Lectrix Technologies Pvt. Ltd.

Feature List for SOP

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Executive Summary

The following document contains the feature list for LX70 with respect to SOP. These features have been derived and designed based on benchmarking study of various players within or near the mass premium segment, user stories/ pain-points and inputs from the team.
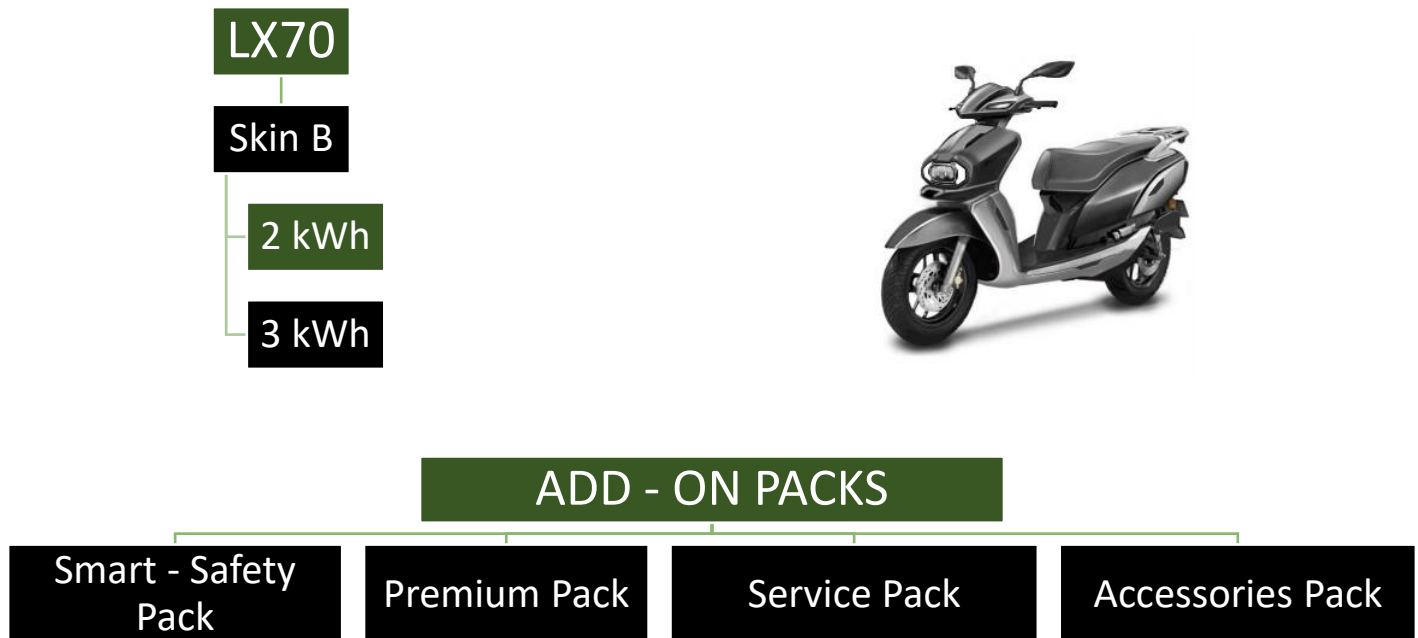
Features were prioritized based on a scorecard analysis with KPIs such as Reach, Impact and Cost/ Effort (Out of 5 each). UX Score and Implementation Score were calculated as follows:

UX Score = Reach X Impact;

Implementation Score = UX Score X (Cost/ Effort);

Features with a higher Implementation Score were given more priority keeping in mind convenience and perfect experience for the user.

