrocom).
 - 1.2 When required, development or demo sites are quickly transferred to one of the backup servers.
 - 1.3 No development is performed on the developer's workstations. All project information (including documentation and code) is on backed up developer servers.
2. General office building problems (fire or other)
 - 2.1 Every person of the development team has a computer at home equipped with dial-in Internet connectivity, that will be used in case of any general office problems.
 - 2.2 External server platforms (office in NYC and Metrocom) are used to restore the team development environment from the backup.
3. Internet connectivity problem
 - 3.1 In the St. Petersburg office, there are two independent channels. Should one of them go down, dynamic routing will send all traffic to the other channel. In the event that both lines are down, the office uses dial-up for most critical tasks.
 - 3.2 In New York, Sprint support is used to resolve office connectivity issues. In the event that the link is down during office hours, the New York staff uses dial-up accounts.
4. Staff migration
 - 4.1 DataArt maintains long-term contracts with employees. This ensures that we have minimal staff turnover. As a rule, a person completes all of his tasks and shares his knowledge with others before leaving the company.
5. A senior manager supervises the process for each project. He is always up to date on the requirements and the status of the system. In the event that a team member gets sick or unexpectedly leaves a company, he is responsible for organizing replacement and knowledge sharing processes.



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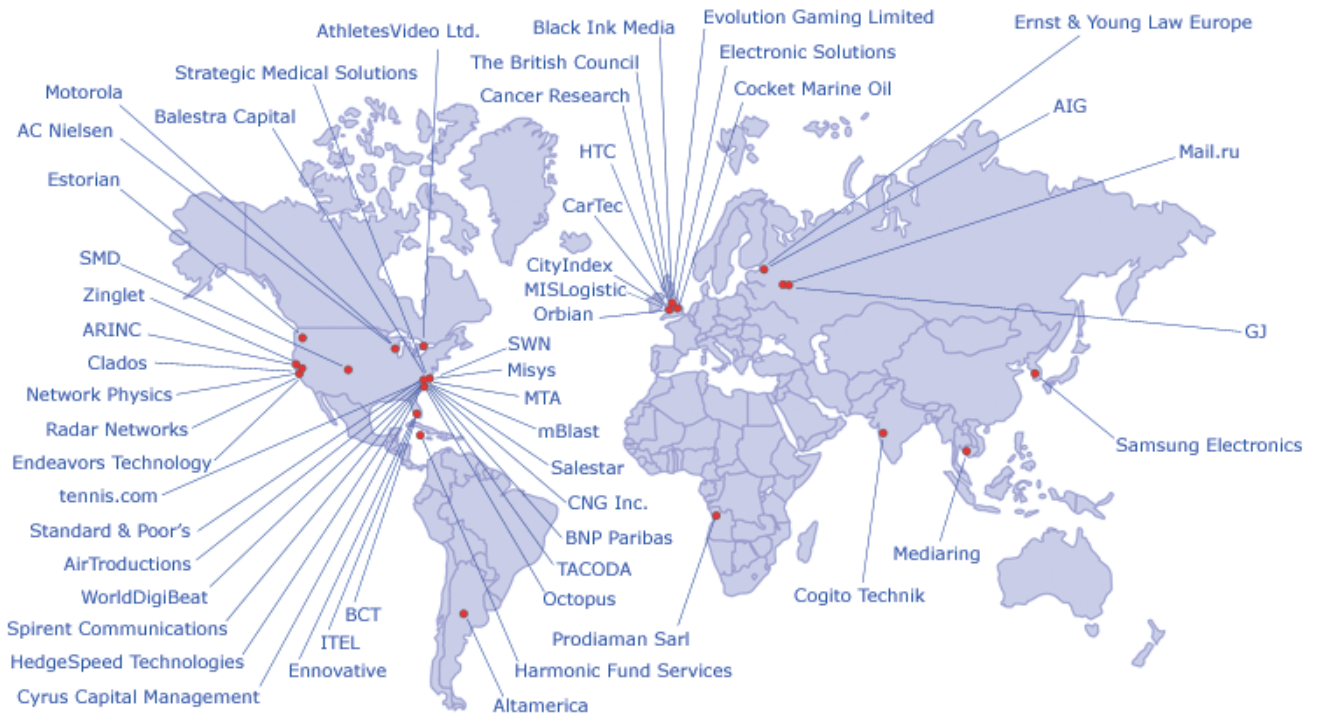


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SELECTED CUSTOMERS





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CUSTOMER ENDORSEMENTS



“DataArt’s team responded in short order to improve our site’s responsiveness, especially in key areas, such as our Live Scores page. The team in Eastern Europe effectively gave us a 24 hour development cycle leading up to this year’s US Open.”

*Dominic Schmitt,
General Manager,
Tennis.com
www.tennis.com/*



I want to thank DataArt for their knowledge and expertise in the field of CRM integration. The implementation specialists at DataArt were fast and professional. The new CRM integration tool has eliminated slower data exchanges, reduced data-entry errors and greatly improved our operational efficiency.

