



Prodapt powering
global telecom

Fix the broken dispatch process to improve filed service

Spare location intelligence can enable efficient dispatch operations and reduce the issue resolution time by 45%"

Credits

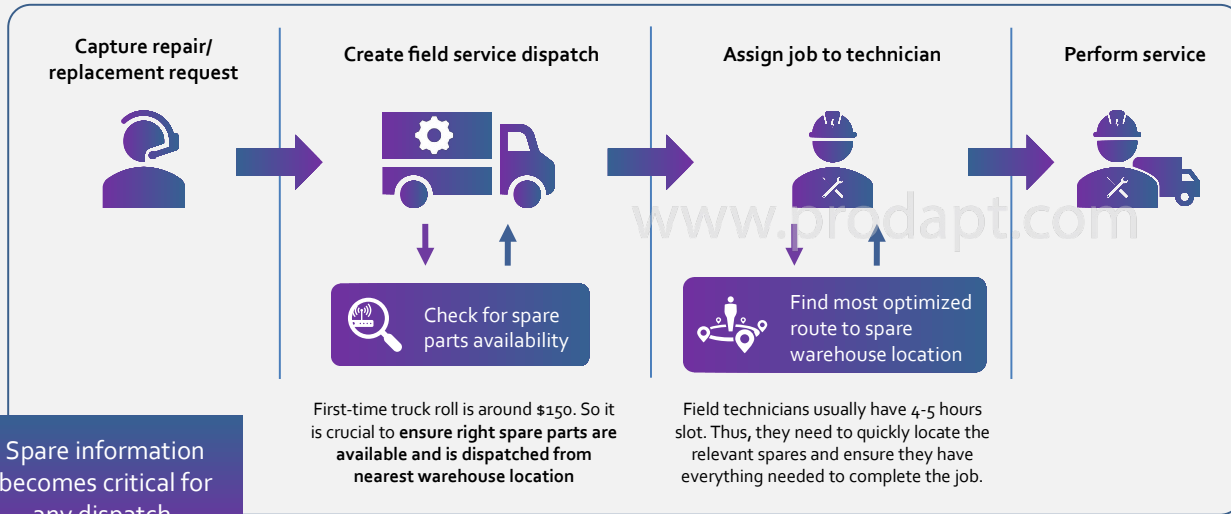
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Handling Repair and Replacement Activities by DSPs is a Challenging Task

Increase in Mean Time To Repair(MTTR) Affects Customer Experience; Higher Repeat-Dispatch Rate Increases Cost

To perform repair/replacement activities, Digital Service Providers (DSPs) need to quickly find the relevant spare parts and schedule the dispatch. Taking too long to repair faulty hardware can significantly impact customer experience.



Major Roadblocks In Accelerating Repair Activities

Element of unpredictability - Less visibility on what is available in stock vs onsite requirements.

