| **Engagement** | **N = 37(n %)** |
| --- | --- |
| **Covid-19 WhatsApp Chabot is fun and entertaining to use** |  |
| Mostly boring | 3 (8.) |
| OK, fun enough to entertain the user for a brief time (< 5 minutes) | 13 (35) |
| Moderately fun and entertaining, would entertain user for some time (5-10 minutes total) | 12 (32) |
| Highly entertaining and fun, would stimulate repeat use | 9 (24) |
| **COVID-19 WhatsApp Chabot enjoyable to use** |  |
| Mostly uninteresting | 1 (2.7) |
| OK, neither exciting nor uninteresting; would engage the user for a brief time (< 5 minutes) | 13 (35) |
| Moderately interesting; would engage the user for some time (5-10 minutes total) | 14 (38) |
| Very interesting, would engage the user in repeat use | 9 (24) |
| **COVID-19 What’s App Chabot retains all necessary preferences features** |  |
| Does not allow any customization or requires setting to be input every time | 2 (5.4) |
| Allows insufficient customization limiting functions | 8 (22) |
| Allows basic customization to function adequately | 13 (35) |
| Allows numerous options for customization | 12 (32) |
| Allows complete tailoring to the individual’s characteristics/preferences retains all settings | 2 (5.4) |
| **COVID-19 WhatsApp Chabot allow users inputs provide feedback and contain prompts** |  |
| No interactive features and/or no response to user interaction | 1 (2.7) |
| Insufficient interactivity, or feedback, or user input options, limiting functions | 1 (2.7) |
| Basic interactive features to function adequately | 12 (32) |
| Offers a variety of interactive features/feedback/user input options | 15 (41) |
| Very high level of responsiveness through interactive features/feedback/user input options | 8 (22) |
| **COVID-19 WhatsApp Chabot content visual information language and design** |  |
| Completely inappropriate/unclear/confusing | 1 (2.9) |
| Acceptable but not targeted. It may be inappropriate/unclear/confusing | 15 (43) |
| Well-targeted, with negligible issues | 13 (37) |
| Perfectly targeted, no issues found | 6 (17) |
| Unknown | 2 |
|  | |

All items in the MARS tool were rate 5-points scale from “1 =inadequate/ strongly disagree” to 5=Excellent/ strongly agree”,

Table 1 shows the engagement frequencies of Malawi MoH COVID-19 Chabot: The engagement section had five questions with a total score of 25. The mean total engagement score of Malawi MoH COVID-19 WhatsApp Chabot was 17.89. 35% find Malawi MoH COVID-19 Okay and fun enough to entertain the users briefly. 38% of the participants found the Malawi MoH COVID-19 Chabot Moderately interesting, engaging the user for some time. 35% were okay, neither fascinating nor uninteresting.

Under The necessary preference features in the Malawi MoH COVID-19 Chabot, 35% agree that it allows basic customisation to function adequately, and 32% agree that it provides numerous options for customization.

Under COVID-19, WhatsApp Chabot allows users to provide input, provide feedback, and contain prompts. 41% agree that the COVID-19 Chabot offers a variety of interactive features/feedback/ user input options. And 32% agree that the Chabot provides basic interactive features to function adequately.

Under the COVID-19 Chabot content, visual information, and Language design, 43% agreed that the Chabot was acceptable and not targeted. It may be inappropriate and unclear. And 37% agreed that it was well-targeted, with negligible issues.