*Edward Roemke,
CEO
InsWorld.com, Inc.
www.insworld.com*



In DataArt we found a firm that shows tech smarts and a good approach to creative problem solving, as well as some experience with world class companies as customers. DataArt showed a very good analysis of the project, and had a reasonable plan to deliver. DataArt has consistently offered good technologists with good analytical skills who are motivated and raise the right questions at the right time .

*Jeremy Sterns,
CTO
Send Word Now – Emergency Notification Solutions
www.sendwordnow.com*



My warmest thanks to all the team members! It was my great honor to be working with you all. I wish that we can keep up our good work and take upcoming development as opportunity for both great companies, DataArt and HTC, to work together and advance together HTC.

*Asihan Khang,
HTC
www.htc.com*



DataArt was chosen for its unique offering among offshore software vendors: deep expertise in the Alternative Asset Management space, which was critical in HedgeSpeed's selection process.

*John DiRocco,
CEO, HedgeSpeed
www.hedgespeed.com*



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DataArt's understanding of our business goals coupled with expert software implementation makes them an invaluable technology partner for Betfair.

*Matt Young,
Distributed Development Director, Betfair
www.betfair.com/*



DataArt provides Orbian with the opportunity to team with a highly talented firm that shares the same views on technology as an enabler, with skills and experience in financial services markets, and an underlying belief in the value of partnership.

*Dean Miller,
Deputy Chairman, Orbian
www.orbian.com*



I just wanted to let you know how pleased we are with DataArt. DataArt has been a great benefit to PKWARE.

*Joe Sturonas,
Chief Technology Officer, PKWARE, Inc.
www.pkware.com*



When Network Physics was presented with a challenge to deliver a custom solution for a major European telecom company in an extremely aggressive time-frame, we selected DataArt as the organization to help us design, develop and test the solution. Throughout the project they functioned as a true extension to the company and delivered on-time and on budget. It simply could not have been done without them.

*Michael Lazar,
VP Customer Advocacy
www.networkphysics.com*



We are extremely pleased with the development service provided by DataArt for our multiple consumer-facing websites. Our project was delivered on time with a great combination of creativity, engineering professionalism, cutting-edge technological choices, and, above all, open and instantaneous communication. We are looking forward to doing more work with DataArt.

*Patrice Peyret
CEO of Plastyc
<http://www.upsidevisa.com/>*



Recently we managed to release Abacus 4.0 on time. This would not happen without the tremendous help from Data Art engineers. All people who worked with us put maximum efforts on pushing out this release on time.

*Mike Kryzhanovsky
Project Manager
Spirent Communications Corporation*



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I just thought this would be a good time to say how much of a credit Daniel and Alexei have been to DataArt over the past few weeks and the life of the project as a whole...

*Justin Stewart,
CityIndex
www.cityindex.co.uk*



DataArt's understanding of the Hedge Fund specific products, plays an important role in our joint efforts of bringing robust, cost-effective technology solutions to the sophisticated Hedge Fund market space. We are looking forward to years of productive partnership with DataArt on our software development engagements...

*Alexander Kouperman,
a principal at
InfoHedge Technologies*



DataArt has proposed a very smart solution for one of our most critical technology tasks – the common registration and authentication gateway. Thanks to a set of networking and database technologies selected, the system integrated seamlessly with all our existing systems. I would not hesitate to recommend DataArt's system development capabilities to any organization looking for UNIX/Oracle/C++ skills.

*Victor Lavrenko
CTO, Mail.ru*



We are glad to collaborate with DataArt, especially in Microsoft.NET usage for mission critical applications and developing knowledge sharing

*Oleg Karacharov,
System Architect Specialist
of Microsoft Strategic Technologies*



DataArt develops quality product with highly structured team interactions. Their project management techniques ensure delivery of fully-tested code-base on schedule and at budget

*Dave Morgan,
CEO/founder,
TACODA Systems, Inc.
www.tacoda.com*

**Global Asset
Administrator**

We are very impressed with DataArt's ability to handle complex technology projects offshore. We want to stress the company's high level of understanding of all areas pertaining to hedge fund operations, which is very rare for an offshore operation today. DataArt onsite teams in New York and London as well as the offshore development team have demonstrated a high level of professionalism, and proved that they are excellent communicators and fast learners. We haven't had any difficulties in our working communication with the St. Petersburg development team.

*Christian Robertson,
CEO*



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SELECTED MEDIA MENTIONS



The Future of Outsourcing

January 30, 2006

DataArt is featured in Business Week magazine's cover story "The Future of Outsourcing". The article, "Angling to Be the Next Bangalore", highlights Russia as one of the emerging key players in the world IT market, and names several established players in the Russian segment, with DataArt among them. "Russia is also playing the near-shoring card, but it's aiming at high-end programming jobs. With its strong engineering culture dating to the Cold War, Russia is brimming with underemployed talent available at rates about one-fifth those in the U.S. A handful of local champions has emerged, including... a firm called DataArt Inc. that has engineers in St. Petersburg and a head office in New York."



Aberdeen Group Names DataArt Best-in-Class R&D Outsourcing Provider

March 1, 2008

Aberdeen Group names DataArt a best-in-class outsourcing provider in its Market Alert entitled DataArt Leverages a Unique Delivery Model and Europe-proximate Facilities to Win Marquee Business.