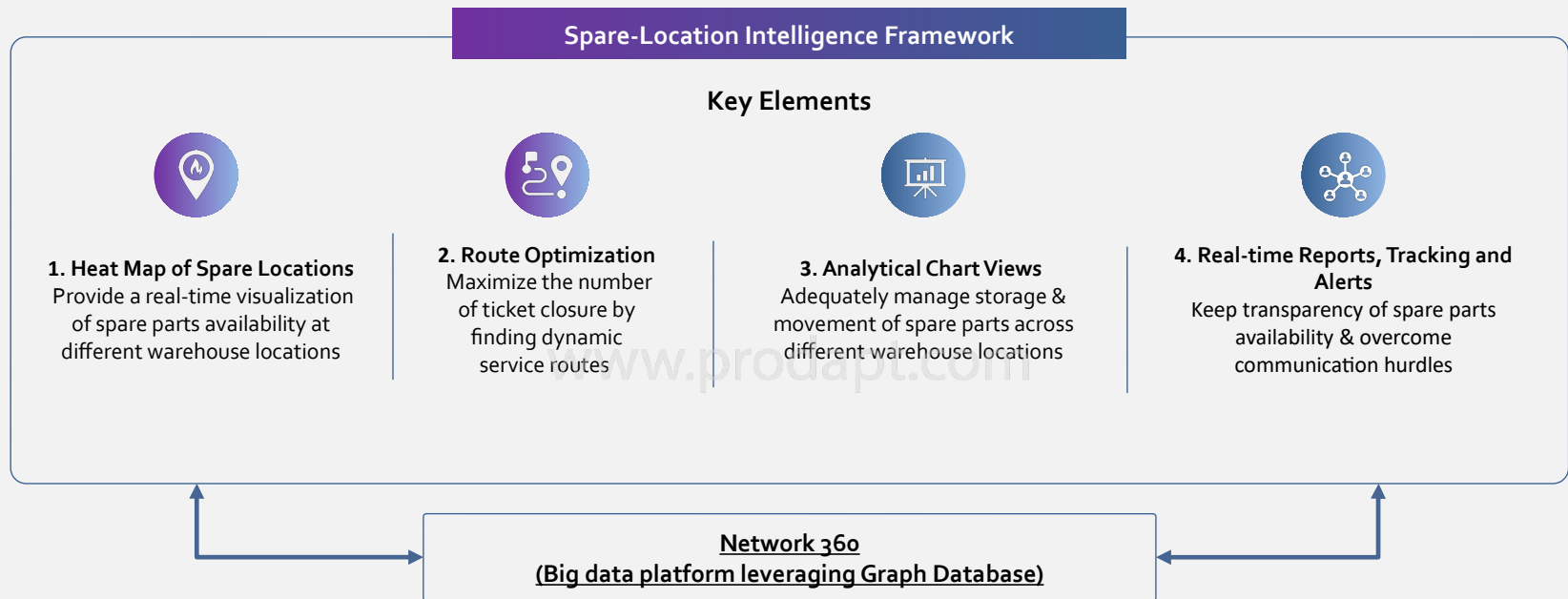
Inefficient monitoring of spare parts movement & storage across location
Lack of real-time reports on availability of spare parts

No optimized routes to reach warehouse location
This gets further complicated when a technician needs to visit multiple locations to complete multiple work orders

Communication hurdles and poor synchronisation
Repeated call backs, late arrival, lack of clear visibility and transparency brings down process efficiency and impacts customer satisfaction

Accelerating MTTR requires DSPs to adopt solutions, which can digitally transform the operations performed by Field Technicians and Design & Planning team.

DSPs can Build Spare-Location Intelligence Framework to Fast Track Repair Activities



* It is recommended to have a big data ecosystem, which integrates scattered set of data to solve the problem of information asymmetry in network management. One of the most efficient way to achieve this is by [building a 360° real-time network visualization leveraging graph database.](#)

This insight details out each of the key elements of the framework and showcases how these elements digitally transform the existing operations

Heat Map of Spare Locations – Provide Real-time Visualization of Spare Parts Availability at Different Warehouse Locations



Heat Map brings more transparent visibility of spare parts; thereby avoiding need of any manual intervention.



Create quick search options

Technician can search the spare parts by entering any one of the search criteria

Carrier 8:53 PM
Back Filter
Current Location
CMRCGA04
Vendor
Part Number
Scan Image Scan Bar Code
Reset Search

Fig: Sample Search option



Integrate advance search functionalities into the mobile app to ease and fast track the process



Image recognition

Automatic identification with real-time image capture to locate the faulty spare



Bar code reader

Quickly scan the bar code present on back of the faulty hardware

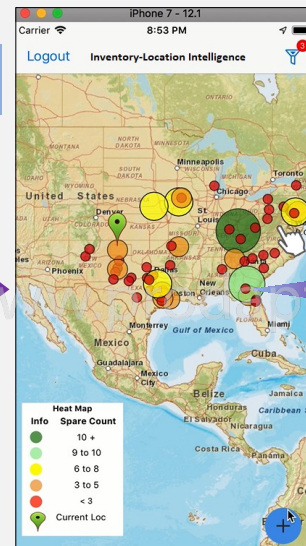


Fig: Sample Heat Map of particular spare part searched by Field Technician



Get spare details in a single click:

Build capabilities to show all the spare details when the field technician selects a specific location.

