

**Customer Feedback Loop-Sync+ Voice Message**

**Product Requirements Document (PRD)**

***V1.0***

**Document Status:**

**Document Type:** PRD

**Classification:** Confidential

**Department:** ECDX

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**Project:** Customer Feedback Loop

# Changes

|  |  |  |  |
| --- | --- | --- | --- |
| **Author** | **Date (YYYY/MM/DD)** | **Status** | **Notes** |
| Simon Zhao | 2021/06/15 | Draft | Version 1.0 |
| Vivian Shang | 2021/06/27 | Draft | Version 1.1 |
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| Reviewing Manager: |  |
| Document Location |  |
| Date Released: | <Date the reviewing manager approved this document MM/DD> |

Contents

1 Changes 1

2 General Assumptions 4

2.1 User 4

2.2 Vehicle 4

3 Overall 4

4 Release Plan 4

5 Sync+ voice message feedback 5

5.1 Description 5

5.2 Assumptions 5

5.3 Requirements 5

5.4 Use Cases 6

6 Classification Key 10

7 Document Status Key 10

8 Terms, Acronyms and Definitions 10

9 Contacts 11

# General Assumptions

## User

The user is assumed to have completed all of the following steps prior to attempt to use the feature:

* Has finished Ford ID register on FordPass / LincolnWay, and binded a vehicle on his ID
* Account login on Sync+, and Sync+ functioning normally

## Vehicle

For a vehicle to support the feature, the vehicle must have all of the following:

* Sync+ system phase 2 / 3 / 4
* GPS Antenna
* TCU / Embedded Moden
* Customer feedback loop has installed

# Overall

As a part of transforming the organization on modernization and customer centricity, the objective of customer feedback project is to offer a digital direct customer feedback channel and related operation mechanism. The whole program scope includes Sync+ and mobile Apps, and other services.Scope as below

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|  | **2021 Q3** | **2021 Q4** | **2022Q1** |
| **Sync+ OTA Plan** | *CD539ICA* | *CX483ICA* | *CX727/ CD542* |
| *U540/ U611/CX483* |
| **Sync+ feature** | - call service center |  |  |
| - send voice message on IVI | |  |
| **Mobile App** | LincolnWay App 8/20(Planned) | FordPass App (TBD) EV App 8/31(Planned) |  |
| **Backend** | •Text upload to Ford cloud | • Text & Audio upload to Ford cloud |  |
|  | • Sync+ system log upload to Ford cloud |  |
|  | • automatically distribution & integration with various CRC |  |
|  | • Operation portal for Internal user (客服 / FRSG /Quality） | Integrate with Company C CRC |
| **Data Consumption** | Involved in 800M data pool which afforded by Ford | | |

The project PRD can be divided into following documents:

|  |  |  |
| --- | --- | --- |
| PRD Name |  | Notes |
| Customer Feedback Loop- EV app v1.0-20210615 |  | Requirement for front-end & H5 & data uploading |
| Customer Feedback Loop- FordPass v1.0-20210615 |  | Requirement for front-end & H5 & data uploading |
| Customer Feedback Loop LincolnWay v1.0-20210615 |  | Requirement for front-end & H5 & data uploading |
| Customer Feedback Loop- Sync+ Voice Message v1.0-20210615 |  | Requirement for data uploading & storage & management  Front-end requirement refers to Baidu MRD |
| Customer Feedback Loop-Operation Portal v1.1-20210622 |  | Requirement for operation portal to internal user |
| Customer Feedback Loop-Log Post Back v1.0-20210622 |  | Requirement for BT & Sync+ system & application log post back |

# Release Plan

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Version | Release Date | Status | Brand | Vehicle Line | Features / Widgets |
| 2.0v | -Aug. 2021 |  | LW, FP & EV app |  | 1. Mobile end H5 solution 2. Portal for customer feedback operation |
| 2.0v | - Aug.2021 |  | Ford | CD539ICA | 1. Sync+ voice & text message feedback |
| 2.1v | - Nov.2021 |  | Lincoln & Ford | CX483  CX483ICA  U554MCA |  |

# Sync+ Voice Message Feedback

## Description

The Sync+ voice message feedback is to let users submit their issues or suggestions by voice message quickly and directly to operation platform, and then, service team will login the platform to respond to users, to bring user better after-sale service.

