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## Building a successful Technical Support Centre

Credits

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# Typical CSP technical assistance center (TAC) landscape: A large number of tasks are NVA (non-value adding), leading to resource wastage

This insight analyzes major areas of process enhancement and provides recommendations for overall efficiency improvement.

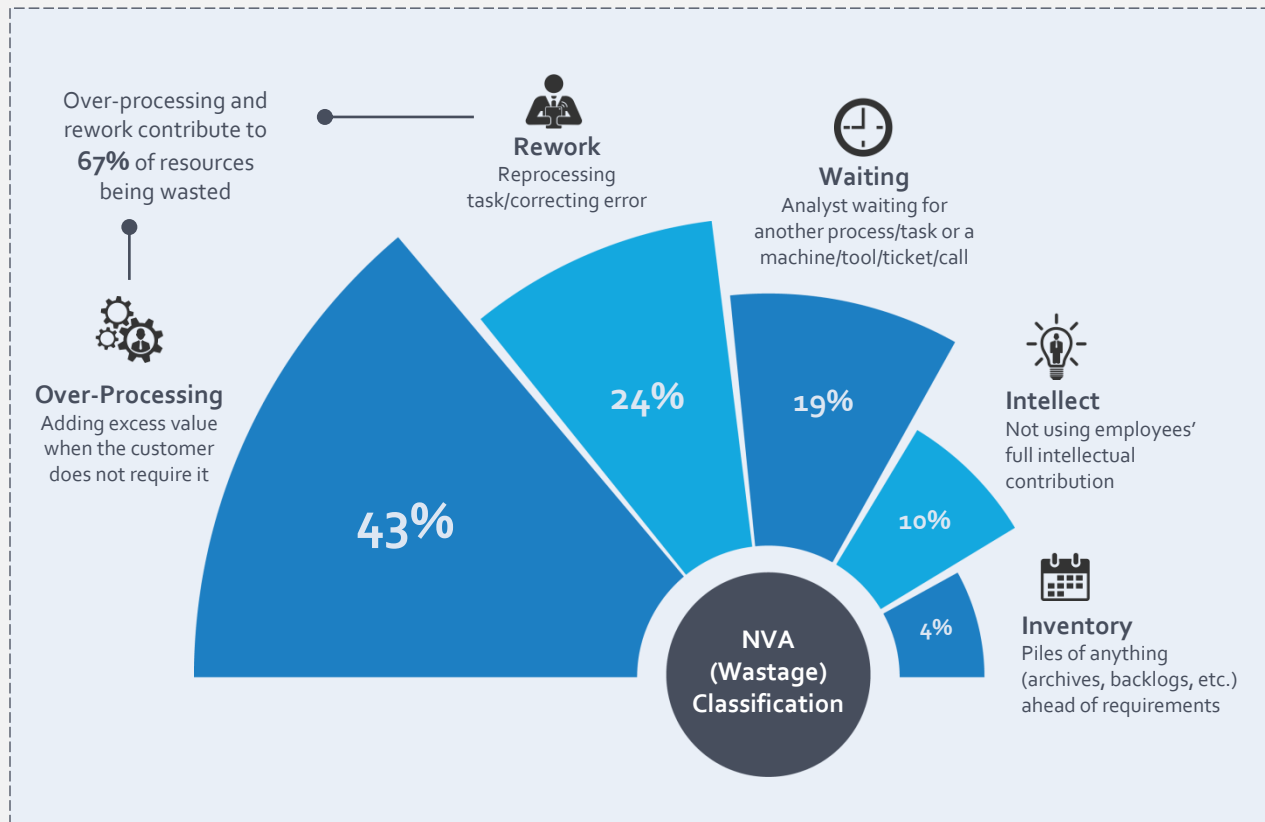
## SUPPORT ORGANIZATION STRUCTURE

Technical Experts

TAC Resources

Level- 1/ Level- 2 Resources

Field Engineers



# Major areas of concern for TAC and strategies to improve process efficiency

There are three main areas of concern for TAC teams that contribute to NVA (resource wastage and process delays)



## High volume of inbound (repeat) calls

- A lot of resources go into handling high volume of inbound calls
- Lack of segregation makes it difficult for CSPs to identify the nature of calls and root cause of repeat calls

## High volume of tickets

- Need to handle a lot of tickets on a daily basis
- A large amount of resources go into the ticket resolution
- No clear method to segregate noisy events from real critical ones

## Issues with distributed tools

- Need to work on a large number of distributed tools
- Simultaneously handling a large number of distributed tools is erroneous and contributes to record mismatch
- Results in rework and resource wastage

Almost all TAC teams face similar performance issues. In this insight, broadband TAC or “BTAC” is considered as an example.

