Geek Squad
Service Order Processing System

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Introduction & Background Information

Geek Squad was founded in 1994 by Robert Stephens and is a leading tech support company in North America. In the past Geek Squad was a home to home tech support and repair service but in 2002 Geek Squad merged with Best Buy and had precincts rolled into stores and homes by 2004. There are almost 1500 Best Buy stores in the United States and almost every Best Buy store has a Geek Squad precinct. Geek Squad also has a large repair center called Geek Squad Central in Kentucky where we have certified agents repair hardware base on brand.

Geek Squad offers 24/7 tech support in home, in store, and over the phone. Agents can reach clients in home with telecommunications, web chat, or remote log in to operate the client's device. Clients can also come in store to get support from the help desk and check items in for repair. Because of the merge Geek Squad has repair and service plans for majority of Best Buy products. Many of these products are eligible for Geek Squad Protection Plans and give Best Buy more value because of the extra step they take to ensure customer satisfaction.

The new trend of e-commerce had scared Best Buy and Geek Squad however in recent times we have seen stocks jump for Best Buy and Geek Squad even with Amazon pushing all corners of every market. It is the genuine customer service that Geek Squad offers that Amazon does not. We give one on one consultations and you can see our repair agents instead of just a status message. I have been a Geek Squad agent for 1.5 years and I am proud to deliver quality customer service as a Geek Squad Agent.

Statement of Scope

Problem Description

As an Geek Squad Agent I must process service orders for clients that require system and hardware repairs. These systems have been well developed by big enterprises however I as an experienced user I notice many ways the system can be improved and areas where it excels. Clients provide account information to access profile listing support plans and best buy products purchased/returned. We can then continue to process service order with product information connected to the profile by filling out information regarding repairs. Service orders are then sent to the next process of repair in store or out of store. Repairs can result in product replacement or part replacement. Clients will be notified of for pick up and survey is dispatched after order completes. The system is very straightforward and work with ease until exceptions and escalated issues occur. These issues are not able to move forward without managerial intervention and typically slows the process down. There is not a redo process to reduce turn over time for out of store repairs. Most times when the repair was not completed regarding client requests, the product was be shipping back to store and reshipped for repair. Large databases are also not properly optimized and takes very long to pull information regarding repair information. System optimization and new processes must be added.

System Scope

There aren't many big tech support help desk businesses in North America and luckily Geek Squad is partnered up with Best Buy. Leading technology retailer teams up with leading tech support. This opened up many opportunities however many others have tried to do the same, for example Staples and Frys. The line is drawn by the quality of service provided with the products sold. If we can get customers to understand our services and products they will have a better experience. The current service order processing system has many great qualities including user friendliness and requires minimal client interaction. However, exceptions have always required managerial intervention which can require time and costs. Redo decisions should be properly processed with a set of parameters so that turn over time can be reduced and improve client experience. Database optimization must also be also be maintained. Long wait times for large tables can be time consuming and should not require minutes for retrieval. Improvements in these areas will expand the company's value to our clients.

Turn over time is one of the biggest challenges tech support companies face. Long turn over times can be a selling point and also a breaking point for clients because computers and televisions are a necessity of every modern life. Customers heavily decide on a service plans ability to deliver a repaired product in a reasonable time frame.

Relationships between Capabilities, Anticipated Benefits and System Functions

System Functions	Capabilities	Anticipated Benefits
Process Customer Log in	- Authenticate member information and service plan - Track customer service and purchase history - Track subscription status and take renewal payments - Provide billing information and receipts	- Improve client loyalty - Increase revenue from renewal and sales - Increase business intelligence
Manage Service Order	- Create client repair form listing client requests and services provided - Repair and contact client regarding repairs - Dispatch survey regarding service order - Escalate exceptions and special issues	- Reduce turn over time - Improve client loyalty - Reduce escalations - Improve agent activity
Process Shipments	- Manifest orders for shipment - Process and receive client items from repair center - Provide tracking information and escalation information - Deliver fast one or two day shipping methods for clients	- Reduce turn over time - Reduce overall costs with shipping partnerships - Increase company accountability - Reduce lost packages

