Predictive Service Story

We want to prototype sending printer usage and sensor data to Leonardo IoT to use for machine learning and analysis to detect potential issues and fix them before they impact customers.

By focusing on device uptime, our customers should see reduction of print-related help desk calls, and fewer disruptions.

To further reduce disruptions for customers, we want to improve onsite service efficiency by using GPS location data for more accurate arrival estimates and augmented reality for faster repairs.
USING SAP LEONARDO FOR PREDICTIVE SERVICE

MILLIONS OF PRINTERS SEND USAGE AND SENSOR DATA TO LEONARDO IOT.

BY ANALYZING THIS DATA, WE CAN PREDICT WHEN PARTS NEED TO BE REPLACED BEFORE THEY BREAK!!!

SERVICE TECH LOCATION INFO SENT TO LEONARDO

SERVICE TECH USES AUGMENTED REALITY TO REPAIR PART

SERVICE TECH WILL ARRIVE IN 30 MINUTES

READY FOR BUSINESS
Personas

Cherise Hart
IT Coordinator

About
- 32, Married, 5 years of IT Experience
- I work with multiple system and network vendors on a weekly basis
- A+, Network+, Security+ certified

Responsibilities
- Provide technical support and training for systems and networks.
- Liaison between end users and higher level support.
- Maintains licenses and upgrade schedules.
- Performs troubleshooting, repairs and data restoration.

Main Goals
- Keep systems and networks functioning 24/7.
- Effectively coordinate schedules between multiple vendors and work streams.
- Evaluating new technology that helps the business be more effective.

Needs
- I need the ability to quickly open trouble tickets with vendors.
- I need to know what repairs are being done and why.
- When office equipment is being repaired, I need to know when the service agent will arrive and how long it will take to fix.

Pain Points
- When office equipment fails and it will be days until the device is fixed.
- When the service tech arrives late to fix a device.
- When the service tech doesn’t have everything they need to fix the device.
Rubin Kreutzmann
Field Service Technician

About
- 28, Single, 4 years of experience repairing printer equipment
- I work with multiple customers per week

Responsibilities
- Assures customers needs and expectations are met.
- Providing service and customer support during field visits.
- Diagnose and repair problems with printer equipment.
- Performs preventative maintenance according to manufacturer specifications.

Main Goals
- Ensuring the customer is satisfied with printer repairs.
- Producing timely and detailed service reports.
- Meet SLAs with customer.

Needs
- I need well written instructions and tools list from manufacturers when making a repair.
- I need parts that are easy to transport, unbox and install.

Pain Points
- Poorly written repair instructions.
- Not having the right tools for the job.
Point of View
As a Field Service Agent

I need a way to have well written instructions and tools list from manufacturers when making a repair so that I am able to fix the job quickly the first time without having to come back for the same issue.

Point of View
As a IT Coordinator

I need a way to know what, why, when and by whom repairs are being done so that I can coordinate with internal customers and reduce the amount of disruptions.

Point of View
As a Field Service Agent

I need a way to watch video on how to install the part so that I can watch someone install while following along with the written instructions.

Point of View
As a IT Coordinator

I need a way to have detailed service reports so that I can add the reports to our internal configuration management database.
# User Experience Journey: IT Coordinator

<table>
<thead>
<tr>
<th>ACTIONS</th>
<th>Email request for preventative service</th>
<th>Coordinating with business</th>
<th>Confirmation of service date</th>
<th>Start of service Call</th>
<th>During service Call</th>
<th>End of service Call</th>
</tr>
</thead>
</table>

| MINDSET                                      | It is better to plan for maintenance than the printer be broken | Appreciate details of maintenance to be completed | Business is informed and we have an estimated time of arrival and duration | Nice to receive location update and estimate arrival from service tech | Nice to have est. completion and why repairs are needed for internal customers | Nice to have detailed service report, the job completed and internal customers happy |

| FEELING                                      | 😊                                      | 😐                                      | 😐                                      | 😐                                      | 😐                                      | 😊                                      |

| TOUCH POINTS                                 | Email                                   | Email                                   | Follow up phone call                   | Text and/or email alert (up to customer) | Earlier email and follow up phone call | Email completion of work with detailed service report |

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**Leonardo IoT Prototype: Service Tech View**
Leonardo IoT Prototype: Printer Detail

Lexmark X790 Series
Acme Financial

1401-143-DE • Mapped • Geo-Match • Connected • On

Contact Person
Hart, Cherise

DEVICE UPTIME
99.99 %
July 1, 2017 00:00:00

Notifications (1)
Needs preventative maintenance

PAPER JAMs

Page Jams

2PM 3PM 4PM 5PM 6PM 7PM 8PM 9PM 10PM 11PM

0 0.5 1 1.5

PAGES PRINTED

Page Count

8AM 9AM 10AM 11AM 12PM 1PM 2PM 3PM 4PM 5PM

0 200 400 600 800

TONER UTILIZATION

Cyan

Cyan

8AM 9AM 10AM 11AM 12PM 1PM 2PM 3PM 4PM 5PM

0 5 10 15 20

CPU UTILIZATION

CPU

2PM 3PM 4PM 5PM 6PM 7PM 8PM 9PM 10PM 11PM

0 5 10 15 20