# Sergey Vdovin



Microsoft
Business Intelligence/ SharePoint/ Project Server
Solutions

In order to get first insights,
I recommend to read my December 2015 TechNet interview:
blogs.technet.com/b/wikininjas/archive/2015/12/28/
interview-with-a-sql-server-business-intelligence-expert-and-wiki-ninjasergey-vdovin.aspx

# Technical experience summary

10+ Years of Experience with the Microsoft Business Intelligence Stack

- -Database Engine
- -SSAS (SQL Server Analysis Services) (+MDX, Shell Dimensions, UDF, Data Mining)
- -SSIS (SQL Server Integration Services) (+Custom Dataflow Destination with PSI Web Services Calls for Project Server 2007-2010)
- -SSRS (SQL Server Reporting Services)
- -SharePoint Excel Services (+Custom Excel Reports Processing with Excel Web Services, EWA)
- 15+ Years of Experience with MS SQL Database Engine

8+ Years of Experience with Project Server – POC - development – deployment – troubleshooting

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### Education

2008 (4 years) — PhD Candidate (exams). Ural Branch of Russian Academy of Sciences, Dynamical Systems Department, 05.13.18 - Mathematical Modeling, Digital Methods and Complexes of Programs

2004 (5 years 6 months) — <u>Engineer at specialty</u> Computing machinery, complexes, systems and networks. Ural State Technical University, Radio-Technical Faculty.

1998 (2 years) – school - Scientific university center (Ural lyceum), class with in-depth study of physics and mathematics

Experience (most recent projects)

# Company Svyaznoy <a href="https://en.wikipedia.org/wiki/Svyaznoy">https://en.wikipedia.org/wiki/Svyaznoy</a>

Duration 10.2016 - Current (1 year)

Position Microsoft Business Intelligence/ Project Server/ SharePoint consultant

### Summary and Achievements

Although it Initially intended to be a temporary part-time position in BI/DWH legacy solutions support team (SSAS, SSIS, SSRS, DB Engine/DWH), some significant efforts were put into the following projects:

- Pilot (feasibility assessment) brand new SSRS 2016 mobile reports project accomplished and now the reports are in production use – employees use it externally to check bonuses online
  - -custom security sample was extended (C#) to work with OAuth(OpenID) for external

https://github.com/Microsoft/Reporting-Services/tree/master/CustomSecuritySample

-The project was pretty heavy for company's infrastructure specialists due to the lack of advanced SSRS topologies deployment competencies. Numerous variants were considered and offered to implement in order to prove the feasibility, the following discussions can provide some insights:

https://community.powerbi.com/t5/Mobile-Apps/ADFS-custom-authentication-as-an-alternative-for-SSRS-custom/td-n/119070

https://community.powerbi.com/t5/Mobile-Apps/Custom-Authentication-in-Reporting-Services-for-mobile-apps/td-p/113723

 $\underline{https://social.msdn.microsoft.com/Forums/en-US/d952d6c0-777f-4aaa-b1da-9e01dc242f4b/ssrs-forms-authentication-with-different-external-url?forum=sqlreportingservices$ 

- Like-for-like (LFL) calculations were implemented for sales in main several hundred gigabytes SSAS cube:
  - business customer current view to LFL was examined and first POC sandbox solution offered
  - little research on LFL and discussion with customer led to the new approach which is commonly used worldwide, the approach was approved and implemented

