Analysis of CiCi Test Volunteer User Feedback

January 2021

Introduction

In March 2020, dmh associates in partnership with Pontydysgu were awarded a national prize from the NESTA in partnership with DfE 'CareerTech Challenge' competition. The purpose of the Challenge is to find new solutions for precarious workers, such as workers in low paid, insecure work, susceptible to change, to upskill and retrain online, or access accurate data-driven information, advice and guidance that helps them find work. In April 2020, 'CareerChat' was formed and a highly innovative careers information and advice chatbot protype emerged named 'CiCi – the little powerhouse that supports your career'™. CiCi stands for capital 'C' CareerChat designed to provide inspiration and ideas for adults 18+. In January 2021, CareerChat was formally established as a 'Ltd Company'.

This report summarises feedback received from 136 volunteer early testers who agreed to test out the CiCi prototype (alpha version) during November – January 2020. Adults 18+ from a range of differing backgrounds, including career development and employability professionals (advisers and coaches) took part as volunteer testers. Having 'stress-tested' the chatbot, volunteers in three cities – Bristol, Derby and Newcastle - provided feedback by completing an online survey questionnaire comprising 16 key questions covering the various features and functions within the chatbot. A final question asked for comment about the newly developed website https://careerchat.uk/ where links to and information about the chatbot CiCi can be found.

The findings will be use to inform next stage developments moving from prototype to BETA version by the end of January 2021.

Overall, the initial feedback and endorsement received from the evaluation has been positive:
- over 66% (n=73) of respondents indicated they would "*definitely" or "probably"* recommend CiCi to a friend or colleague.

All of the individual functions within CiCi were assessed by the volunteer testers These include:

- Assessments to find out more about you and your skills
- Help you with your CV
- Information about training courses
- Information about job vacancies
- Information about general job roles (including LMI)
- Volunteer opportunities
- Self-employment tips
- Referrals/links to a career/employability adviser (a human being).

Each of the features were identified as being of either "a lot of" or "some" help to most of those individuals who tested out each function. The volunteer testers offered helpful constructive comments with suggestions and recommendations for improvement in each of these individual modules and the appearance and user interface of CiCi.

Acknowledgments

We are extremely grateful to our Associate Partner organisations[1] and practitioners in Bristol Derby and Newcastle and all of the volunteer testers in each of these 3 cities (and beyond) who kindly agreed to take part in testing CiCi and providing their feedback via survey responses. Also, our sincere thanks to Robert Hughes for his work on analysing the key findings.

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[1] In alphabetical order: Adviza, Bristol City College, D2N2, Derby City Council, Derby College, North of Tyne Combined Authority, The Futures Group, South Gloucestershire College, Weston College and West of England Combined Authority.

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1.0 Methodology

The CareerChat team's work is focused on Bristol, Derby and Newcastle cities in line within the CareerTech Challenge finalist award. These contrasting English cities were chosen because of their diverse geographical locations, diverse ethnicity and differing education and employment structural arrangements. A series of monthly focus group meetings 'SuperUser Groups' - aimed at discussing and co-developing an innovative chatbot – informed the development of key questions worthy of exploration. Our Associate Partners worked with the CareerChat team to promote the volunteer survey.

Volunteer testers in all of the 3 cities were offered a £10 Amazon voucher as an incentive to provide feedback. Each participant registered their interest on the CareerChat website https://careerchat.uk/ where they completed a consent form complying with GDPR regulations and the CareerChat ethical code of practice. Following this, volunteers were given access to CiCi to log into and a set of guidelines to maximise the experience. They were then invited to complete an online feedback survey.

The report below provides an analysis of the feedback provided by the 136 volunteer testers who participated in this exercise.

2.0 Survey Responses

2.1 Demographics of Test Volunteers

A total of 136 survey responses were received from test volunteers. These were mainly from the 3 targeted cities, Bristol, Derby and Newcastle.

CiCi evaluation survey responses were returned from:

Bristol – 15% (n=21)
Derby – 51% (n=70)
Newcastle – 29% (n=40)
Other – 4% (n=5)
  Nottingham – (n=2)
  Bath – (n=1)
  Middlesbrough –(n=1)
  Manchester – (n=1)

Age groups of the respondents:

- 18 to 25 years = 24% (n=32)
- 26 to 35 years = 25%(n=34)
- 36 to 45 years = 21% (n=28)
- 46 to 55 years =15% (n=20)
- 55+ = 16% (n=22)

Ethnicity of volunteer respondents:

- White - English/Welsh/Scottish/Northern Irish/British – 67% (n=92)
- Asian/ Asian British –18% (n=24)
- White Other – 10% (n=14)
- Black/African/Caribbean/Black British – 3% (n=4)
- Mixed/Multiple ethnic groups – 1% (n=2)

A small number 13% (n=18) reported they had used a chatbot before, either for banking or customer service in retail. Some expressed their differing experiences with these type of chatbots:

> *"Very annoying as answers were very generic and repetitive"*

> *"I have used many chat bots some have been helpful and some not so but usually I am able to get the answer I need by refining the question"*

"Sometimes it was good, other times it was clunky and terrible to use."

"not many chat bots understand what I am trying to say or ask them"

"They are usually quite accurate, though they can sometimes not recognise particular questions or sentence structures".

Respondents' profile

- 17% (n=23) stated that they are currently unemployed.
- 24% (n=32) stated they are currently full time employed.
- 7% (n=9) stated they are currently in part time employment
- 3% (n=4) stated they are currently self employed
- 2% (n=3) stated they are currently on a zero hours contract
- 5% (n=7) stated they are part time students
- 3% (n=4) stated that they have recently left education
- 9% (n=12) stated they are currently looking for work
- 4% (n=6) stated they are looking for retraining
- 2% (n=3) stated that their job is currently at risk.

Respondents were asked to identify what they would be most interested in when using a careers information and advice chatbot?

All respondents were asked at the point of registration, prior to testing CiCi, to complete a short questionnaire to identify what they would be most interested in when using a careers information and advice chatbot. The list below shows their responses.

- Career ideas – 9% (n=12)
- How to transfer skills to other sectors – 9% (n=12)
- Help with CV – 6% (n=8)
- Skills assessment – 5% (n=7)
- Information about local courses – 5% (n=7)
- Volunteer opportunities – 5% (n=7)
- Motivational tips – 5% (n=6)
- What are the job trends – 4% (n=5)
- Help with interviews – 3% (n=4)
- Career coaching – 3% (n=4)
- Local links to a career/employability adviser (human being) – 2% (n=3)
- Help applying for jobs – 1% (n=2)
- Your own personalised career profile – 1% (n=2)

5% (n=7) of the respondents expressed they had specific requirements which chatbot designers should take into consideration:
- 4% (n=5) explained they are dyslexic
- 1 identified themselves as autistic
- 1 identified themselves as having Tourette's syndrome.

How much time did you spend testing the chatbot?
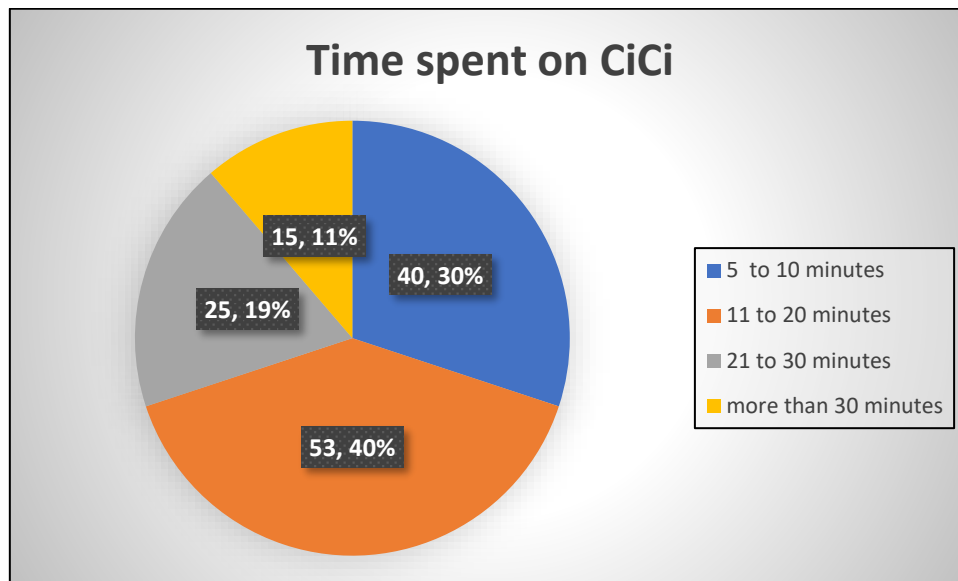
Figure 1: Time spent on CiCi by Volunteers

The chart above illustrates 30% (n=40) of the volunteers spent at least 20 minutes testing CiCi. 4% (n=6) reported they spent longer on the chatbot, with 2 revisiting CiCi several times over a number of days and others spending over 1 hour using CiCi.

