

House of Quality (HOQ)

The House of Quality has made as shown in the following figure. It has developed by using the customer requirements and engineering requirements. As the customer requirements have listed on the left side of table and engineering requirements have listed on the top of the table.

Customer Requirement	Weight	Engineering Requirement	WiFi Operation	Accuracy	High Speed Motor	High Resolution Camera	Database Capacity	Durable	Two Dimensional	Cursor Movement Reading
Write on whiteboard	9		3	3	1			1	3	3
Erase on whiteboard	9		3	3	1			1	3	3
Remotely Use Robot	9		3			1				
Online Portal	3		3			1				
Images on whiteboard	3		3				9			
Scanning board	3			1		9				3
Cost within budget	3		1	1	1	1		3	1	1
Durable and Robust Design	1				1	1		3		1
Reliable Design	1				1	1		3		1
Absolute Technical Importance (ATI)			102	60	23	44	27	33	57	68
Relative Technical Importance (RTI)			35%	21%	8%	15%	9%	11%	20%	24%
Target ER values			24 hours	1 cm	100 rpm	108MP	100GB	2200 M-	-	1 cm
Tolerances of Ers			5 min	0.01 cm	10 rpm	10 MP	10GB	200 M-	-	0.01 cm

The relation of each customer requirement with the engineering requirement has listed with the marks given in the corresponding box and the table has generated the priority list of engineering requirements according to which the most important requirement is Wi-Fi operation, that need to be active for full time a day so anyone can access the robot at any time. The next most important requirement is cursor reading as it can easily locate the exact point where the cursor is present. And the next important requirement is two-dimensional movement of the cursor to move the cursor for writing and cleaning purpose in both horizontal and vertical direction and the least important is motor speed as the cursor writing and erasing has to be done with a specific speed

and doesn't require any high-speed motor. Hence house of quality plays a great a role in determining which engineering requirement is most important and which is least important.