Alex Tam Geek Squad Service Order Processing System Context Level Diagram

Customer

Customer repair decision report

Payment

Member info

Bill

Shipped service order info

Receipt

Completed repair order notice

Delayed repair order notice

Service Order Repair Receipt

Repair cost quote

Bank Account information

Geek Squad Service Repair Processing System

Out of store repair report

Management

Out of store repair order

Declined out of store repair quote

Approved out of store repair quote

Bank Account inquiry

Bank

Shipment order problems

Shipment progress

Completed service order shipment

Out-of-Store Repair Center

Repair cost estimate

Completed out of store repair order

Warehouse

Alex Tam Geek Squad Service Order Processing System Zero Level Diagram

Customer

Member info

Payment

Service Order Repair Receipt

Bill

Receipt

Bank Account information

Process Customer Login

1

Bank

Bank Account inquiry

Verified service order

Customer

Customer repair decision report

Repair cost quote

Completed repair order notice

Delayed repair order notice

Management

Out of store repair report

Manage Service Orders

Service order shipment

Shipped service order info

Customer

Completed service order shipment

Out-of-Store Repair Center

Process Shipments

Shipment order problems

Shipment progress

Warehouse

Out of store repair order

Declined out of store repair quote

Approved out of store repair quote

Repair cost estimate

Completed out of store repair order

Out-of-Store Repair Center

D1 Customer Data

D4 Product Data

D3 Warranty Data

Client info inquiry

Requested client info

Product info inquiry

Requested product info

Warranty inquiry

Warranty info

1.1 Look up client

Member info

Valid client login

1.4 Look up product information

Verified repairable product

1.5 Create Service Order

Full warranty coverage

1.8 Finalize Service Order Creation

Verified service order

Service Order Repair Receipt

Invalid Login

New client profile created

No warranty coverage

Payment complete

1.2 Unable to find client

New client information

1.3 Input new client profile

1.6 Create payment transaction

Bank Account information

Valid Bank Account info

1.7 Finalize transaction

Bill

Receipt

Bank Account inquiry

Payment

2.2 Verify out of store repair order

Verified service order →

Out of store repair order →

Service order shipment ←

Out of store diagnostic issued

2.3 Diagnose out of store repair

Diagnostic results

2.5 Redo out of store repair

Delayed repair order notice

Completed out of store redo repair

Delayed out of store repair order

2.1 Issue repair quote

Repair cost estimate →

Repair cost quote ←

Approved out of store

Declined out of store repair quote

2.4 Repair unit out of store

No delay

Approved out of store repair quote

Customer repair decision report

2.6 Contact out of store repair customer

Notified out of store customer

Completed repair order notice →

Completed out of store repair order ←

Out of store customer contact info

Out of store customer contact inquiry

2.7 Issue pick up time

Finished service order

2.8 Update completed service order history

Out of store repair report →

D2 Order Data

Update service order inquiry

Updated service order confirmation

D1 Customer Data

Shipping Data

Ship to repair center inquiry

Ship to repair center info

Service order shipment

| 3.1 |
| Manifest shipment |

Valid shipping manifest

| 3.2 |
| Ship package |

Successful delivery

| 3.4 |
| Repair Center Received Package |

Ship to store manifest

Shipping Data

Ship to store inquiry

Ship to store info

| 3.6 |
| Manifest shipment to store |

Completed service order shipment

Delayed delivery time

Successful rerouted delivery

Valid completed service order shipment

Shipment progress

| 3.3 |
| Delayed package |

Expedit shipping to repair center

| 3.5 |
| Rerouted Package |

Shipment order problems

| 3.7 |
| Ship back to store |

Shipped service order info

Alex Tam Geek Squad ERD Diagram 1

Product Data

productSKU

productModel
productCost
productPurchaseDate

contains

Customer Data

customerID

customerName
customerEmail
customerPhone

places

Order Data

orderID

orderData
orderType
orderCost

ships

Shipping Data

shippingNumber

shippingType
shippingTime
shippingCost

contains

Warranty Data

warrantyID

warrantyTime
warrantyCost
warrantyType

Alex Tam Geek Squad Class Diagram 1

Product Data

productSKU
productModel
productCost
productPurchaseDate

orderPart
updatePart

1

contains

1

Customer Data

customerID
customerName
customerEmail
customerPhone

addCustomer
updateCustomer

places

1

Order Data

orderID
orderData
orderType
orderCost

createOrder
updateOrder

*

1

ships

1

Shipping Data

shippingNumber
shippingType
shippingTime
shippingCost

createShipping
updateShipping

1

contains

1..*

Warranty Data

warrantyID
warrantyTime
warrantyCost
warrantyType

updateWarranty
viewWarranty

Geek Squad Create Service Order Activity Diagram

Client	Agent	System
Check in with agent	Input client information	Display customer profile
	Verify customer and product information	Initiate customer profile creation
	Start service order	Create new service order
Request product to repair	Select item and check serial number	Add item to service order
Explain problems with device	Record suspected problems and repair requests	Finalize service order

Yes

No