

## Big Data Analytics

Adanto significantly improves customer service and reduces operating cost for the global leader in HR Consulting field by deploying real-time big data analytics and reporting for data streaming from Contact Center in 15 regions around the world.

### The Environment:

- **15 global regions** with Contact Centers in **North America, EMEA and A/P.**
- **2,500,000** events monthly (chat, voice mail, telephone, service tickets)
- Very complex data center environment with **30 disparate databases** (cloud & on premise).
- **ShoreTel system** (PBX Business Phone Systems) operated by 15 regions across the world with
- **CIC system** (Customer Interaction Center) where calls are routed to the dedicated support queue.
- **Service Now Cloud** (service management system)

### The Challenge:

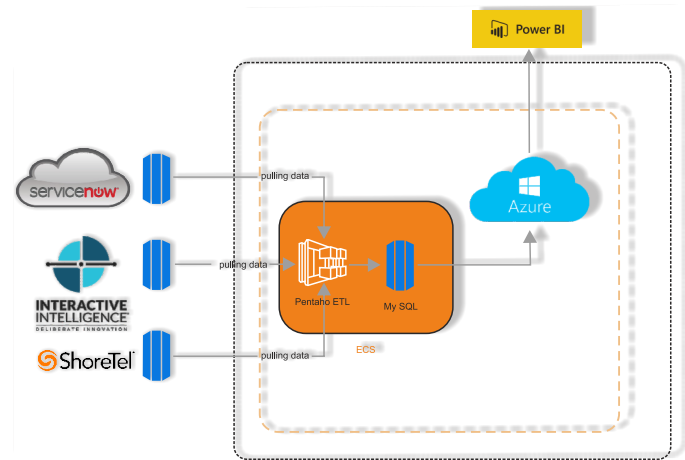
- A lot of manual work analyzing what is happening inside each system in each Contact Center
- Poor manual reporting or none-existing reporting from each system
- Poor customer service not meeting given SLAs
- Not understanding what is going on at Contact Centers
- Hard to find information
- Extensive delays in getting issues resolved
- Customer dissatisfaction
- Data Center complexity

### The Objective:

1. **Real-time Analysis** of the caller behavior for the Management
2. **Real-time Reports** based on caller behavior for call center management and stakeholders to make decisions
3. Predefined **real-time executive Dashboards with cloud access from mobile, PC**

## The Solution

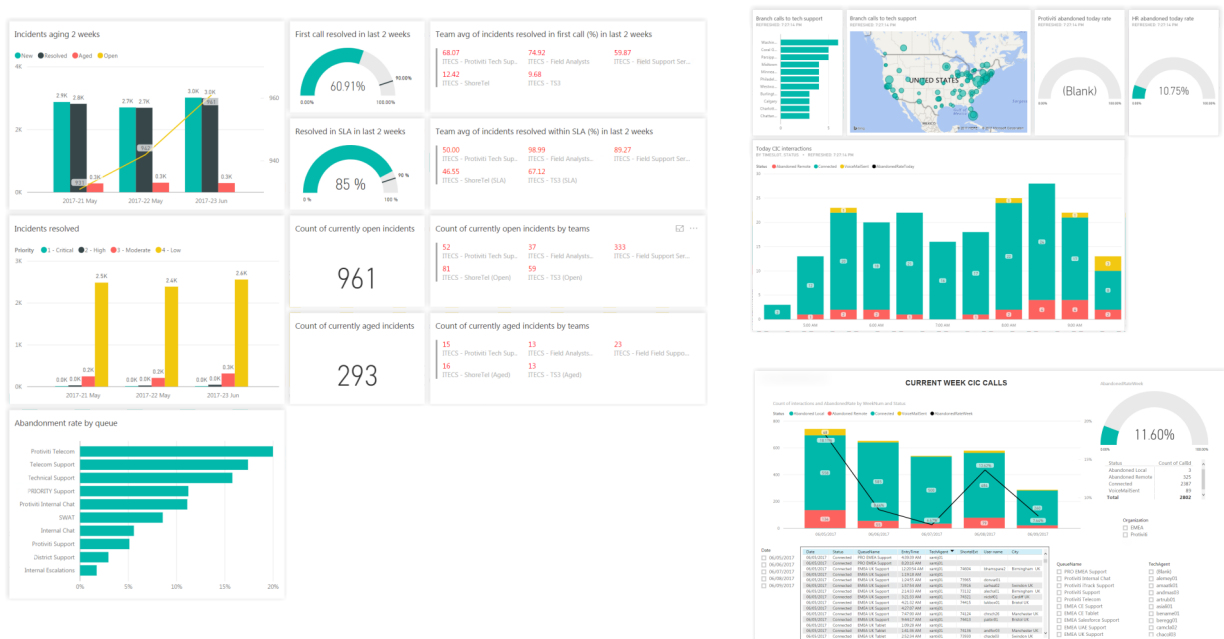
- **ETL with Data Warehouse** based on **Pentaho ETL data integrator & MySQL**
- **REST APIs** for data access/refresh
- **Machine learning algorithms** for data correlation and analytics
- **Amazon AWS & Microsoft Azure Cloud**
- **Microsoft Power BI** reporting tool from data stored in Azure cloud.