2.2 To what extent did CiCi help you with "Assessments to find out more about you and your skills"?
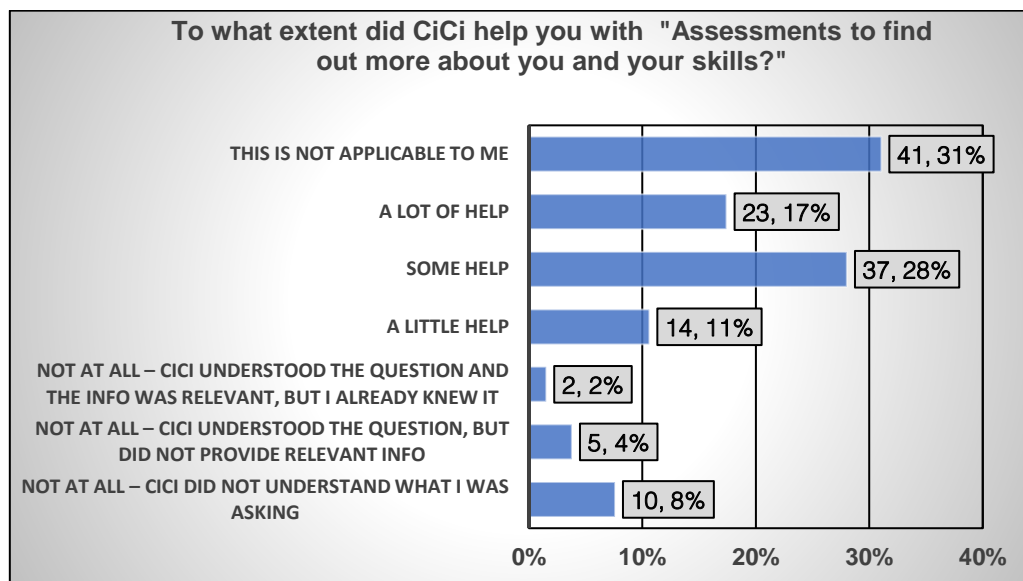
Figure 2: How much did CiCi help with Skills Assessment

From the chart above, it can be seen 59% (n=95) for whom this particular feature of CiCi was applicable. 63% (n=60) found it at least of "some" help or "a lot" of help, while 18% (n=17) claimed it was "not at all" helpful because they either already knew the answer, or CiCi understood the question but could not provide the answer. A total of 11% (n=10) claimed that CiCi did not understand the question.

A total of 51 comments were provided by test volunteers reflecting the perceptions of some as to what this feature should actually offer:

Some reported that CiCi was useful with suggestions for improvement

> *"Helped with what abilities needed for job."*

"The section where it says job and skills needed for the role was great. Really applicable to building a relevant CV. Would add a tab on there to say where you can get training courses to build up more experience for a specific job role, so the user does not have to go back to the main menu."

"It's nice showing off the charts on customer service on what skills are important but could offer written explanation on what the skills are."

"Maybe not providing so much information at one time. Because it's all in the same colour and quite large it's a lot to take on. Maybe an option to save the information to be able to look back on would be good without having to load it all up again."

Others highlighted:

"There isn't a skills assessment per se, instead, one is able to see the skills, abilities and knowledge 'required' for a specific job role. At no point does the system offer any help in finding out how your actual skills measure up, or what skills could you work on, or how to obtain skills."

"I thought that the chat would have asked more questions about my skills to assess me!"

"Although this was what I wanted to use the tool for, none of the main menus 7 options seemed to indicate this sort of service. I was able to find out what skills were needed for a certain job, but wasn't able to navigate to any form of self-appraisal; which is what I'm assuming was in there somewhere?"

"It did not ask me about my skills only the skills needed for certain jobs."

"Could the client not input their present skills in order for CICI to find other skills which may help the client to achieve there end goal?"

"All the information was very dry and often just sending you to a link with more information which is sort of helpful but doesn't provide much more than plain google would."

Feedback from when the chatbot could not find information about their particular search

"I asked CiCi about receptionist employment and the feedback was good but could have been better with more options on gaining experience in this area."

"When I selected the category of role, I was interested in 'management', the list it returned did not have one that matched what I was looking for."

"I asked for interior design and she did not know this as a career, the only close option was an architect."

"I asked for help to find me a full-time job so no skill questions came up. The chat took me straight to the jobs list I had mentioned."

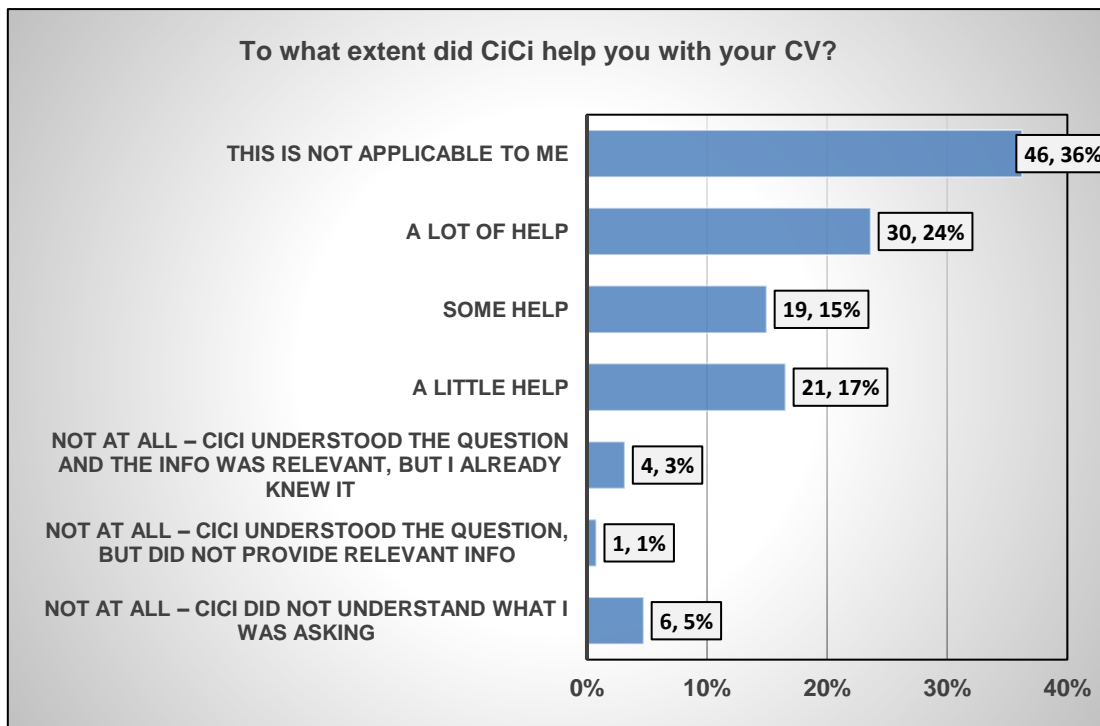**To what extent did CiCi help you with your CV?**

Figure 3: Extent to which CiCi provided CV help.

For 90 test volunteers this feature of CiCi was specifically applicable to them. 54% (n=49) indicated CiCi provided either "a lot of' or 'some' help. 12% (n=11) reported CiCi did not help. Again, this was either because they already knew the answer or that CiCi did not provide the relevant information. 7% (n=6) stated that CiCi did not understand what they were asking.