Variants

LX70
Skin B
2 kWh
3 kWh

ADD - ON PACKS

| Smart - Safety Pack | Premium Pack | Service Pack | Accessories Pack |

Note:

a. *VCU hardware is common across all variants. Feature locking to be done via software.*
b. *Smart and Premium pack can only be bought at the time of order, while Service pack can be added anytime.*
c. *Premium pack would include premium features and the Smart pack as a bundle.*

Feature List (SOP)

SOP	Feature
BASE	**Custom modes ★**
	Real time Km/ Wh ★
	Boot Space - 1 full face helmet + Charger ★
	TFT 5" ★
	Hill Hold ★
	Turn by turn Nav ★
	Day/ Night mode
	Crash & Fall alert (BLE)
	Last Parked Location (BLE)
	Public Fast Charging (3 kWh)
	Remote Diagnostic
	Shut down Mode
	Engaged Side Stand -> motor cut-off
	Accident/ Topple -> motor cut-off
	Regeneration
	Standard riding modes (Eco, Power)
	Boost mode/ Nitro
	Incoming call alert
	Call acceptance and rejection
	SOS (On App)
	Distance to go
	Average Km/ Wh
	Music Control
	Multiple rider profiles
	OTA – Bug Fixes
	Ride Analytics
	Periodic Service alerts
	USB Charger for mobile charging
	Pass switch
	Multiple Cluster themes (3 kWh)
	Utility pockets
	Hazard Lights (Via Parking Button)
	Front Hook
	Flat Footboard

SMART/ SAFETY PACK ADD-ON **@INR X**	**Child mode/ Parental Control ★**
	OTA – Graphics/Firmware
	Crash & Fall alert Plus (4G enabled)
	Live Location
	Vehicle health Data
	Geo Fencing
	Last Parked Location
	Theft Alert
(Beyond SOP) **PREMIUM PACK ADD-ON** **(Fixed Variants)** **@INR Y** **Inclusive of Smart-Safety pack features!**	**TFT 7" with Touch ★**
	Screen Gestures ★
	Onboard Downloadable Maps ★
	Keyless - Proximity Unlock ★
	SOS Plus (On Screen)
	TPMS
	Document Widget
SERVICE PACK ADD-ON **(2* Year Renewal)** **@INR Z**	**3 Years (Standard) + 5 Years* (Extended) Warranty ★**
	Pre-emptive Diagnostics + Periodic Service Alerts (Base Feature) ★
	Free Service!!! ★
	Advanced Tool Kit ★
	2 Coupons - Free Pick and Drop ★
	Road-Side Assistance
Accessories – SOP Scooter Use case accessories.xlsx	**850 W Charger** ** **★/ Wall mount***
	Screen Guard
	Ladies' footrest/ Buddy Step
	Centre Stand
	Floor Mat
	Helmet – Half face
	Utility Pocket
	Number Plate Rubber End
	Mobile holder
	All bodyguard
	Chrome Bar Ends

Can be modified later does not impact any build

**Standard 450W charger will come with the vehicle, 850W is optional*

Feature List (Alpha)

SOP	Feature
BASE	**Custom modes (Mobile – Vehicle Interaction) ★**
	Boot Space - 1 full face helmet + Charger ★
	TFT 5" ★
	Hill Hold ★
	Turn by turn Nav ★
	Last Parked Location (BLE)
	Shut down Mode
	Engaged Side Stand -> motor cut-off
	Accident/ Topple -> motor cut-off
	Regeneration
	Hazard Lights
	Standard riding modes (Eco, Power)
	Incoming call alert
	Call acceptance and rejection
	Distance to go
	Average Km/ Wh
	Music Control
	Pass switch
	Flat Footboard
	Mobile holder