Business flow chart as following:

Click “ voice message feedback” button / through voice recogniton to leave voice message

Account login or not

Remind user to login

No

Yes

Authorization prompt pop-up

User authorize to allow audio colection

Back to home page

No

No

Yes

Yes

Enter into voice meaasge feedback page and start 30s audio recroding and text convertion

Reconding completed

Satisfied with the audio Recording or not

Submit message to cloud

Yes

Submiting and pop-up prompt “we have received your feedback and will reply to you soon ”

No

Reentering voice message

Scenarios:

When customer submit a voice message, service stuff respond via In-app message

S1: customer no follow up issues close

S2: customer has follow up issue click link In-app message

## Assumptions

The voice message is clear enough and speech to text conversion is accurate enough. Sync+ NLP works normally.

## Requirements

|  |  |  |
| --- | --- | --- |
| Requirement ID | Title | Description |
| 5.3.1 | Sync+ voice message entering and reentering | 1. Click “ voice message feedback” button/ through voice recogniton to leave voice message 2. User authorization first and authorize for current login user ID, user can cancel authorization in setting page 3. User can view converted text when leaving voice message 4. Click “reenter” button if user try to leave new voice message after felt not ok for the previous one 5. User can name the voice message (optional) |
| 5.3.2 | Sync+ feedback submitting and canceling | 1. Submit automatically after voice message entering completed within 30 s 2. user should check the privacy policy as well 3. User can also cancel to submit their voice message by click “cancle” button |
| 5.3.3 | Pop-up prompt 1 after feedback submitted automatically | After feedback submitted automatically, there is a pop-up to remind user   * “we have received your feeback and will reply to you timely” * “the voice message will be saved 7 days in Sync+ system ” (optional) |
| 5.3.4 | Sync+ feedback history display | 1. User can view and listen their history voice message（compressed） of last 7 days 2. User can delete their voice message by click “delete” button |
| 5.3.5 | Uploading fields & attachment | Need upload customer voice feedback converted text, including required fields as: user ID, brand & model name, VIN. And voice message attachment （compressed）to cloud |
| 5.3.6 | Voice message store and upload | 1. Voice message will be compressed losslessly and stored in Sync+ system for 7 days, and uploaded to cloud and stored for 14 workdays 2. Service staff can request for the voice message(compressed) attachemnt from colud on demand |
| 5.3.7 | Conveted text message uploading | Converted text message will upload to cloud to be classified and then to operation portal |
| 5.3.8 | Pop-up prompt 2 with message uploading failed | If the compressed voice message and converted text uploaded failed after submitted， there is a pop-up to remind user “voice message submitted failed， please check your network and try again” |
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## Use Cases

|  |  |
| --- | --- |
| Use Case ID | 5.4.1 |
| Use Case | Sync+ voice feedback entering and reentering |
| Requirements | 5.3.1 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is working normally. |
| Trigger | 1. User clicks “voice message feedback” button/ through voice recogniton, or“reenter” button |
| Expected Behavior | 1. Click “voice message feedback” button/through voice recogniton to leave voice message and can view converted text as well 2. Click “reenter” button if user try to leave new voice message after felt not ok for the previous one 3. User authorization first |
| Post Conditions | If user feel ok to their voice message ,click “submit” button |
| Exceptions |  |