"DataArt's solutions are designed to meet the needs of companies seeking R&D outsourcing services as its delivery infrastructure provides cost, time-zone and time-to-implement advantages," says the alert. "While in most companies domain experts are highly present in customer-facing positions, developers work primarily remotely. At DataArt the developers are the domain experts themselves, they bring detailed knowledge of platforms and expertise in tools, and are involved in all aspects of project scoping, customer facing and delivering allowing end-to-end development, and delivery capabilities."



VC Pipeline Still Flowing to Local Tech Firms

May 28, 2008

Following DataArt's announcement on raising private equity investment, Crain's New York Business features the company as one of the champions in New York technology space as it managed to secure the funds despite the markets' volatility. "DataArt, which develops custom software for companies particularly in the financial services industries, said it raised \$4 million in private equity funding—the first time the company has taken outside money



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since it was founded in 1997,” writes the paper. “DataArt will use the investment to expand sales and marketing efforts to companies in the online travel and telecom fields. Its clients include Standard & Poor’s and BNP Paribas. The 400-employee company acts as a tech consultant to corporations and does all of its tech research and development out of centers in Russia and the Ukraine.”



Hedging with Technology (Cover Story)

November 1, 2007

Global Services magazine devotes an exclusive cover story to the successful partnership between HedgeSpeed and DataArt, detailing DataArt’s expertise in financial technology and extensively quoting Alexei Miller. According to the article, HedgeSpeed “realized that a generic software development company wouldn’t be able to provide what they were looking for. They needed someone who was familiar with the capital market and was open to change and innovation. The provider’s understanding of the domain was critical to HedgeSpeed”. The grip on time to market issues was another reason for trusting DataArt with handling development of middle-office liquidity management solutions, which resulted in a “happy customer-provider alliance”. John DiRocco, CEO of HedgeSpeed, declared that this would be a multiyear strategic deal, to which DataArt brought a “bit of uniqueness with their model of working. Less than 10 percent of DataArt’s team works onsite unlike the industry average of 30 percent. The majority of development work is done offshore in the R&D facility of DataArt in Russia. This 1:9 ratio of onsite to offshore workforce not only saves cost for HedgeSpeed but also enables efficient resource management for both the customer and provider,” writes the magazine. “In the hedge-funds market, you should be able to reduce the time between product vision and implementation,” the magazine quotes Alexei Miller, Executive Vice President at DataArt. “The whole premise is acceleration.” The deal targets 30 to 50 percent saving on time and roughly the same range of cost savings for HedgeSpeed.

“I like the personal attention we get at DataArt,” adds John DiRocco, CEO of HedgeSpeed.



To Russia with Love

March 23, 2006

Corporate Deal Maker, a sister publication of The Deal magazine, salutes Russia for its “world-class science and engineering talent”. “The country is emerging as a prime destination for software application development, system design, computational modeling and other complex technical work.”

The article features DataArt as an example of a strong R&D operation, quoting Eugene Goland, “Russian companies have a much higher success rate on projects that require lots of research and scientific skill, and less on projects that require a high level of documentation and longer-term management skills... I’m pretty sure India will remain the destination for general and large-scale outsourcing and Russia will become more and more known for its high-level technical skills.” The article goes on to highlight a case study of Bonland Industries, which turned to DataArt after “disappointing results” with an Indian vendor. “The hourly rate was slightly higher than in India, but according to Bonland’s president for information systems, the quality and technical capabilities of the Russian team more than made up for the difference in price.”



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Russian IT Outsourcing Market on a Roll

ne 27, 2007

CMP Media's Global Services magazine profiles Russia as an outsourcing destination of choice, based on a comprehensive report of Russian IT sector by IDC Research, and features DataArt as one of its leaders. "Russian IT service companies are now counted amongst the world's best providers," writes the magazine. Stability in relationships, technical expertise and relatively low staff turnover are the key advantages of Russian software-development companies, according to the study.

"Recently, DataArt was amongst Russian companies that were recognized by IAOP (for Employee Management). Global Services, too, recognized ...DataArt in its annual listing of global service providers in February this year." Companies participating in the study point to the availability of very well-educated engineers, strong technical skills and sound methodologies as the benefits of outsourcing to Russia.



The Russian Myth

June, 2005

The Myth of Russian outsourcing is revealed on the pages of June's issue of Waters Magazine, a leading financial publication, as contributed by DataArt's EVP Alexei Miller. "Today's Russia has the right combination of talent, expertise and cost to be the location of choice for developing financial technology," states the article. Miller goes on to address the cultural, political and legal issues of Russian outsourcing, and informs the readers that many "myths" belong to the past, while current Russia provides a new breed of highly educated, English-speaking experts. "While India and China lead the way in number, overall size and revenue volume of outsourcing vendors, Russian IT companies are often built on the "boutique" vs. "wholesale" approach, focusing on solving advanced R&D problems. Thus, most large projects demanding standardized solutions are often outsourced to India, and specialized R&D tasks go to Eastern Europe."



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