Spare Detail
• Spare CLLI Code: CLEVGA
• Shelf: 06
• Bin: 02
• Spare Count: 4
• Infractions: 3
• Predicted Likelihood: 70 %
• Distance: 33.74 (Miles)
• Driving Directions: [Click Here](#)
Zoom to

Fig: Sample output of Spare Details

Extract and display granular level of details as shown above

Helps field technicians to quickly get all details in a single click, which otherwise takes 1-2 hours just to find spare availability

Route Optimization- Maximize the Number of Ticket Closure by Finding Dynamic Service Routes on a Continual Basis

Route optimization should direct field technicians along the best route to accomplish maximum tasks as per the allotted work orders.



Get optimized routes to nearest 5 locations

Field technician can select one of the location based on:

- Miles Count
- Customer location
- Location of other scheduled work orders

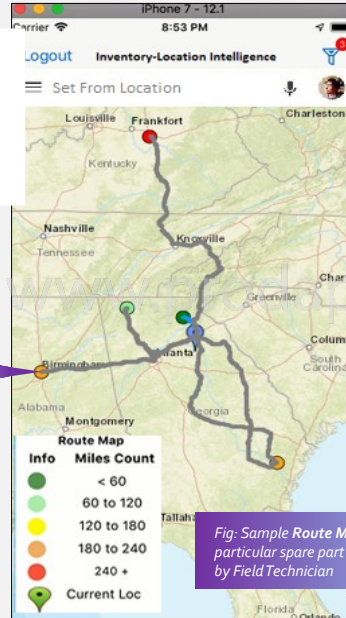
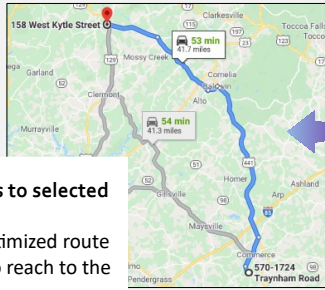


Fig: Sample Route Map of particular spare part searched by Field Technician



Find dynamic routes to selected spare locations

- Provide most optimized route within the app to reach to the spare location.
- Share **live tracking of technician** with warehouse manager and field supervisor.



Reserve spare parts in advance

Very often the field agent doesn't get the required number of spares when he reaches location – spare part is reallocated or picked by some other agent

Built-in features such as **"Advance Reservation"**, notifies the warehouse manager to block any movement of the spare parts



Self-locate the spare parts in the warehouse

Having information such as **shelf number, rack number and bin number**, helps field technicians to self locate these spare parts when they have reached the warehouse

Having above mobile-based features for field technicians can lead to 45 - 50% increase in job completion rate

Integrating Analytical Chart Views with Spare locations

Adequately manage storage & movement of spare parts across different warehouse locations



Planning team needs to ensure that **spare parts are always available at right place and in right quantity**. Integrating features such as **analytical chart views** along with the heat map of spare availability can further ease planning decisions