- 3 technical approaches were tested:
  - 1. pure MDX
  - 2. measure groups source column addition better performance
- 3. 2 existing columns (date and store) used + big hidden intermediate LFL dimension with 2 key columns (along with visible utility dimension) better performance and minimal change impact to add LFL calculations one need just to set dimensions usage now
- "Utility Dimension" is used to implement user access to LFL calculations <a href="https://social.technet.microsoft.com/wiki/contents/articles/32618.ssas-slicing-and-dicing-over-data-differences-between-ssas-databases-via-c-udf-and-shell-dimension.aspx">https://social.technet.microsoft.com/wiki/contents/articles/32618.ssas-slicing-and-dicing-over-data-differences-between-ssas-databases-via-c-udf-and-shell-dimension.aspx</a>
- the LFL solution was mentioned as one of 2 major department's achievements of the year 2016
- Automatic base level aggregations system (based on SSAS query log and base aggregation design algorithms) currently under development
   https://social.msdn.microsoft.com/Forums/en-US/d05c57f8-7557-49c3-8501-2923c54f27e6/ssas-performance-maintenance-powershell-script-with-aggregationdesignaggregations-method?forum=sqlanalysisservices
- ETL for internal support system was implemented via Python for RabbitMQ as source (brand new language and system for author). POC solution with RabbitMQ SSIS flow source was implemented with starting point <a href="https://github.com/kzhen/SSISRabbitMQ">https://github.com/kzhen/SSISRabbitMQ</a>
  - the sample was extended to confirm the queue extraction in SSIS post execute event (vs basic confirmation when we confirm the extraction in the moment of extraction)
- Company's dynamic SSIS packet (C# script) was extended to support postgre +
  previously in the source system special integration views were constructed in order to
  cast type for efficient ETL, in the extension the queries used in views are generating
  dynamically now during package execution

#### **Company Independent Consultant**

Duration 06.2015 - Current (2 years 5 months)

Position Microsoft Business Intelligence/ Project Server/ SharePoint consultant

#### Summary and Achievements

Along with the work as an independent consultant, as a revision of previous professional activities, several Microsoft Business Intelligence and Project Server articles were accomplished including TechNet Guru award winning:

Project Server: Refresh calculated fields for all projects via PowerShell PSI calls

Windows PowerShell Technical Guru January 2016 Gold

SSAS, SSIS: Extending Project Server

OLAP Cubes via push-mode processing

SSAS: Slicing and dicing over data differences between SSAS databases via C# UDF and shell dimension SQL BI and Power BI Technical Guru October 2015 Gold

SSRS: Merge data from different data sources into one data set inside SSRS report using XML Connection

SSRS: Merge data from different data sources into one dataset inside SSRS report

SSRS: End-user defined parameters set and cascading hierarchy

SQL BI and Power BI Technical Guru June 2015 Bronze

SSRS: Deduplicating unrelated details data

SSRS: Join data from different SSRS data sources into data set

Special recognition from the TechNet community resulted in TechNet Wiki Interview:

Interview with a SQL Server Business Intelligence Expert and Wiki Ninja

The interview reflects my history, ideas and plans.

Project 1 "Project Center" IIS site migration SharePoint/ ProjectServer 2010 to SharePoint/ ProjectServer 2013

Role all in one: from negotiations to implementation

Description from customer: "external customer has a site from another System Integrator, would be good to recompile it from 2010 platform to 2013 platform".

Results:

- Several development/testing cycles completed all the functional migrated and Visual Studio 2015 solution with deployment guide is delivered to customer.
- Unsupported and undocumented by vendor (Microsoft) calls to Published Project Server database (for authorization purposes) replaced by CSOM OData Project Server calls.
- SSRS native calls migrated to SSRS SharePoint 2013 integrated calls.
- Legacy application architecture yielded in restriction on Project Server Custom Fields
  values (current immediate resolution of malfunction) explained to customer. Solution
  with SSRS reports modifications proposed (using UIDs instead of text values for SSRS
  parameters keys).

- Project Server 2013 Development Environment deployed from scratch in Amazon AWS:
  - EC2
  - Directory Service (Simple AD)
  - Windows Server 2012 AMI
  - SharePoint 2013
  - SQL Server 2014
  - Project Server 2013
  - AutoSPInstaller

Results were delivered in 2 stages, analysis and full communication and delivery cycle was proved during first stage (with a lack of information and high communication and technical risks). During first stage the following was discovered about the site:

A custom ASP. NET Internet Information Services (IIS) Site "Project Center" uses information from RDB (Project Server Reporting Database), Published DB (Unsupported and undocumented by vendor - Microsoft), aggregates information to display it to users and contains links to projects workspaces, Project Detail Pages(PDP). SSRS URL access with JavaScript used to render reports in EXCEL and PDF formats.