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| --- | --- |
| Use Case ID | 5.4.2 |
| Use Case | Sync+ feedback submitting and canceling |
| Requirements | 5.3.2 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is working normally. |
| Trigger | 1. User click “cancel” button |
| Expected Behavior | 1. Voice message will be submitted automatically 2. Voice message will not be submitted |
| Post Conditions | 1. Converted text message will upload to cloud to be classified and then to operation portal；while voice message will be uploaded and stored in cloud 2. Voice message will be deleted in Sync+ system successfully |
| Exceptions |  |

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| --- | --- |
| Use Case ID | 5.4.3 |
| Use Case | Pop-up prompt 1 after feedback submitted automatically |
| Requirements | 5.3.3 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is working normally |
| Trigger | 1. After feedback submitted automatically |
| Expected Behavior | 1. there is a pop-up to remind user  * “we have received your feeback and will reply to you timely” * “the voice message will be saved 7days in Sync+ system” (optional) |
| Post Conditions | 1. user can view the voice message history if they want |
| Exceptions |  |

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| --- | --- |
| Use Case ID | 5.4.4 |
| Use Case | Sync+ voice message history display |
| Requirements | 5.3.4 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is working normally |
| Trigger | 1. User click “view history” and “detele” button |
| Expected Behavior | 1. User can view and listen their history voice message（compressed） of last 7 days 2. User can delete their voice message by click “delete” button |
| Post Conditions | 1. View and detele voice message sucessfully |
| Exceptions | None |

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| --- | --- |
| Use Case ID | 5.4.6 |
| Use Case | Voice message store and upload |
| Requirements | 5.3.6 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is working normally. |
| Trigger | 1. After feedback submitted automatically |
| Expected Behavior | 1. Voice message will be compressed losslessly and stored in Sync+ system for 7days, and uploaded to cloud and stored for 14 days |
| Post Conditions | 1. User can view voice message history of last 7 days 2. Concierge/Guides can request for the voice message attachement on demand |
| Exceptions | None |

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| --- | --- |
| Use Case ID | 5.4.7 |
| Use Case | Conveted text message uploading |
| Requirements | 5.3.7 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is working normally. |
| Trigger | After feedback submitted automatically |
| Expected Behavior | Converted text message will upload to cloud to be classified and then to operation portal |
| Post Conditions | Concierge/Guides can view the feedback and respond |
| Exceptions | None |

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| --- | --- |
| Use Case ID | 5.4.8 |
| Use Case | Pop-up prompt 2 with message uploading failed |
| Requirements | 5.3.8 |
| Pre-Conditions | 1. Vehicle ignition on 2. Sync+ functioning normally 3. The network is not working. |
| Trigger | 1. feedback submitting |
| Expected Behavior | 1. there is a pop-up to remind user “voice message submitted failed， please check your network and try again” |
| Post Conditions | 1. User checked the network and make sure network works normally and click submit again |
| Exceptions | None |

# Classification Key

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| --- | --- |
| **Classification** | **Notes** |
| Proprietary | Information created or obtained in the normal course of business and not classified as Secret or Confidential |
| Confidential | Information that provides the Company with a competitive advantage, that supports its technical or financial position, and which, if disclosed without authorization, could cause damage to the Company. |
| Secret | Information of a strategic or highly sensitive nature that, if disclosed without authorization, would cause substantial, severe, or irreparable damage to the Company or its relationships. |

# Document Status Key

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| **Status** | **Notes** |
| DRAFT | Document currently being worked on. Shall not be used as a solid reference to information included in this document. |
| AFR | Available For Review. Document information is not eligible for changes. Approving manager will revise this document and if all the information is found to be completely valid, then the document will change to REL status. If the document is found to have errors, the document will change to DRAFT status. |
| REL | Released. Document is completely valid at time of review, and is now available to be used as a solid reference of information. |

# Terms, Acronyms and Definitions

|  |  |
| --- | --- |
| **Term or Acronym** | **Definition** |
| Sync+ |  |
| HMI | Human Machine Interface. The infotainment display and controls provided by the vehicle. |
| TCU | The telematics control unit. |
|  |  |

# Contacts

For assistance or correction, please contact any of the following:

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