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## A Case Study of **OneTouch Direct's** **Cloud Adoption and Migration**



### **About OneTouch Direct**

OneTouch Direct has successfully helped businesses not only reach, but exceed their revenue goals through call center solutions for over 20 years. By implementing live chat via voice, email, and text messaging, they allow their talented account managers to seamlessly address the necessary direct response channels to boost sales at the lowest conceivable cost.

OneTouch Direct's call center customer service supports all channels to help their clients connect to their customers conveniently and efficiently. OneTouch Direct operates as a PCI certified and SSAE 16 audited company to meet the strictest standards of excellence.

OneTouch Direct is not your typical contact center. Their focus is on understanding the unique goals of their clients and offering flexible solutions aimed at keeping their customers happy and their operational efficiency at its best. OneTouch Direct has a 100% client retention rate and are invested in helping companies continuously improve the customer experience through customer acquisition, retention, loyalty and best in class customer service.

### **The Challenge**

OneTouch Direct thrives in a fast paced market that needs to be flexible enough for any new opportunity that comes their way. OneTouch Direct built OmniTouch, a Next Gen Contact Center Solution application that combines contact management and a dialer platform. OneTouch Direct was also looking for a more cost-effective solution for off-site backups. OneTouch Direct is always innovative in the Contact Center and was additionally looking for assistance with Cloud-based dialer systems, transcription and discovery/data loss prevention of sensitive information.

When it came time for production, OneTouch Direct knew that they needed to be able to handle: 1) Security for their PCI and SSAE 16 certification/audits, 2) scalable solutions to



meet a high volume of users, 3) availability at all times and 4) Disaster Recovery/Business Continuity failover.

OneTouch Direct decided not to use their existing on-premise or colocation data centers due to frequent power and air conditioner outages and the high cost of maintaining equipment at colocation data centers. They decided that this would be an opportune project to delve into the Cloud.

## The Solution

After researching different Cloud companies, Gartner's Magic Quadrant for Cloud Infrastructure as a Service and listening to valued opinions of Cloud Solution Architects, OneTouch Direct quickly settled into using Amazon Web Services (AWS) as their Cloud Computing Service Provider.

Being new to AWS, OneTouch Direct reached out to IMPLERUS Corporation for assistance in migrating to the Cloud. IMPLERUS helped OneTouch Direct by designing a solution that was needed for their versatile application.

IMPLERUS ramped their solutions in multiple phases. For OmniTouch, IMPLERUS designed a custom Amazon Virtual Private Cloud (VPC) with multiple subnets and multiple Amazon Elastic Compute Cloud (EC2) instances all behind an Elastic Load Balancer in the US-East region to ensure scalability and availability. IMPLERUS assisted in building a VPN connection back to OneTouch Direct's HQ data center for Active Directory connectivity and to ensure safer traffic for sensitive information. IMPLERUS built AWS Lambda functions to create daily Elastic Block Store (EBS) Snapshots that are retained for 30 days and delete unused EBS volumes from an Amazon CloudWatch daily trigger. AWS Lambda functions were employed by the AWS Serverless Application Model (SAM), notifications are sent via Amazon Simple Notification Services (SNS) and are logged to Amazon CloudWatch. IMPLERUS and OneTouch Direct mutually decided on this configuration for cost effectiveness, greater reliability, greater availability, speed to delivery and security for internal applications and authentication methods.

IMPLERUS assisted OneTouch Direct with Business Continuity/Disaster Recovery (BC/DR) concerns by automating a complete backup the OmniTouch environment to the US-West region via Amazon Machine Images (AMIs) and an AWS CloudFormation template. OneTouch Direct wanted to also have an Amazon VPC in US-West in case of any regional outage in US-East.

Upon seeing great success and a quick implementation time, IMPLERUS also assisted with a safe Amazon Simple Storage Service (S3) implementation to include versioning and archive control for needed reliable off-site backup systems. OneTouch Direct was currently backing up 31 servers daily with Veritas Backup Exec and then sending 2 TB of backup data on media off-site weekly to ArchiveAmerica and Iron Mountain. IMPLERUS developed a script that will synchronize the daily backup jobs to Amazon S3. The Amazon S3 buckets were created with lifecycle rules which transitioned the weekly backup jobs to S3 Standard-Infrequently Accessed (IA) after 30 days and then transitioned the monthly backup



jobs to Amazon S3 Glacier after 60 days. The script also included a method to delete older archives after one year in order to remove unnecessary data. IMPLERUS recommended this solution for cost savings, security and automation (not relying on physical delivery of media). This provided a more frequent off-site solution while still saving costs of off-site storage, software upgrades and storage resources.