The main challenge to create the requested result was the correlation of results between the source systems. We have utilized time as the common key between systems. We have deployed additional tools which will collect information from 3 non-integrated system sources and used our analytics algorithms to insure the accuracy of reports. The hit ratio which we were able to achieve was around **89%**, meaning that for a given set of 100 events from the first system we were able to correctly identify 89 correlated events from other system. With daily average around 700 calls this hit ratio was well accepted.

## The result

- **Reduced Abandoned Call rate from 18% to 5%**
- **Reduced hold time** from an average of **15 minutes to 4 minutes**
- **Improved Management reporting accuracy, workload and reduced operating cost**



# Adanto Professional Services

“We help our clients - from start-ups to large enterprises - deliver **web-based, mobile & cloud-based** apps, accelerating time-to-market & improving the quality, usability and agility of their digital IT.”

Michael Kinalski  
CEO, Adanto Software LLC

Adanto Professional Services help organizations create sophisticated, enterprise-class software solutions and harness full potential of emerging technology trends to:

- **Improve delivery quality** across the application portfolio, from mobile to cloud to Web to packaged software, through standardized architectures and tools.
- **Increase predictability** through standardized confirmation and transition points, deliverable templates and workflows.
- **Optimize delivery cost** through an optimal mix of resources.
- **Enhance User Experience** with very latest mobile and web technologies.

Adanto Professional Services address unique challenges that every business or IT department is faced with today. It provides a full lifecycle of custom software development on the Java, .Net or Open Source platform, including broad Web and application development solutions and those enabling portal and content management.

Adanto Professional Services include overall project management, planning, requirements analysis, technical architecture, design, build, test, deployment post launch free support, and fee-based extended service.

We offer Java, Javascript, .Net/C#, C/C++, R, PHP, Python, Ruby, Perl, Pig, Hive, HBase, Spark, and other languages pervasively used in a wide range of technology-based solutions especially: mobile, UX/CX, cloud and Web.



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## About Adanto

Adanto is an emerging global software services and solutions company, incorporated in Delaware, serving clients in the EU and the USA from its five global locations.

Combining vast experience with comprehensive capabilities across many technologies, industries and business functions, Adanto collaborates with clients to **accelerate their innovation** and help them become **high-performance digital businesses**.

[www.adanto.com](http://www.adanto.com)  
+1 (888) 774-6647

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To find out more about Adanto and how to best harness Adanto Professional Services on your quest to accelerate innovation, please contact:

In USA:  
Michael Kinalski  
+1 208 841 6598  
[michael.kinalski@adanto.com](mailto:michael.kinalski@adanto.com)

In UK:  
Alexander Hill  
+44 (0) 781 806 8861  
[alexander.hill@adanto.uk](mailto:alexander.hill@adanto.uk)

In Poland:  
Grzegorz Szutkiewicz  
+48 692 455 214  
[grzegorz.szutkiewicz@adanto.com](mailto:grzegorz.szutkiewicz@adanto.com)