| **Information** | **N = 37(n%)** |
| --- | --- |
| **The COVID-19 WhatsApp Chabot profile contains its purpose.** |  |
| Inaccurate. The profile contains very few of the described components/functions | 1 (2.7) |
| OK, the COVID-19 WhatsApp Chabot profile contains some of the described components/ functions | 8 (22) |
| Accurate. The COVID-19 WhatsApp Chabot profile contains most of the described components/functions | 20 (54) |
| Highly accurate description of the COVID-19 WhatsApp Chabot components/functions on the profile. | 8 (22) |
| **Covid-19 WhatsApp Chabot content is correct, well written, and relevant.** |  |
| Moderately relevant/appropriate/coherent/and appears correct | 9 (24) |
| Relevant/appropriate/coherent/correct | 21 (57) |
| Highly relevant, appropriate, coherent, and correct | 7 (19) |
| **COVID-19 WhatsApp Chabot scope is comprehensive and concise** |  |
| Insufficient or possibly overwhelming | 1 (2.9) |
| OK, but not comprehensive or concise | 9 (26) |
| Offers a broad range of information that has some gaps or unnecessary detail or has no links to more information and resources | 14 (40) |
| Comprehensive and concise; contains links to more information and resources | 11 (31) |
| Unknown | 2 |

Table 2 shows the frequency of information content and the relevance of the COVID-19 Chabot. The section of information had 3 questions, and the total score was 15. The mean score of information was 11.68(2.22).

Under the COVID-19 WhatsApp Chabot Profile and Contain variable, 53% of the participants agreed that the Malawi MoH COVID-19 Chabot was Accurate (the profile contains most of the described components/Functions). 22% agreed that the content was Highly Accurate, and another 22% were OK with the content. 1% described the Malawi MoH COVID-19 Chabot as Inaccurate. The profile contains very few of the described components/functions.

Regarding the COVID-19 Chabot’s relevance and how the content was written, 57% of the participants agreed with the statement that the content was relevant, appropriate, coherent, and correct. 24% agreed that the content was Moderately relevant/Appropriate/Coherent/Appeared correct. 19% agree that it is Highly relevant, appropriate, coherent, and correct

Regarding the Malawi MoH COVID-19 Chabot’s scope, 40% of the participants agreed that it offers a broad range of information and has some gaps or unnecessary details. 31% agreed that the Chabot was comprehensive and concise and contained links to more information and resources. 26% were OK with it, but it was not extensive or concise. 2.9% described it as Insufficient or possibly overwhelming.

| **Performance** | **N = 37(n%)** |
| --- | --- |
| Accurate and fastest of the COVID-19 WhatsApp Chabot features, functions, and components. |  |
| 2. Some functions work but lag or contain major technical problems | 1 (2.7%) |
| 3. works overall. Some technical problems need fixing/Slow at times | 14 (38%) |
| 4. Mostly functional with minor/negligible problems | 13 (35%) |
| 5. Perfect/timely response; no technical bugs found/contains a ‘loading time left’ indicator | 9 (24%) |
| Ease of use of COVID-19 whats app chatbot |  |
| 3. Useable after some time/effort | 5 (14%) |
| 4. Easy to learn how to use the COVID-19 WhatsApp Chatbot | 20 (54%) |
| 5. Able to use the COVID-19 WhatsApp Chatbot immediately; intuitive; simple | 12 (32%) |
| The chatbot is interactive, consistent and intuitive across all components |  |
| 2. Often inconsistent/confusing | 1 (2.7%) |
| 3. OK with some inconsistencies/confusing elements | 12 (32%) |
| 4. Mostly consistent/intuitive with negligible problems | 12 (32%) |
| 5. Perfectly consistent and intuitive | 12 (32%) |

Table 3 shows the frequency of rating the Malawi MoH COVID-19 Chabot’s performance regarding features, functions, and components. The performance section had 3 questions, with a total score of 15. The mean Chabot performance score was 11.95(1.96).

Regarding rating the performance of the Chabot’s features, functions, and components, 38% agreed that the Chabot features, functions, and components work Overall, with some technical problems that need fixing. 35% agreed that the features, functions, and components were mainly functional with minor/negligible problems, and 24% agreed that the features, functions, and Components were Perfect/Timely Responses with no technical bugs. 2.7% agree that the Malawi MoH COVID-19 had some functions that worked but lagged or contained major technical problems.   
  