Upon realizing the benefits of Amazon S3 and off-site storage, OneTouch Direct then addressed their file server backup challenges. OneTouch Direct was running out of storage space and their current backup solution could not backup their internal file servers. IMPLERUS proposed and built a volume gateway using an AWS Storage Gateway solution which allowed for quick block storage using the iSCSI protocol. The volume gateway was recommended because OneTouch Direct recently purchased a new VMWare farm for new servers, to include file servers. Since OneTouch Direct did not want to upgrade their Veritas software, nor expand their local backup capacity, IMPLERUS recommended a block storage backup solution.

IMPLERUS discovered that Amazon Connect could be a great solution for OneTouch Direct. Several solutions were created to assist OneTouch Direct stay on the innovative frontline for Contact Center technologies. IMPLERUS assisted in creating a low-cost inbound dialing solution, IVR solution and an outbound dialing solution. Furthermore, IMPLERUS implemented AWS Lambda, Amazon Lex and encrypted Amazon DynamoDB solutions for integration with Amazon Connect for a custom IVR/VRU, automated surveys, chat bots, data gathering and finally included Amazon Comprehend for sentiment analysis. IMPLERUS gave OneTouch Direct the foundation to continue their OmniTouch work in the cloud and not reliant upon Avaya or Dialogic.

IMPLERUS also assisted OneTouch Direct with Amazon Transcribe to transcribe audio recordings using Amazon S3 as the primary storage and used Amazon Macie for finding and scrubbing recorded phone calls for sensitive information. This solution was developed to assist removing any Personally Identifiable Information (PII) from recordings for their PCI compliance/attestation and customer requirements.

## The Benefits

OneTouch Direct was highly impressed with the speed to market that AWS affords. The scalability and availability is much cheaper than initially thought before starting this process. While some costs are not conducive for complete implementations, they now have the ability to run in an OpEx model and can now offer multiple optional services for their unique solutions that they provide to their customers.

OneTouch Direct considered purchasing additional server farms in their other locations and/or colocations throughout North America to provide greater availability for OmniTouch. In order to do that, they would have spent tens of thousands of dollars on servers, Storage Area Networks (SANs), load balancers, networking equipment backup generator, expanded data centers, electricity and labor. Utilizing all of the different AWS services has afforded



OneTouch Direct to have more cash on hand, no long-term contracts, no up-front commitments and no long-term debt. IMPLERUS recommended the US-West BC/DR plan to OneTouch Direct as this provides an even greater level of availability to their core products and less latency for their customers on the west coast. This pilot light approach offered a very affordable BC/DR solution that meets OneTouch Direct's Recovery Point Objective (RPO) and Recovery Time Objective (RTO).

The Amazon Simple Storage Service (S3) solution saved OneTouch Direct about \$500/month in off-site storage costs and additional costs to expand their backup solution storage resources. OneTouch Direct had at least 32 hard drives in off-site rotation that they have now repurposed for other needs and no longer have to worry about replacement costs, since moving hard drives often causes less lifetime. Utilizing Amazon S3 lifecycle rules were able to save OneTouch Direct costs on longer term, infrequently accessed and/or unnecessary data. Both Amazon S3 and AWS Storage Gateway solutions were built with private access for only OneTouch Direct approved personnel, encryption of all files and user/API level activity tracking using AWS CloudTrail. Amazon S3 is providing greater scalability, greater durability (99.99999999%) than they previously had, plus version control, lifecycle rules and compliance and audit capabilities.

To best summarize the benefits, OneTouch Direct's CEO and EVP of IT said: "If we had to start from scratch, we would be using all Cloud-based technologies".

## **About IMPLERUS**

IMPLERUS Corporation is a Northern Virginia-based AWS Advanced-Tier IT consulting and services firm dedicated to providing innovative solutions to the Intelligence Community, public and private-sectors.

We design, build, integrate and manage solutions for cloud-based applications and system architectures.

Our clients range from Fortune-level global VC firms to government intelligence and defense agencies through our successful relationships with satisfied clients over 25+ years.

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