A total of 49 comments were provided by the test volunteers. Most were mainly constructive, recommending how this feature could be improved

"This section is done well but if I had to identify something it would be to possibly provide examples in the chat bot itself but everything else seemed good to me."

"Shown examples physically of what a perfect CV should look like and an option to upload your own to receive feedback."

"I would have preferred to see a picture with a basic CV layout, rather than links to websites."

"Perhaps access to templates of some kind. However, the advice given here was very useful."

"When clicking on information about gaps and job hopping the information came up too fast and there was a lot of information to scroll back through and read. i would have liked to see an image of a CV example when looking at information about CV formats rather than just lots of text."

"The links to CV library and Reed were useful, though perhaps starting off with the creative CV information on Reed might have confused some people and I think the information from Europass CV may be a bit confusing. The information on explaining gaps in a CV is useful."

"There was a lot of general information that I felt didn't help as it was shipping me off to other websites. I know that this chatbot won't have all of the information that I will use on it, but all of the options that I was given would be ones that come up if you just google CV help."

"I find AI apps and this one need a more vocational selection of wordings. language is evolving at a constant fast rate, having to juggle words around to find what the client is looking for can be tiring at best of times, all in all and using the old school English grammar I still found this a somewhat pleasant experience."

Others simply stated that the feature was very helpful.

"I feel like what was provided was extremely helpful to build my CV."

"This section was well detailed and gave lots of resources which was helpful to creating a CV. Again, only improvement I would suggest is to embed examples into the messages either through iframes or hosting the images just to make it easier for those."

"I thought that it was useful that CiCi explained that you should tailor your CV to the job role that you are interested in. In the format, the link there was to a very helpful website which had different CV examples relevant to the job sector. I also liked that typing "menu" led you back to the CV menu not the main menu but there was an option to go to the main one if you wished. The CV gap advice was well formatted, I like how it was divided into three steps it made it easy to follow."

"I think it was great how it told you practical skills like the best font and font size to use but maybe being able to provide some example layouts for people to be able to see without having to load other web pages."

"Told me all of the information I needed to include, could do with an example of a good CV to compare it to."

2.3 To what extent did CiCi help you with "Information about training courses"?

To what extent did CiCi help you with "Information about training courses"?

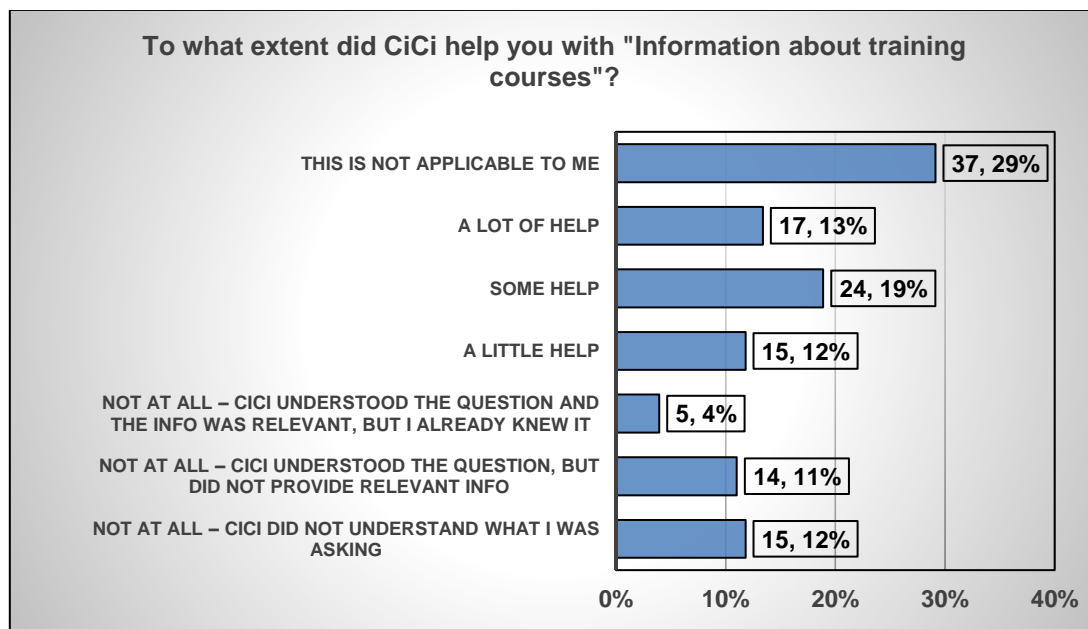| Category	Value
THIS IS NOT APPLICABLE TO ME	37, 29%
A LOT OF HELP	17, 13%
SOME HELP	24, 19%
A LITTLE HELP	15, 12%
NOT AT ALL – CICI UNDERSTOOD THE QUESTION AND THE INFO WAS RELEVANT, BUT I ALREADY KNEW IT	5, 4%
NOT AT ALL – CICI UNDERSTOOD THE QUESTION, BUT DID NOT PROVIDE RELEVANT INFO	14, 11%
NOT AT ALL – CICI DID NOT UNDERSTAND WHAT I WAS ASKING	15, 12%

Figure 4: Extent to which CiCi helps with information about training courses

This feature of CiCi was applicable to 99 of the 136 test volunteers. 41% (n=41) reported the bot was at least of some help to them. However, 34% (n=33) of the 99 volunteers who tested this feature claimed that this was not helpful - 5% (n=5) claiming they already knew the answer even though CiCi did understand what they were asking. A further 14% (n=11) stated that although CiCi was able to comprehend their request, it could not provide the relevant information. 15% (n=15) stated that CiCi did not understand what was being asked.

Some of the problems experienced may have due to the words used in the searches.

"The items I typed in would suite my search but I had to attempt this three times using different wording."

"It didn't recognise some of my search suggestions, such as 'probation officer' but then didn't prompt for a new suggestion. It just sent be back to the start to type my name in which can be quite time-consuming and annoying."

"I first searched "programmer" which returned no results and was prompted to ask again, when asked again I replied with "software" and the chatbot didn't respond. I had to reply with back to go to the start. I don't know what the problem was but I then re-entered the courses section and typed "software" again and 3 results appeared."

"I searched for terms such as 'Project Management' but it didn't find any relevant courses- people searching may not know the name 'Prince2' etc. so this could be an improved function."

"Asked about online dog grooming courses and said error has occurred but this also could of been my fault not knowing what course was fully called or how to explain to help CiCi understand."

"There are plenty of opportunities within healthcare (the subject i put) however, it only brought up 1 course. This needs looking into as its not bringing up every course possible."

"I tried putting in construction safety but nothing doing."

"I asked about web design course then web development. Came back with nothing."

"I searched for training in 'finance', what was returned was not useful to me at all. Anyone using this app/bot would likely use generic search words and therefore the results need to return a more relevant results list."

For others the problem was more geographical

"Need to be able to choose to go over 20kms for training."

"Info was not local enough and not a useful level of training."

For some the course information provided was insufficient. This may not be an issue about CiCi but may reflect either the lack of course information available or accessible by CiCi from the local colleges or training providers.

"CiCi couldn't find any courses for Microsoft office skills."

"Just more local courses. I assume this will improve is only a prototype."

"I searched for engineering and I would have perhaps liked more options rather than just college courses or told what websites to check for more options."

"There are plenty of opportunities within healthcare (the subject input) however, it only brought up 1 course. This needs looking into as its not bringing up every course possible."

"I asked for passenger transport, public transport or travel planning. CiCi understood but could not provide any information. I am not sure are any training opportunities in this area. It was a genuine enquiry. I would have like to have changed my enquiry wording straight away without returning back to the start."