# Addressing high volume inbound calls - Repeat call analysis mechanism



## Inbound Calls Database

Gain access to inbound calls CRM database (e.g. last 6 months data)



## Repeat Call Analyser

Use the repeat call analyzer tool to perform detailed analysis on the inbound calls. Analysis should include

- Source of calls (e.g. Field technicians/ customers/ Level-1/ Level 2 support)
- Issue category (e.g. Provisioning/ Troubleshooting)
- Geography
- Device type/ model

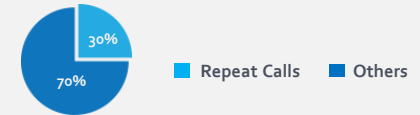


## Repeat Call Analysis Report

A sample report of repeat call analysis could look like the below:

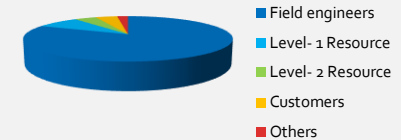
### Inbound call analysis:

30% of the overall inbound calls received in the selected period are repeat calls



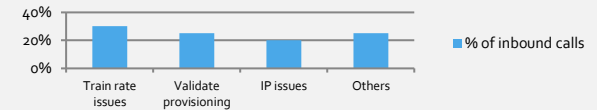
### Call source:

- 75- 85% of the inbound repeat calls comes from field engineers
- Rest 15 - 25% of repeat calls comes from level - 1/2 support centers and customers



### Issue category:

More than 60% of repeat calls comes for trouble shooting of train rate, IP issues and provisioning validation



### Geography analysis:

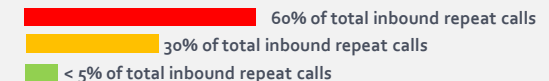
- 50% of repeat calls are originated from region - 5
- 20% repeat calls are from region - 3



### Device type analysis:

DSLAM models by % of repeat calls:

- 60% are related to ADT - 118x-g1 series
- 30% are related to CAL - 100-7 series



# Addressing high volume tickets – Ticket analysis mechanism



## Database

Tickets database: Gain access to ITSM database for the tickets raised (e.g. last 6 months data)



## Ticket Analyser

Use the ticket analyzer tool to perform detailed analysis on the tickets raised. Analysis should include

- Type of the ticket (severity level)
- Frequency of the ticket for same customer or device
- Functionality affected



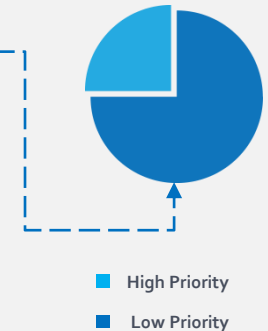
## Ticket Analyser Report

Ticket analysis report: Report based on the analysis of the ticket type, frequency, functionality etc.

### Sample findings from the report.

Approximately **70%** of the tickets raised are of low severity. These tickets are related to:








- Speed or broadband issues from the existing customers
- Login/password related issues



# Recommendations to reduce inbound repeat calls and tickets



Based on analyzing repeat call analysis report, following are some of the key recommendations to reduce inbound repeat calls and high volume of tickets

