S. No.	Customer Wants and Needs	Operational Requirement	Technical Performance Measure
1	Keyless entry	 Keyless entry using fingerprint of owner(s)/authorized users stored in the system 	
2	Highly secured Access & Information Security	 User authorization process through mobile application only All user data must be stored with state-of-the-art encryption technology in the database Camera activates when someone tries to open the door Camera records feed of front door when it is activated The entry will be flagged to authorized users if the person trying to enter is not one of the authorized users 	 A user authorization process must be finished by the user within ~10 minutes of it being started; If not completed, it must be started over by the user All data stored in the system must use state-of-the-art encryption to yield 0% security breaches The camera must activate within a period of ~1 sec when it senses the fingerprint The camera must keep recording for 10 min and switch off only after 10 min of inactivity The entry flagging communication (email, text) must be sent within
3	Ease of use	 Mobile application/web application for the Smart House Lock system should be intuitive User should not have to spend a long time trying to open the door Fingerprint sensors must be good quality and maintained 	 The process of unlocking the door should be triggered within ~10 seconds of fingerprint being placed on the lock The maximum duration for fingerprint scanning and verification should be ~5 seconds
4	Compatibility with iOS and Android	Mobile application for both iOS and Android platforms should be available and up to	 Mobile applications should be maintained and updated every 15 days All reviews for the mobile application must be read and

		date with all security measures	recorded in the database within 3 business days of being uploaded on the platform
5	Supporting multiple users	Customers must have the option to add multiple owner(s)/ authorized user(s)	 At least 5 owner(s) must be available to the customer to be added Minimum 1 owner must always be added in the system database Maximum of 8 owner(s) may be stored in the system at a time The addition of the authorized user to the Smart Lock's database should not take more than 2 hour(s)
6	Remote access for guests	Customers must be able to produce digital keys to visitors which would make them authorized user(s)	 Digital remote keys must be generated within ~10 seconds in the mobile application Unlimited digital keys maybe issued per day per authorized user No more than 5 keys may be sent to a single receiver for a particular entry date and a particular entry duration The remote key(s) must activate and deactivate within ~5 seconds of their activated duration
7	Cost effective	The system must be reasonably priced and offer a competitive advantage as per market standards which are similarly priced	 The price point must be between the range of \$250 - \$350 based on the market research Minimum offered warranty duration must be 3 months
8	Battery powered	 System must be battery powered to avoid the hassle of wiring to the customers The system must have a battery status to alert the customer The system must send a notification to the customer when it needs battery change For any maintenance related issue, the system must display a notification as well as 	 Batteries are expected to last an average of 3 months Every 180th day the system will send a notification to the customer of the battery status If the system crosses the battery storage of 8%, it will send a notification and display an alert continuously on the mobile application In case of hardware malfunction or other maintenance issue, the system must notify the customer

		an error code to help customer understand and diagnose the issue	 every 1 hour on the mobile application For regular maintenance, a notification will be sent every 6 months to the customer
9	Ease of installation	 The system must be capable of mounting the device on existing mechanical lock which eliminates the need to replace the entire lock The system must be designed based on the standard/popular locks so that it can be added onto the existing locks causing least inconvenience 	•
10	Activity logging	The system must maintain the history of the activity to refer to	The system must maintain at least 15 days of previous activity and camera footage