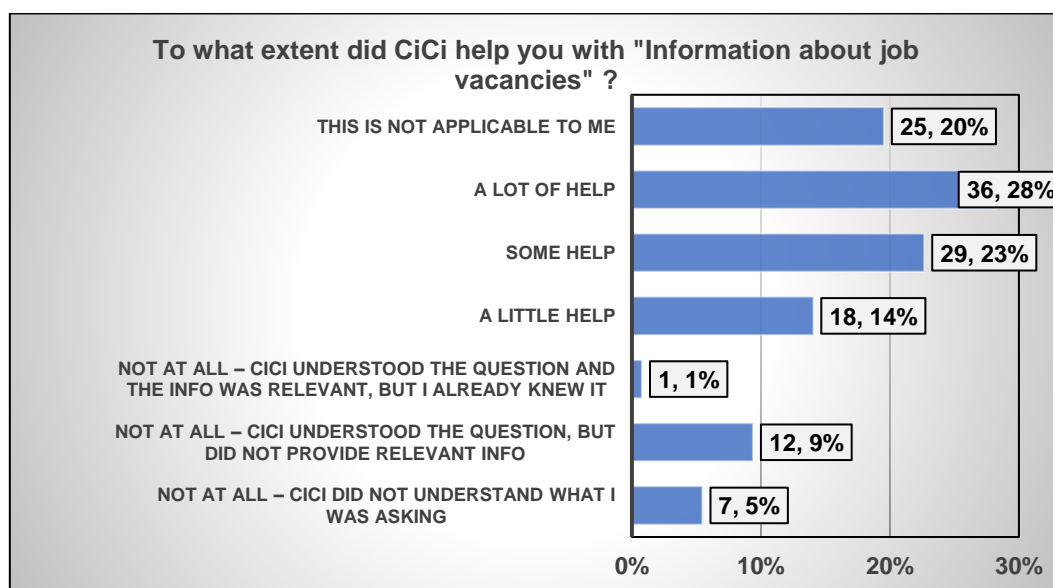## 2.4 To what extent did CiCi help you with "Information about job vacancies"?

Figure 5: Extent to which CiCi helped providing information about job vacancies.

Figure 5 above demonstrates this feature of CiCi was applicable to 11 of the volunteers who tested the bot. Of these, the chatbot was at least of some help to 58% (n=65) of the users. For 11% (n=12) of the volunteer testers CiCi understood their question but did not provide any relevant information. For 6% (n-7) CiCi did not understand their query.

There were a number of positive comments:

"I have been able to get a job interview."

"This was excellent! Found roles I hadn't seen."

"I requested help to find full time vacancies. It took me straight to the vacancies pages that were relevant to me. I didn't wait long after the chat asked me to confirm that I was looking for what I stated. I was impressed with the list that came up."

"Tried a variety of job titles and it provided relevant vacancies and opportunities and good websites to search on-very useful."

"I asked about traffic and transport which is a broad and vague range. I was pleasantly surprised to get a list of current vacancies across the Midlands, they covered the broad spectrum that is traffic and transport. Pleasantly surprised."

"Again, this function was brilliant I put in banking work and it brought up relevant job opportunities. I think this is an excellent function as it filters the roles down to the words that match."

Not all feedback was as positive but the comments provided were constructive:

"I searched for a job as a teaching assistant. When it offered a list of websites to find jobs, you cannot click on the links to open them either directly, either on a new tab. 'Sorry an error occurred' when it was looking for job vacancies. The list should be more focused on the Job sector. For education, the website 'Vision for Education', should be noted."

"Possibly more options I tried to get it to search for a role that I know is available but CiCi did not find it which may need looking at as it is not picking up all vacancies."

"Assistant roles in general, CiCi showed alot of managerial positions when searching for entry level jobs."

"It was a bit of blunt search and the jobs returned were all too far for me to travel to."

"I searched for hairdressing jobs but only care and nursing jobs came up."

"It could have more options to recognise as replies. Or when it doesn't understand a response just say it doesn't instead of freezing and going back to the start. For example, I wrote I was interested in teaching rather than writing teacher. When asked if I was looking for a job as a teaching I corrected it by writing 'teacher' in the box and I think the bot froze as when I typed in again it went back to the start."

"Not sure who the target audience is but I think for someone early in their career then the help finding the correct sources and online sites would be useful. The displaying the jobs themselves was ok for negating the requirement to leave the tool and go to a 3rd party site but you lose a lot of the filtering and user Interface functionality."

"It could not bring up a job in health but could in healthcare. So do think this needs addressing."

"I searched for vacancies in bar work in my area however it brought up job vacancies for home care assistants as the descriptions for the home care assistant vacancy stated you have a secure job here unlike the uncertainty of bar work/waitressing. Obviously cici was picking up any job vacancies with the key words "bar work" just not actual bar vacancies which was unfortunate."

"I think maybe more specific roles as I asked for trainee teaching and it came up with a driving instructor."

2.7   To what extent did CiCi help you with "Information about general job roles"?
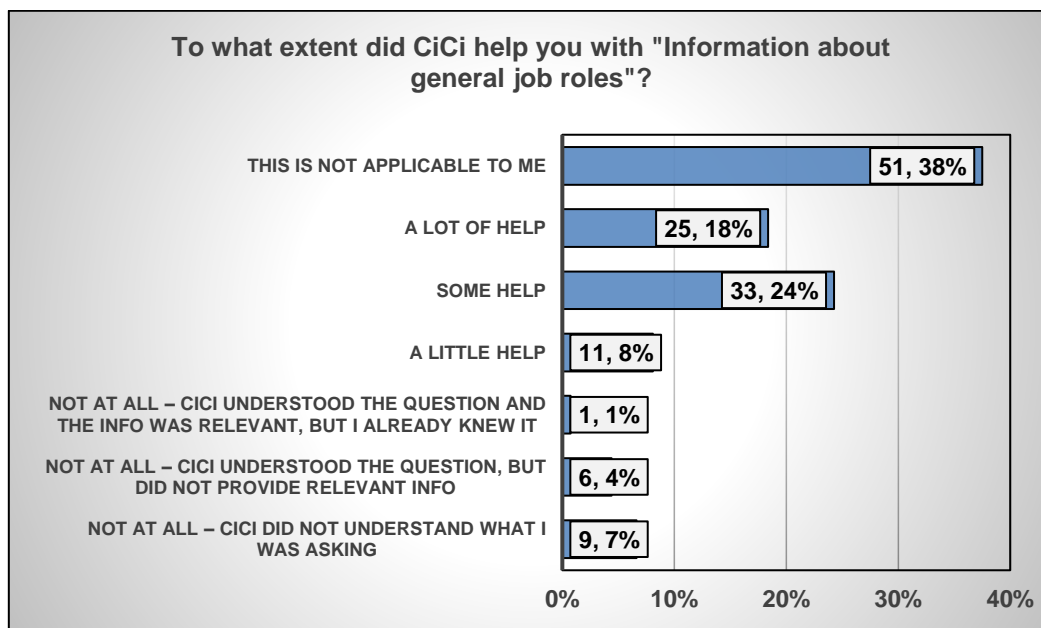

Figure 6: Extent of help CiCi provided with "Information about general job roles"

From Figure 6 above, it can be seen that 85 of the 136 test volunteers accessed this function on CiCi and for 38% (n=51) this was not applicable. Of the 85 responses 68% (n=58) stated CiCi provided at least 'some help' to them. Almost 19% (n=16) said CiCi was "not at all" helpful. These trends are similar to those shown for the earlier questions where CiCi understood the question but the volunteer already knew the answer in 1 case. For 7% (n=6) of the volunteers CiCi understood the question but was unable to provide the information the volunteer testers were seeking. For 11% (n=9) CiCi did not understand the query.

As previously reported, there were additional comments added by the volunteers. These were mixed responses with some having a positive experience and others who struggled in their search:

"Brilliant feature- the videos and other links really useful."

"I don't think there's anything cici could have done better"

"Good info here, I looked for solicitor. The skills, abilities and knowledge bits were impactful and on point."

"This section out of all of them was the most helpful to me, listing specific skills/knowledge for the job is a very good idea. However, I think that the answers could be expanded (how to acquire, resources etc.)."

"When selecting "number of recent vacancies" for programmers and software development professionals it didn't give a result. It did give valid information about future vacancies and average pay."

"If the information did not come all at once and gave you time to read the first paragraph without it looking like an essay."

"I searched for admin job skills and abilities. It would have been useful to see what qualifications may be required as well."

"After clicking on another job offer in the drop list it started saying an error has occurred. I don't think it understood that I had read all the information and had gone back up and chosen another option. Perhaps this could be sorted so you can pick another option from the list."

"CiCi was too quick to give me 6000 jobs instead of asking what type of engineering role I wanted."

11

"Needed to understand sector skills more"

"This is slightly better than the original careers online platform within this area, again I decided to use counselling and again I had no response. although other searches using a mobile phone gave me some varied connections to counselling so all in all still did the job just not as I expected."