Regarding rating the Ease of use of the Malawi MoH COVID-19 Chatbot, 54% agreed that it was easy to learn how to use, 32% agreed that they were able to use the COVID-19 Chatbot immediately and intuitively, and 14% agreed that they found it usable after some time/effort.

Regarding the Interactive, it was Consistent and Intuitive across all components. 32% of participants agreed that the Chabot was OK with some inconsistency or confusing elements, 32% said it was mostly consistent and intuitive with negligible problems, and 32% said it was perfectly consistent and Intuitive. 2.7 % agreed that Malawi COVID-19 was often inconsistent and confusing.

| **Aesthetics** | **N = 37(n%)** |
| --- | --- |
| **Chatbot graphics are of quality resolution for used icons, menus, and content.** |  |
| Moderate-quality graphics and visual design (generally consistent in style) | 12 (32%) |
| High-quality/resolution graphics and visual design – mostly proportionate, stylistically consistent | 13 (35%) |
| Very high quality/resolution graphics and visual design - proportionate, stylistically consistent throughout | 12 (32%) |
| **The chatbot content is visually appealing in terms of font colour and size.** |  |
| Little visual appeal – poorly designed, bad use of colour/font/Size, visually boring | 3 (8.3%) |
| Some visual appeal – average, neither pleasant nor unpleasant | 12 (33%) |
| High level of visual appeal – seamless graphics – consistent and professionally designed | 12 (33%) |
| As above + very attractive, memorable, stands out; use of colour enhances app features/menus | 9 (25%) |
| Unknown | 1 |

Table 4 shows the frequency rating of the Malawi MoH COVID-19 Chabot’s aesthetic. The section had two questions, and the total score was 10. The mean score rating was 7.54.

Regarding rating the quality resolutions used for icons, menus, and content, 35% agreed that the COVID-19 Chabot had high-quality graphics and visual design that was proportionately and stylistically consistent throughout. 32% of the participants agreed that the COVID-19 Chabot had very high-quality resolution graphic and visual design. And 32% agreed that the Chabot had moderate-quality graphic and visual design.

Regarding rating the Content's Visual Appeal font, Color, and Size, 33% of the participants agreed that the COVID-19 font, Color, and Size were highly visually appealing, seamless, graphic, consistent, and professional. 33% also agreed that the Malawi MoH COVID-19 Chabot had some visual appeal, was average, and was neither pleasant nor unpleasant. 25% of the participants agreed that the Malawi MoH COVID-19 colour, font, and size were beautiful, memorable, and stand out. 8.3% agree that the Malawi MoH COVID-19 had Little visual appeal – poorly designed, bad use of colour/font/Size, and visually boring.

| Quality score | Mean scores |
| --- | --- |
| Engagement Score | 17.89 |
| Performance Score | 11.95 |
| Graphic Score | 7.54 |
| Information Score | 11.67 |
| Quality Score | 11.49 |
| **App quality overall mean Score** | 12.11 |

Table 5 shows the scores of the Malawi MoH COVID-19 rating based on Engagement, Performance, Graphics, Information, and quality. The quality overall mean of Malawi MoH COVID-19 Chabot score was 12.11.

| **Subjective Quality-Recommendation** | **N = 37(n%)** |
| --- | --- |
| **Recommend COVID-19 WhatsApp Chabot to people who might benefit from it** |  |
| Not at all I would not recommend this app to anyone | 1 (2.9) |
| There are very few people I would recommend this app to | 1 (2.9) |
| Maybe There are several people whom I would recommend it to | 1 (2.9) |
| There are many people I would recommend this app to | 9 (26) |
| I would recommend this app to everyone | 23 (66) |
| Unknown | 2 |
| **Number of times to use covid-19 WhatsApp Chabot** |  |
| 1 None | 1 (2.7%) |
| 3 3-10 | 12 (32) |
| 4 10-50 | 13 (35) |
| 5 >50 | 11 (30) |
| Star rating of the covid-19 WhatsApp Chabot |  |
| ★ One of the worst apps I’ve used | 1 (2.7) |
| ★★★ Average | 12 (32) |
| ★★★★ | 19 (51) |
| ★★★★★ One of the best apps I've used | 5 (14) |

Table 5 shows the frequency of rating the Malawi MoH COVID-19 Chabot based on subjective quality. The section had 3 questions, and the total score was 15. The mean subjective quality score was 11.45.