Identify which spare part is understocked and at what location



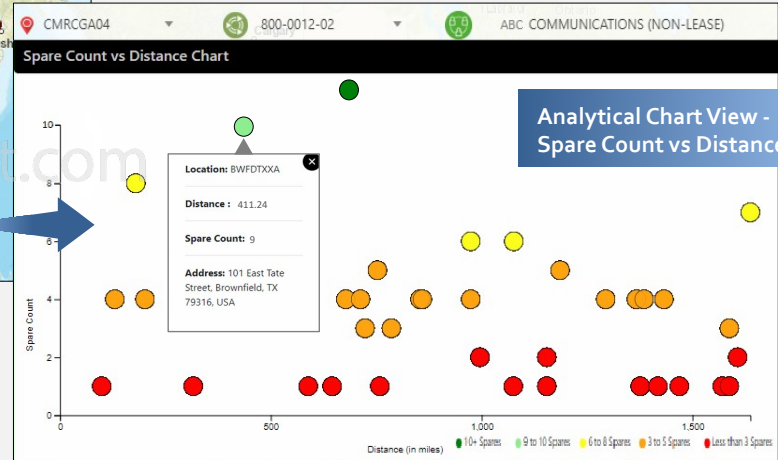
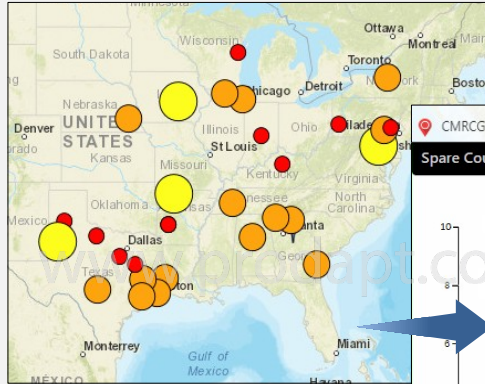
Monitor change to reallocate spare parts



Ensure higher availability of spare parts at locations where demand is higher



Understand trends and set priorities



In addition to this, integrating Spare locations with **real-time GIS (geographic information system) data** can reveal real-time insights into data, such as **weather patterns, trends, and situations** - helping planning teams to make prudent decisions.

This helps planning team to identify risk-prone areas and take precautionary measures to respond to any events

Increased analytical and decision-making capacity is vital for planners to ensure spare parts are always available in adequate quantity. This also ensures better resource utilization leading to increased savings.

Real-time Reports, Tracking and Alerts

Keep transparency on spare parts availability & overcome communication hurdles

1

2

3

4

Back	Spare List
Search CLLI Code	
Spare CLLI Code : DUMSTXXA	
Spare count : 4	
Distance : 163 Miles	
Predictive likely hood : 60 %	
Address : 116 West 7th Street, Dumas, TX 79029, USA	
Spare CLLI Code : TLIATXXA	
Spare count : 1	
Distance : 255 Miles	
Predictive likely hood : 75 %	
Address : 123 North Armstrong Avenue, Tulia, TX 79088,...	
Spare CLLI Code : ESPNNMXXA	
Spare count : 1	
Distance : 274 Miles	
Predictive likely hood : 70 %	
Address : 315 Route 399, NM 87532, US	
Spare CLLI Code : SHLWTTXXA	
Spare count : 2	
Distance : 313 Miles	
Predictive likely hood : 60 %	

Real-time Reports:
List of spares at
particular warehouse



Design & Planning
Team

- Real-time reports are a single source of truth for decision making
- Avoids discrepancies leading to **understocking** or **overstocking**

Overcome communication hurdles by going digital– Live Tracking, Email Alerts and Notification



Field Manager

- Get technician location and their availability at any point of time to better **prioritize work orders**
- Make decision weather to **bring additional resource** to supplement workload
- Gain control of **late arrival and rescheduling situations**
- In case of any delays and postponement **provide alerts to customer in advance.**

Live Tracking



Email Alerts

Notifications



Field Technician

- Digitally be in **sync with the rest of team** to get real-time updates and **reduce call backs**
- Notify customers in real-time of **arrival status**

Having these in-built functionalities can bring significant process improvements and increase customer satisfaction

Business & Operational Benefits Achieved by a Leading Digital Service Provider (DSP) in North America

The DSP was facing challenges in reducing overall MTTR, which led to poor customer satisfaction. Owing to the opaque nature of operations, it was a hassle for both Field Technicians and Design & Planning team to fast track repair activities.

Implementing **Spare-Location Intelligence**, as discussed in this insight, helped the DSP to achieve major benefits

Key Benefits



Reduced overall Mean Time To Repair by **45 - 50%**



Increased analytical capabilities helped design & planning team to make a better decision



Reduced Field agent's time taken to locate spare parts by up to **70 - 75%**



Improved customer experience and Net Promoter Score (NPS)

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THANK YOU!