"I was showed information about architecture, when I asked for interior design."

"Skills graphs were ok if you like graphs but some people like lists. Qualifications needed/ transferable qualifications would be good. Salary information was out of date. The graphs sometimes contradict the video information."

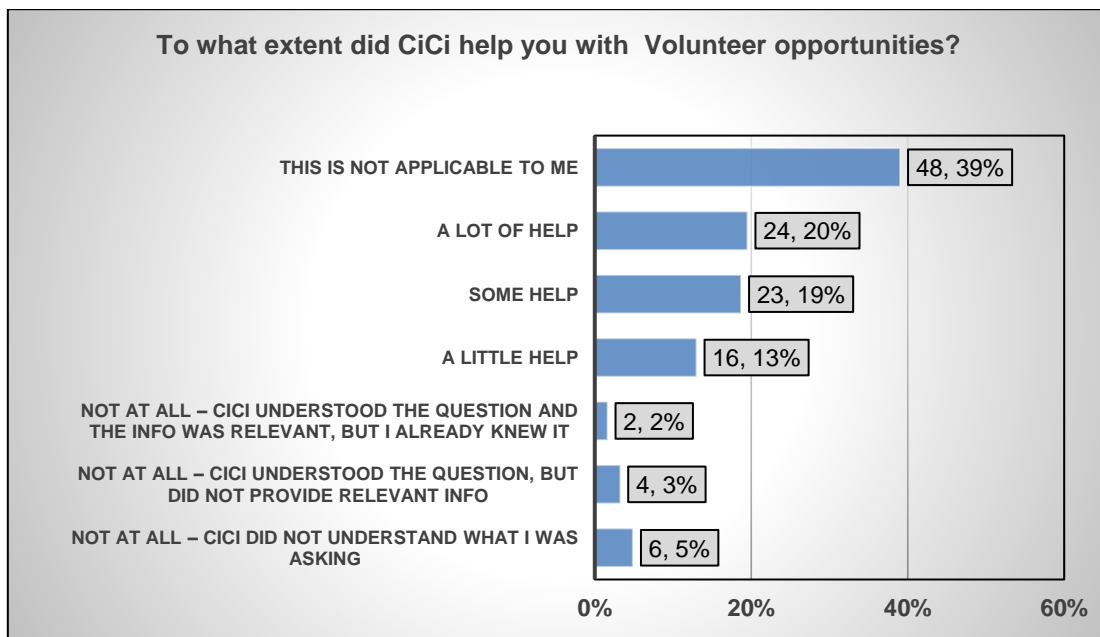## 2.8 To what extent did CiCi help you with "Volunteer opportunities"?

Figure 7: Extent to which CiCi helps provide volunteer information

This question was answered by 128 of the volunteer respondents. It can be seen in Figure 7 above 39% (n=48) stated this feature of CiCi was not applicable to them. Of the remaining 73 responses, 64%(n=47) claimed this function of CiCi was at least of "some" help to them. 16% (n=12) said that it was "not at all" helpful to them.

There were 40 comments included in the responses to this question. An overarching theme emerged suggesting this feature could be improved if actual volunteering vacancies could be accessed and displayed.

"Good links provided but didn't produce individual opportunities like jobs which would make it more enticing. Just gives general volunteering, being able to select an area of interest for the volunteering would be a plus."

"Finding relevant opportunities based on search instead of general volunteering options."

"It provided good signposting to local organisations. Perhaps an actual list of volunteering vacancies would have been helpful."

"As soon as you get the link to the local volunteering centre it says goodbye. I would have liked more some information on how volunteering can help me and then maybe linking this to how to put this on my CV."

"Could ask for specific interests e.g. volunteering with adults/ children or animals"

"This was actual very good as it gave links and websites to different organisations that could help you volunteer in your local area but also slightly further out than your local area. The information it gave was quite in depth and also gave phone numbers for different councils that could also help you with voluntary service."

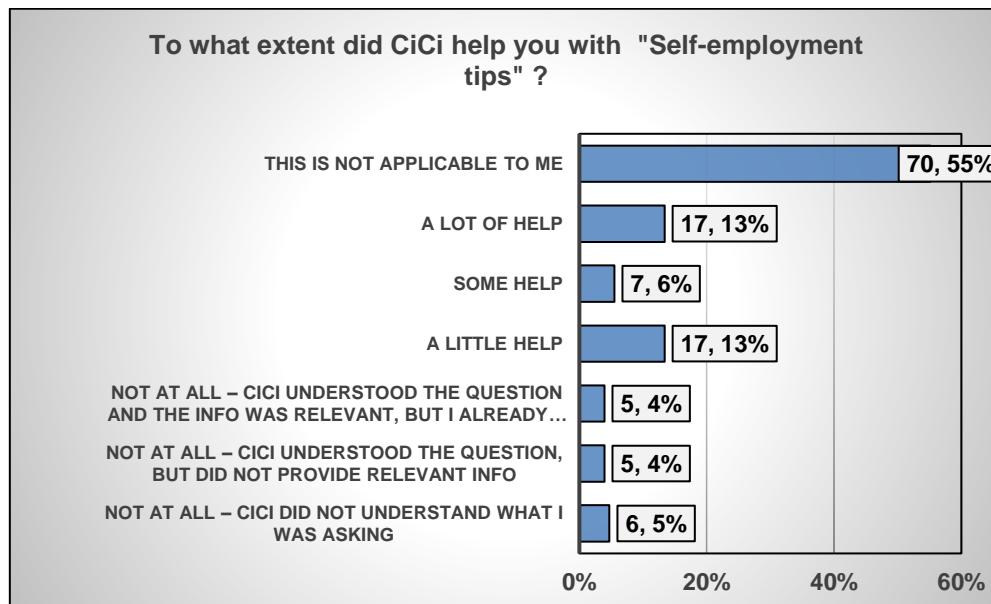## 2.9 To what extent did CiCi help you with "Self-employment tips"?

Figure 8: Extent to which CiCi helps with Self Employment tips

Figure 8 above illustrates 55% (n=70) of the test volunteers this feature within CiCi was not applicable to them. Of the 66 remaining test volunteers who used this feature, 36% (n=24) said that this was either of "some" help or "a lot of" help, while 32% (n=21) said it "did not" help at all. As with earlier mentioned features of CiCi these trends are similar. 34 comments were provided from the volunteer testers with mixed feedback and some constructive suggestions:

"My husband is self-employed and the links these take you too are fab and such a great help for anyone thinking of starting self-employed."

"There was a lot of links, but nothing practical."

"I was pleasantly surprised at the amount of links this produced a lot of information a great tool for anyone looking to go into self-employment."

"Too much information to read all at once on the page."

"Predictable."

"Linking me up with appropriate local people who can help."

"The information was a bit overwhelming. Perhaps videos of people running their own business in specific areas."

"I have setup a private limited company before so perhaps my knowledge is not typical but the information given for me was stuff I already know and would regard as common information. It would be nice on statistics on local businesses and perhaps tips on how to not close in your first year, how to write contracts, if you should get an accountant, etc."

"Perhaps some information about financial requirements, bookkeeping and taxes would be useful too."

"I did click on it quickly though and it just sent loads of text and links which I find overwhelming to be honest."

"Again, it provided relevant links for me to consider but this is information I could easily access through a Google search. I wonder if there is a way to provide a little more detail taken from these sites? Rather than hoping people will click through, search and then read it, could some introductory text be included in the responses to try and hook the individual in and make them want to find out more?"

"Maybe explaining what self-employment is and maybe having some sub categories regarding it rather than links."