At the second stage the proved communication scheme used to deliver the final result with recommendations for further development

## Project 2 Project Online reporting consultations

- -Teaching
- -OData
- -PowerPivot
- -Excel
- -Project reporting tables structure
- -Reporting troubleshooting

Project 3 Project Online reporting in Power BI

#### Power BI financial reports were delivered with OData Project Online as source



Project 4 Configuration Site template – PowerShell

Redesign of existing configuration site using (goals):

Deployment and content store in PowerShell file template:

- -PowerShell file
- -Access: OData
- -Support 2 languages

Some of the implementation details:

- -Lists elements with default settings creation during deployment
- -2 deployment languages static depends on deployment settings (choose by customer over taxonomies Multilanguage features for elements)
- -PowerShell Script creates SharePoint site using Microsoft.SharePoint.PowerShell
- -Consultations on how to use OData with C#

Previous numerous experiences can be found on my site:

http://sergeyavdovin.com/ContentPage/Resume

# Recent professional education

## Completed

Microsoft: DAT216x: Delivering a Relational Data Warehouse(certificate)

https://courses.edx.org/certificates/1935dff4bdbb440cb3e5acd1623948ac

Microsoft: DEV212x: Introduction to DevOps(certificate)

https://courses.edx.org/certificates/b8f136e881aa4876bcb805bcd9134871

ETH Zurich ASD.1x: Agile Software Development (certificate)

https://courses.edx.org/certificates/60ea3e97a2504668a978d178aea46b6d

Microsoft: DAT214x Analyzing and Visualizing Data with SQL Server Reporting Services

https://courses.edx.org/courses/course-v1:Microsoft+DAT214x+3T2016/course/

Microsoft: DAT224x Developing a Multidimensional Data Model

https://courses.edx.org/courses/course-v1:Microsoft+DAT224x+2T2017/course/

Microsoft: DAT207x Analyzing and Visualizing Data with Power BI

https://courses.edx.org/courses/course-v1:Microsoft+DAT207x+2T2017/course/

Microsoft: DAT215.4x Implementing In-Memory SQL Database Objects

https://courses.edx.org/courses/course-v1:Microsoft+DAT215.4x+3T2016/course/

Microsoft: DAT201x Querying with Transact-SQL

https://courses.edx.org/courses/course-v1:Microsoft+DAT201x+5T2016/course/

Microsoft: DAT229x Microsoft Professional Program: Big Data Orientation

https://courses.edx.org/courses/course-v1:Microsoft+DAT229x+2T2017/course/

Microsoft: CLD213x Managing Projects with Microsoft Project

https://courses.edx.org/courses/course-v1:Microsoft+CLD213x+3T2017/course/

In progress

Data-driven Decision Making by PwC

https://www.coursera.org/learn/decision-making/home/welcome

Microsoft Professional Orientation: Data Science

https://www.edx.org/course/microsoft-professional-orientation-data-microsoft-dat101x

Recent common education

## Completed

Stanford Introduction to Food and Health (certificate)

https://www.coursera.org/account/accomplishments/records/HWZTGQSZEMDP

Success by University of Pennsylvania

https://www.coursera.org/learn/wharton-succcess/home/welcome

Learning How to Learn: Powerful mental tools to help you master tough subjects by University of California, San Diego

https://www.coursera.org/learn/learning-how-to-learn/home/welcome

Healthy Ageing in 6 Steps: Let your environment do the work

https://courses.edx.org/courses/course-v1:DelftX+EIT001x+2T2017/course/

In progress

Harvardx: HLS2X ContractsX 2016

https://courses.edx.org/courses/course-v1:Harvardx+HLS2X+3T2016/course/

Successful Negotiation: Essential Strategies and Skills by University of Michigan

https://www.coursera.org/learn/negotiation-skills/home/welcome

UTArlingtonX: LINK.BW.1x The Science and Practice of Yoga <a href="https://courses.edx.org/courses/cou

UQx: IELTSx IELTS Academic Test Preparation

https://courses.edx.org/courses/course-v1:UQx+IELTSx+2T2017/course/

Also you are more than welcome to check out my site itself – it contains links to my articles, forum activities, social networks and even more in order to know me better.

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