	<b>Implement bot assistance for level - 1/2 support team</b>	Deploy software robots to perform screening and basic troubleshooting steps assisting the level - 1/2 support centers. This will reduce the inbound calls and tickets raised from level - 1/2 support to BTAC.
	<b>Implement proactive monitoring and alert mechanism</b>	Enhancing the monitoring tool with capability to monitor the issues and assign/create correlated tickets proactively on ITSM. For example, if the monitoring tool detects an issue with specific DSLAM modem type, correlated ticket is raised on ITSM with CRM integration. This helps level - 1/2 resources accessing the CRM to proactively know all the affected customers with the particular DSLAM model type and take appropriate action even before customers complain.
	<b>Enhanced support application for field engineers</b>	Enhance field engineers' support app to contain all the necessary information such as order provisioning status, maximum attainable rate up/down, DSLAM card and slot information. This would reduce the calls and tickets raised from field engineers to BTAC.
	<b>On-demand provisioning feature</b>	On-demand availability of auto-provisioning tool to field technicians. This would help field engineers to fix any provisioning issues at customer premises by themselves without support from BTAC, in turn reducing calls and tickets to BTAC.
	<b>Updated workflow for level - 1/2 resources</b>	Clear workflow to enable level - 1/2 resources in handling issues such as resetting username, password etc. without TAC assistance. The workflow can be used as a checklist before issues are escalated by level - 1/2 resources to BTAC.
	<b>Providing clear password policy description on self-care portal</b>	Providing clear password policy description on self-care portal reduces login/password related tickets.
	<b>Proactive network analyzer tools for field technicians</b>	Provide proactive network analyzer tools such as Copper Analyzer, Broadband Tester etc. to field engineers to fix the issues proactively and reduce ticket volume.

# Recommendations to fix distributed tools problem & reduce record mismatch issues



## Analyzing the Issues

- Over the years, telcos have built/added a number of tools and applications based on the TAC teams' requirements
- Today, a typical TAC team has approximately **25 to 40 different tools** for record process
- It's difficult for TAC analysts to perform activities efficiently on distributed tools
- It leaves high scope of errors and mismatches in record process



## Recommendations

Unified B-TAC Tool: Consolidate all the tools under one umbrella/dashboard in order to improve efficiency.



### Consolidation Strategy

Conduct a tool study based on tools' features, compatibility & dependencies and categorize them into two sets:

1. Tools that can be consolidated
2. Tools that can be integrated

Study should also focus on required APIs, scripts for consolidation and integration.

### Sample tool study report

#### Following tools can be consolidated into unified BTAC tool

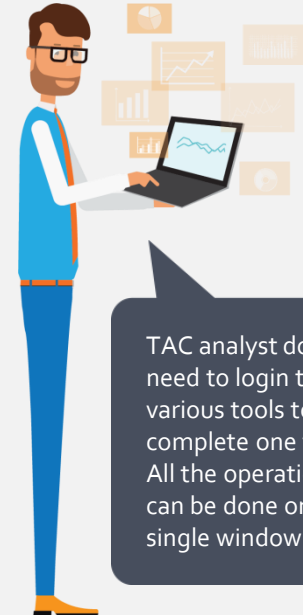
- Dashboard
- Scripting tool
- Field tech view
- Auto provisioning tool
- e-health
- Profile setter
- Fallouts management system
- Record corrections tracking system

#### Following tools can be integrated with unified BTAC tool

- Inventory tool
- CRM
- ITSM tool
- User access control tool
- OTP generator
- Network management system
- Inbound/Outbound call monitoring system



## Benefits of Unified BTAC Tool



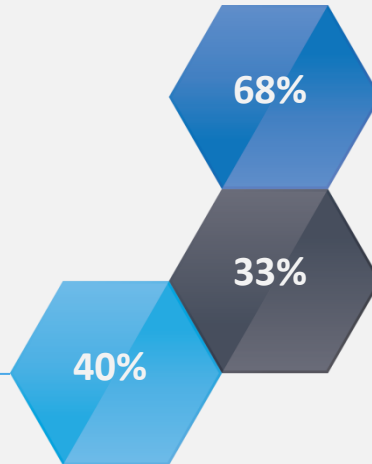
TAC analyst doesn't need to login to various tools to complete one task. All the operations can be done on a single window.

# Key takeaways

A leading **tier 1** operator in the US realized **167K** reduction in record issues, **128K** reduction in inbound calls and **28K** reduction in tickets with the help of the strategies described in this insight.

## Reduction in ticket volume

- Copper analyzer and robotic screener helped identify and solve entry-level issues
- Ticket volume reduced by 40%, i.e. 28K per annum



## Reduction in record issues (mismatches)

- Tools consolidation helped reduce record (mismatch) issues by 68%, i.e. 167 K per annum

## Reduction in inbound call volume

- Self-diagnostic tools and on-demand access to the provisioning tool helped reduce inbound calls volume by 33%, i.e. 128K calls per annum





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THANK YOU!

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