2.10 To what extent did CiCi help you with "Referrals/links to a career/employability adviser (a human being)"?
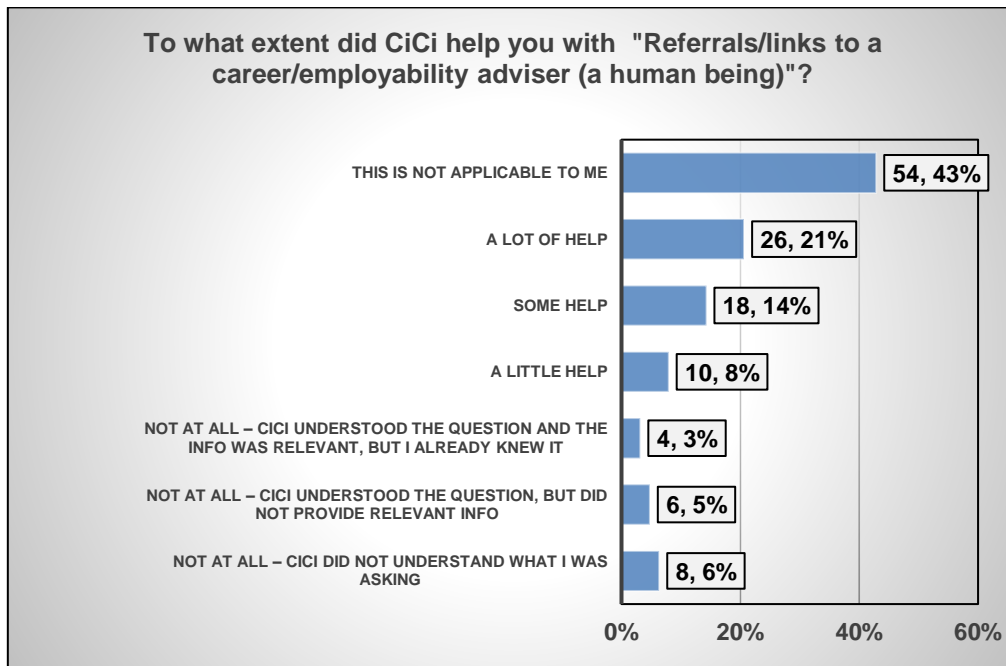

Figure 9: Extent to which CiCi helped with referrals.

The chart above shows 43% (n=54) of respondents this was not applicable. Of the 82 for whom this feature was applicable, 54% (n=44) said that this was at least of "some" help. As with all of the other features there are some for whom this was "not at all" helpful because they either knew the answer already 5% (n=4); or CiCi understood the question but did not provide relevant information 6% (n=6) or CiCi did not understand what was being asked 10% (n=8).

Feedback comments were mixed:

"I think it was too wordy to read. Simplify the language and shorten the paragraphs."

"When I clicked through to see the paid advice, the cdi link was good but the other link was just general google which felt counterproductive, just the cdi link would have been better from my point of view."

"I am Career Progression Coach so did not have a need for this but hopefully this option could point individuals in our direction for help and support"

"Again, really useful and relevant links and referrals"

"Local agencies would help (Derby hub?)"

"It gave me relevant service information and time to copy down which is a service I have not seen before."

"Named contacts perhaps? Makes it more personable, especially if they had not spoken to an adviser before and were a bit nervous"

"Only gave national careers service and Serco nothing about employer hub or other services"

"There could be some links to local services in Derby such as DCC or DWP."

"Information given was good and useful for anyone who doesn't know these resources are available. Again, pretty surface level though and would love to see more depth about what advice they give, what typically the advisors can give advice on and what to take with you etc."

"Cx direct link didn't work. More options needed of other organisations that offer free impartial careers advice. CDI website doesn't list all advisors from national careers service some of which are members and cover the areas searched for."

"I think maybe being able to have a human adviser almost already know what you're interested in before ringing. Maybe a quick checklist to send them pre-appointment."

2.11 How would rate CICi on the following points?

Criteria	1 Poor		2		3 Neutral		4		5 Excellent		Weighted Average
Supportive/friendly tone of voice	4%	5	5%	6	32%	40	34%	42	25%	31	3.71
Information was accessible and understandable	6%	8	10%	12	22%	27	37%	46	25%	31	3.65
Ability to provide a relevant response	6%	7	10%	12	25%	31	44%	54	16%	20	3.55
Ability to understand my question	3%	4	14%	17	26%	33	40%	50	17%	21	3.54
When CiCi provided answers, the answers were at an appropriate level of detail/length	5%	6	15%	19	29%	36	32%	40	19%	24	3.46

Table 1: How volunteer testers rated CiCi

The above table illustrates how CiCi has been rated according to several criteria. These have been ranked according to the weighted average shown in the right-hand column, which indicates that the highest ranking of 3.71 was for **"Supportive and friendly tone of voice".** The responses are further illustrated in the chart below which indicate in the green and blue peaks (ranking of 4 and 5 respectively) that for all criteria CiCi has been rated highly.
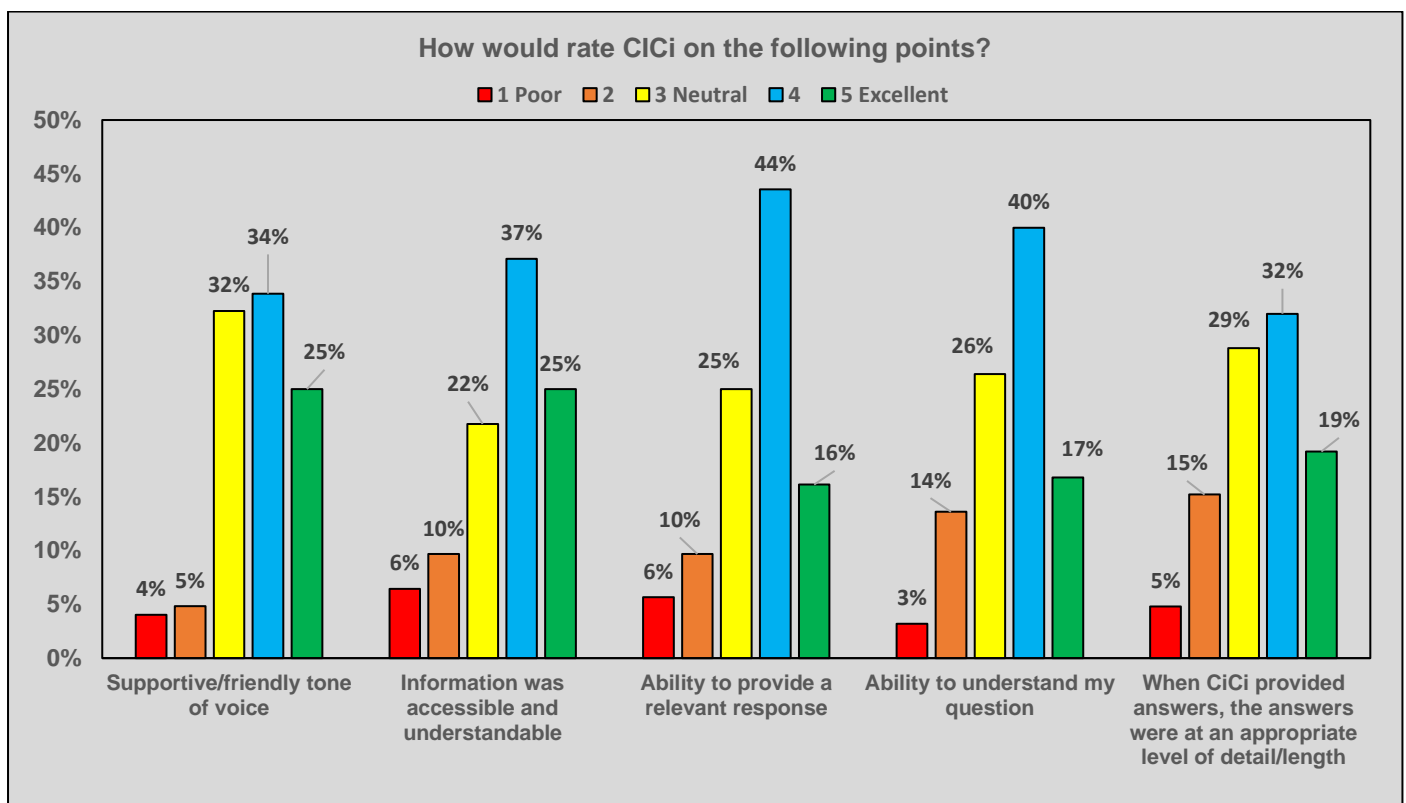

Figure 10: How CiCi was rated by volunteer testers.