Annexure I – Deleted Features

S. No.	Feature	Category	Reason for deletion
1	Auto Brightness	Base	1. Benchmarked against a 1750 nits' system, LX70 will have an 800 nits' system, and change in brightness won't be very noticeable in daylight 2. Most of the time vehicle will run in open, having smart brightness control would not affect much + for a better UX the sensor has to be of a very high grade so that change in brightness is smooth 3. Dark mode will suffice in most cases
2	Parking Brake Lever	Base	1. Packaging constraint 2. Not a must have feature. 3. Benchmarked Ather by parking on 12-degree grade, with riders' feet on footboard, it withstood easily without a Parking Brake Lever
3	Kill switch	Base	1. Lack of control I/O pins on ConnectM VCU 2. Not homologation critical
4	Stepped Mirrors	Base	1. Design constraint - handlebar and head panels
5	Home Fast Charging Option	Base	1. Battery life degradation 2. Huge cost impact
6	Joystick - Manual Cluster Control	Base	1. Not enough Pins in the ConnectM VCU 2. In Zaptics VCU, Touch would supersede Joystick
7	On Screen Live Maps	Premium	1. VCU needs a processor strong enough to run android and do live map rendering with decent latency; cost of VCU
8	2 Coupons - Free Scooter Wash	Service Pack	1. Not a must have feature

Annexure II – Feature Scorecard/ Secondary Market Research

UX Score and Implementation Score were calculated as follows:

UX Score = Reach X Impact;

Implementation Score = UX Score X (Cost/ Effort);

Reach	Description
1	Extremely Low Reach, < 10% customers will appreciate the feature
2	Low, 10 - 30% customers will appreciate
3	Medium, 30 - 50% customers will appreciate
4	High, 50 - 75% customers will appreciate
5	Extremely high, > 75% customers will appreciate
Impact	Description
1	Low, doesn't add a lot of value. customer can live without it
3	Medium, adds value but the customer may still live without it
5	High, adds a lot of value, customer wants it

Feature	Reach	Impact	Cost/ Effort	UX Score	Implementation Score
TFT 5"	5	5	5	25	125
Crash & Fall alert	5	5	5	25	125
Incoming call alert	5	5	5	25	125
Call acceptance and rejection	5	5	5	25	125
Side stand indication	5	5	5	25	125
Battery level & low battery indicator	5	5	5	25	125
Scooter Mode indicator	5	5	5	25	125
Distance to go	5	5	5	25	125
Day/ night mode	5	5	5	25	125
Real time Km/ Wh	5	5	5	25	125
Average Km/ Wh	5	5	5	25	125
Theft alert	5	5	5	25	125

Service alerts	5	5	5	25	125
USB Charger for mobile charging	5	5	5	25	125
Pass switch	5	5	5	25	125
Boot Space - 1 full face helmet + Charger	5	5	5	25	125
Utility pocket	5	5	5	25	125
Front Hook	5	5	5	25	125
Flat Footboard	5	5	5	25	125
Accident topple -> motor cut-off	5	5	5	25	125
Buzzer	5	5	5	25	125
SOS	5	5	5	25	125
Grab handle	5	5	5	25	125
Ladies' footrest	5	5	5	25	125
Floor mat	5	5	5	25	125
Seat cover	5	5	5	25	125
Mobile holder	5	5	5	25	125
Hill Hold	5	5	5	20	125
Custom modes	5	4	5	20	100
TFT Display 7" with Touch	5	5	4	25	100
Screen Gestures	5	4	5	20	100
Document Widget	5	4	5	20	100
Live Location	5	4	5	20	100
Last Parked Location	5	4	5	20	100
Vehicle health data	5	4	5	20	100
Geo Fencing	5	4	5	20	100
Standard riding modes (Eco, Power)	5	4	5	20	100
Child Mode/ Parental Control	5	4	5	20	100
Cluster themes	5	4	5	20	100
Public Fast Charging	5	4	5	20	100
Parking Mode Switch	5	4	5	20	100
Centre Stand	5	4	5	20	100
Onboard Downloadable Maps	5	4	4	20	80
Music Control	4	4	5	16	80
Multiple rider profiles	4	4	5	16	80
Key encryption	5	4	4	20	80
Remote Diagnostic	4	4	5	16	80
Shut down Mode	4	4	5	16	80
OTA (Over the Air)	5	4	4	20	80
Turn by turn Nav	5	5	3	25	75