Regarding rating the Malawi MoH COVID-19 on individuals' recommendations to others who would benefit from the COVID-19 Chabot, 66% agreed to recommend it to everyone, and 26% decided to recommend it to many people who could benefit from it.

Regarding rating the number of people who will use the Malawi MoH COVID-19 Chabot in the next 12 months, 35% of the participants agree to use it 10 to 50 times within the next 12 months, 32% agree to use it 3- 10 times, and 30 % agree to use it above 50 times. 2.7% did not indicate the number they can use it in the next 12 Months.

Regarding the Malawi MoH COVID-19 Chabot starring, 51% of the participants rated it slightly above average (4 stars), and 32% rated it as average (3 stars). 14% raring it as the best app (5 stars) and 2.7% rate it as the worst app (1 star).

| **Awareness of COVID-19 Chabot** | **Strongly  disagree(n%)** | **Disagree**  **(n%)** | **Neutral**  **(n%)** | **Agree**  **(n%)** | **Strongly Agree(n%)** |
| --- | --- | --- | --- | --- | --- |
| Chabot increases awareness of the importance of addressing covid 19 myths | 0 (0) | 1 (2.7) | 5 (14) | 20 (54) | 11 (30) |
| Chabot is likely to increase intentions and motivation to get the COVID-19 vaccination test | 0 (0) | 1 (2.7) | 12 (32) | 18 (49) | 6 (16) |
| Chabot is likely to change attitudes toward improving the COVID-19 response | 0 (0) | 1 (2.9) | 4 (11) | 22 (63) | 8 (23) |
| Chabot is likely to encourage the general public to test for COVID-19-vaccinated | 0 (0) | 2 (5.6) | 8 (22) | 19 (53) | 7 (19) |
| Chabot is likely to increase covid 19 related health behaviors | 1 (2.7) | 1 (2.7) | 8 (22) | 17 (46) | 10 (27) |
| Chabot is likely to increase knowledge and understanding of COVID-19 | 1 (2.8) | 2 (5.6) | 1 (2.8) | 20 (56) | 12 (33) |

Table 6 shows the frequency of how the Malawi MoH COVID-19 can increase awareness, knowledge, attitude, and intention to change, as well as help-seeking and behaviour change. The section had six questions. With response 1=from strongly disagree to 5= strongly agree.

Regarding Malawi MoH COVID-19, Chabot increased awareness of the Importance of addressing COVID-19 myths; 54% agreed, 30% strongly agreed, 14% were neutral, and 2.7% disagreed.

Regarding Malawi MoH COVID-19, Chabot is increasing knowledge and understanding of COVID-19 among the general public and health workers. 56% agree, 33% strongly agree, 2.8% neutral, 5.6% disagree, and 2.8% strongly disagree.

Regarding Malawi MoH COVID-19 Chabot's changing attitude towards improving COVID-19 response, 63% agreed, 23% strongly agreed, 11% were neutral, and 2.9% strongly disagreed.

Regarding Malawi MoH COVID-19 increasing / Motivation to get COVID-19 vaccination and testing, 49% agree, 32% neutral, 16% strongly agree, and 2.7% disagree.

Regarding Malawi MoH COVID-19, the general public should be encouraged to test for COVID-19 vaccination. 53% agree, 19% strongly agree, 22% were neutral and 5.6% disagree.

Regarding Malawi MoH, COVID-19 increased/decreased COVID-19-related healthy behaviour (e.g., wearing face masks, sanitizing, and hand washing). 46% agree, 27% strongly agree, 22% neutral, and 2.7% disagree and strongly disagree.