2.12 Which of the following features for CiCi do you think we should develop that would be most helpful to you?

Feature	Not important at all		Not really important		Not important but nice to have		Important		Very important		Weighted Average
Advice for interview preparation	2%	2	1%	1	11%	13	46%	56	41%	51	4.24
Identifying jobs that have similar skills to other jobs	1%	1	3%	4	11%	14	48%	59	37%	46	4.17
Job specification assessment	2%	2	0%	0	22%	27	53%	65	24%	29	3.97
Building a personal profile	2%	2	6%	7	20%	25	43%	53	29%	35	3.92
Coaching / motivational support	2%	3	5%	6	19%	23	51%	63	23%	29	3.88
Different languages / simpler English	7%	9	9%	11	23%	28	34%	42	27%	34	3.65
One-click to email conversation record to you	4%	5	11%	14	33%	41	25%	31	26%	32	3.58
An action tracking tool within CiCi to manage your plans	2%	3	5%	6	45%	56	34%	42	14%	17	3.52
Ability to change colours/font size/display	6%	7	23%	28	41%	50	18%	22	13%	16	3.1

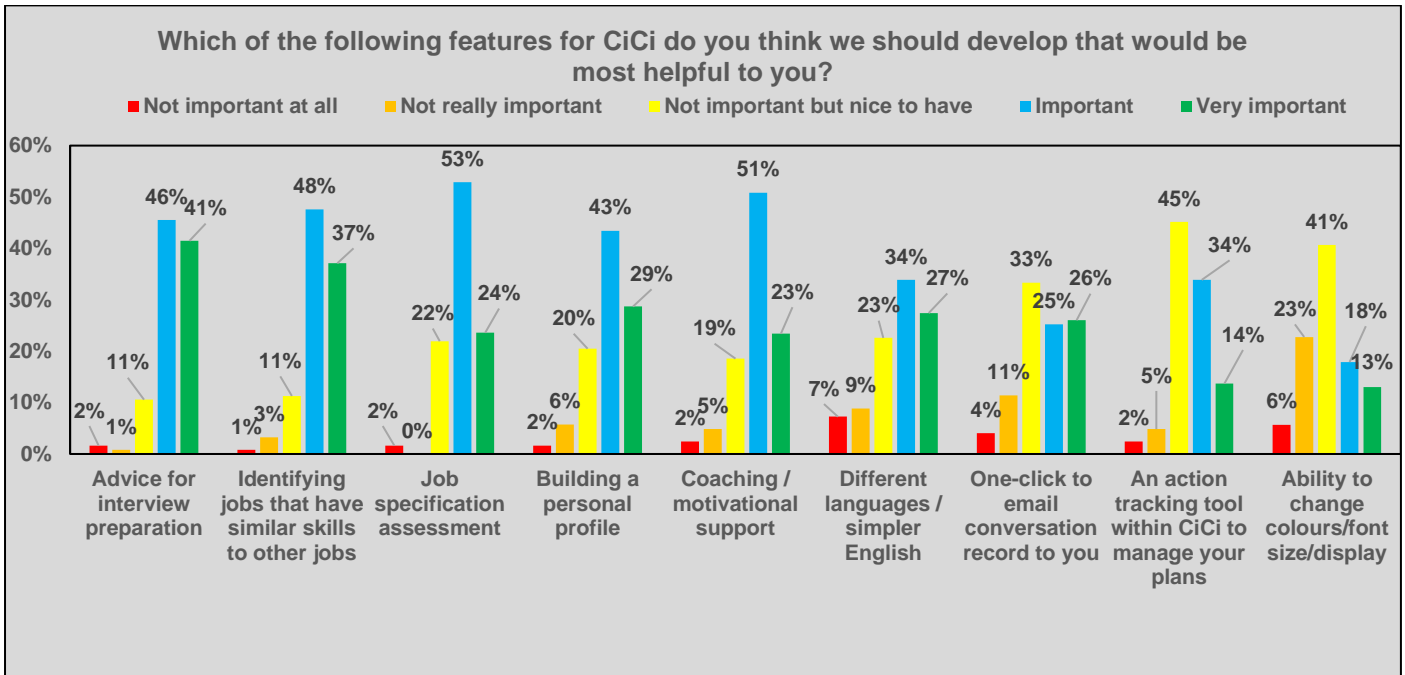*Table 2: Most important features to be developed*

Figure 11: Which features to be developed are most helpful

Table 2 and figure 11 above indicate the features that are ranked by level if importance by the volunteer testers to be developed by the CareerChat team in order to improve CiCi. The table is ranked by weighted average showing that **"Advice for interview preparation"** has been rated as 4.24 out 5 and is rated as the most important feature to be developed by the team. The bar chart illustrates by the blue and green columns (Important and Very Important respectively) how each feature has been rated by the volunteer testers.

As shown rated first is **"Advice for interview preparation**" with 87% (n=107) rating this as important or very important. Rated as second is "**Identifying jobs that have similar skills to other jobs"** with 85% (n=105) rating this as Important or Very Important.

2.13 Would you recommend CiCi to a friend who was thinking through some basic career questions?
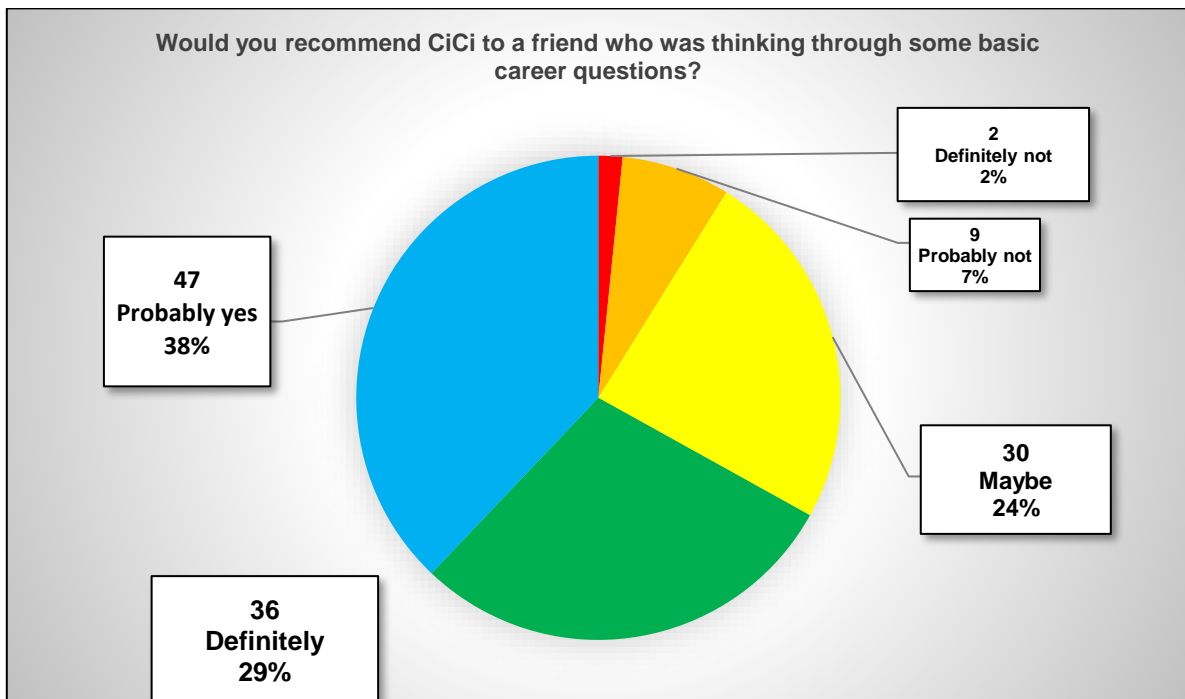

Figure 12: Would you recommend CiCi to a friend?

Figure 12 above clearly shows that 29% (n=36) of the test volunteers would definitely recommend CiCi to a friend. A further 38% (n=47) stated they probably would recommend the chatbot.

Clearly with any prototype there will inevitably be some issues and not all of the test volunteers had a good experience. For some, there were difficulties in using the bot and it crashed on 1 occasion, which undoubtably had a negative effect on the user experience. For others, the bot did not produce the results they had expected, which again would have had a less than positive impact on their experience and would have influenced their answer to this question. However, the above evidence indicates that over 2/3 (n=83) indicated they would recommend CiCi and a further 24% (n=30) are considering recommending the chatbot. The indications are very positive and constructive feedback will inform the BETA design.