Regen	5	3	5	15	75
Boost mode	5	3	5	15	75
Ride Analytics	5	3	5	15	75
Mode switch	5	3	5	15	75
Keyless	5	5	3	25	75
850 W Charger	5	3	5	15	75
TPMS	5	3	5	15	75
Luggage rack	5	3	5	15	75

Cells highlighted with grey are for accessories

Annexure III – High Level Feature Description

Feature	Functionality
Turn by turn Nav	App -> VCU -> Cluster over BLE
Onboard Downloadable Maps	Over 4G Telematics
Incoming call alert	App -> VCU -> Cluster over BLE
Call acceptance and rejection	Will be done via Ignition button calibration (Long press to accept and cut an ongoing call, single press to reject)
Distance to empty	VCU will calculate based on recent efficiency
Day/ night mode	Ambient light sensor will be calibrated
Real time Km/ Wh	VCU will calculate based on real time energy consumption data from battery
Average Km/ Wh	All time average of last trips completed
Music Control	Over Ignition: Single tap for next song, long press for play/ pause, double tap for previous. **Note:** Call operations will take precedence over all music functionalities
Screen Gestures	Dependent on touch
Document Widget	Dependent on touch, user can swipe to see document screen with DL etc.
Multiple rider profiles	Over app, users can register and share among family
Live Location	4G Telematics -> app
Last Parked Location	BLE/ 4G Telematics -> app
Theft alert	Detection via IMU, alert sent on the app by 4G Telematics
Vehicle health data	To be available on app for owner to know if any sub-system has failed over 4G telematics
Ride Analytics	Vehicle trip data available on app
Service alerts	Regular alerts on app
Crash & Fall alert	Detection via IMU, alert sent on the app
Geo Fencing	over app via 4G telematics
Hill Hold	IMU will work for both uphill and downhill and auto activation when vehicle speed is 0 kmph (for 2 kWh - battery IMU)
USB Charger for mobile charging	Provided in utility pocket
Custom modes	One custom mode where user can adjust performance on app or Touch cluster. **Note:** Only one custom mode at a time will be taking that slot

Standard riding modes (Eco, Power)	Eco mode optimized for range, additional performance automatically available on gradients. In Power mode, entire capability unlocked
Child Mode/ Parental Control	Low speed EV like performance intended for first time riders
Regen	Pre-set values to mimic ICE scooter engine braking; no user control
Boost mode	Will be done on park switch
Pass switch	Integrated with the low and high beam switch
Boot Space - 1 full face helmet + Charger	Standard across variants
Cluster themes	Pushed over the app to VCU
Utility pockets	Standard, minimum one phone storage
Front Hook	Standard
Key encryption	BLE to be integrated in key
Flat Footboard	Standard
Public Fast Charging	Only available on 3 kWh variants using existing infrastructure
Remote Diagnostic	Available to user only via 4G telematics, this feature is for lectrix analysis
Shut down Mode	VCU, Battery and IoT will go into deep sleep, wake up by button touch
Accidental Topple -> Motor Cut-off	Detection by IMU; no user control
Keyless	functionality over Bluetooth and key fob provided
SOS feature	On Touch based cluster, swipe on screen to confirm
OTA (Over the Air)	4G telematics, non 4G pack users - service centre
850 W Charger	Option to charge in 3 hrs
TPMS	Standard accessory across variants
Mobile holder	Spacer installed on both mirror mounts. attaching TVS image for reference with extended mount to explain to concept

Annexure IV – References and Version Control

Version Control

Feature List Version:

Feature List version x.y.z would imply:

X increments on addition or addition + deletion of features, Y increments on deletion of features, Z increments on description or PRD modifications.

So, v1.1.0 implies that this document has been modified by deleting some features from v1.0.0

Document Version:

Document version control is simply x.0, where x increments if a change has been made.

References

1. Features Specs - Scorecard
2. Lectrix Model Specification.xlsx
3. Feature List v1.0.xlsx
4. Scooter Use case accessories.xlsx