Below are comments where some users experienced difficult problems with CiCi:

"Unfortunately, today was not a good day for CiCi - the page wasn't loading properly, it kept restarting the conversation and I had a lot of error messages. This could have been for many reasons, including a wifi issue, but it was a valiant attempt. Overall, I liked the reasoning behind it, and the fact that it is all in one place (the jobs, training and all the other choices) is something that I would come back to if all worked well."

"The format of the chatbot needs to change. When I first entered the chatbot on desktop, it wasn't clear that I had to type anything - so maybe a welcome message needs to be there Also it opens full screen, which would be good for mobile optimised devices but on a desktop it's not clear at all unless you know to type into the 'Reply' box at the bottom... Also once you start working your way through the Chatbots automated responses and choice selections, the replies from the chat =bot are so lengthy - you could almost call it 'EssayBot' - the replys are too long for what's supposed to be a 'Chat' - so it becomes very tedious to read, and if you have learning disabilities like I have 'Dyslexia' it becomes almost too difficult to navigate, I think you need to look at colours and format of the chatbot to make it more pleasing on all platforms... And, of course, the responses need to be smaller and more to the point, I assume it's just doing a search from a database of responses and google searches for relevant responses' but the abbreviated response needs to be smaller and more to the point if possible...."

"I could not log on. I tried all your links at least 4 times, and it would timeout for the CICi page to load. Also, when I completed stage 1 of your instructions the page went blank with this in the browser https://careerchat.uk/volunteer-testers-wanted/ .... but no message about what next or what to do."

"I have suggested Google could do some of this but accept that would return a long list but CiCi at least provides a focused response."

"I didn't really learn or see anything new. I was hoping to have something more personalised."

"Just helping a friend out to test the site which I found basic but I'm sure it will be helpful for those seeking employment help."

"Unfortunately, I could not access the chatbot at all". The same respondent commented that CiCi could not understand any of her questions at all. (Note: This respondent has agreed to be interviewed about CiCi – Respondent 54)

The following are some of the more positive and constructive comments:

"Completely new to me but easy to follow links. One link with everything would have been better."

"The speed with which it returned responses was really fast. Some responses were very generic and not useful."

"I was impressed with the speed of cici and also providing the links within my own area an obviously well thought out site but maybe a better layout to create more interest for the client to want to continue to proceed, plain screens soon become boring."

"Most of the information given was quite surface level and not of great relevance to me personally. The job skills tool was nice to see specifics of each job, this should be the level of depth for each section in my opinion."

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"The links provided within the answers were relevant and worked well. I liked the embedded video in one of the answers. The tone was friendly, but a bit too wordy. My ESOL and Basic Skills students would definitely struggle to use this system. It would be good to have a summary of the conversation to keep all the links at hand."

"Gave a reminder that computers still can't replace humans when it comes to personal feeling not just a generic answer/pre-programmed response. Reminded me of a job site I had forgotten."

"Repeated her answers. Times out too soon. Only responds to certain responses (yes and no not ok or a question) and didn't give an option to other relevant options like speaking to someone in person or searching again when it didn't bring up anything related to your original search. Chat kept zooming in and out when cici replied. Being able recognise when you're watching a video or reading all the information and not time out."

2.14 What do you think we should prioritise in improving CiCi so that it can better help with career questions you have or can imagine others having?

This was an open-ended question inviting users to provide recommendations and suggestions for improvement to the chat bot. There were 102 responses and below are a few selected examples:

"Improve user interface"

"Coaching/ motivational support would be great alongside interview support to get through the final hurdle of job hunting."

"In my personal opinion I think the biggest improvement that can be made is to add the option to save searched opportunities to a dashboard."

"Just making sure when people are searching for specific jobs that the correct job vacancies come up not completely random jobs that have nothing to do with what you searched for purely because they had the key words in the job description. Someone searching to work in retail don't want to have to keep changing the job search because they are getting shown jobs in construction as the description says "need builders to build a new retail shop in so and so area."

"Better responses. Having the option to ask questions and not having to pre pick questions. Having it remember what you've searched for and recommend other jobs or courses that would be useful to progress. Have up to date information regarding salaries and better course recommendations. Not to suggest job sites that are related more to admin/clerical for outdoor vocational roles "

"More jobs results - maybe a wider search prompting different job title inputs as if you get zero results clients will just give up."

"Widen the search for training courses as to a limit of 20km, access to all training courses provided and not just the 1st three on the chat."

"More depth to information given. It seems right now there's a lot of sections but no depth to info and ends up with the programme being not useful in any area. In my opinion it would be better to work on a section at a time rather than working on a section each or multiple sections per person. Again - the job skills section is the level of depth that should come from each section with deep information and statistics."

"I put in "legal job/employment" and she didn't understand. Maybe link words with specific jobs or skills."

"Better matching to job roles given by the user. Picture examples of CV's to show what they may look like and options for alternative CV's such as graduate and creative CV's."

"A transferrable skills questionnaire would be useful. Simplify the language. Provide examples and pictures to make it more user friendly. Dyslexic users would struggle to read those long questions as well."

Note – 4% (n=5) of the volunteer testers identified themselves as dyslexic.

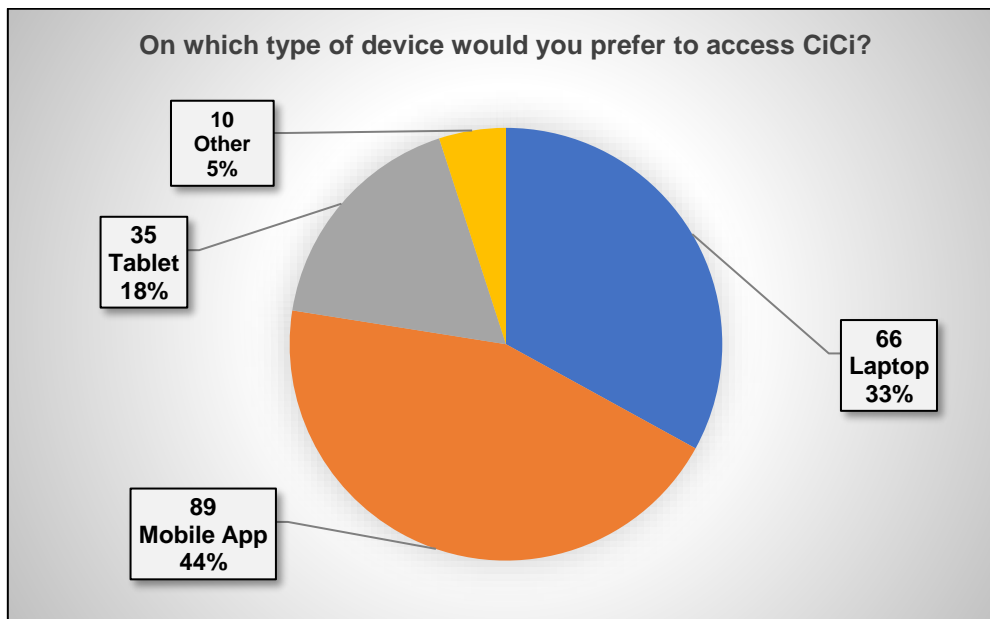**2.15 On which type of device would you prefer to access CiCi?**

Figure 13: Which type of device users prefer to access CiCi

It can be seen the most popular device preferred by users is a mobile app selected by 44% (n=89) of the volunteer testers. The second most popular choice was laptop as identified by 33% (n=66). Other devices identified were PC's.

2.16 Please provide some feedback about our CareerChat website

This was an open-ended question to which there were 105 responses. Upon reading through these, it is clear that the responses were mainly about the appearance of CiCi and less about the website. Those comments that specifically relate to the website are below:

"The web design in terms of the sizing of different elements needs to be improved. For example, the top left logo is so wide it pushes the menu items into two rows. Also, I don't like having to scroll loads on a site. The top banner image is so deep there's hardly room for any content on the screen, unless you start to scroll."

"Background video of person on phone is distracting. Website works well in different formats. Contrast seems a bit low for text against background on some of the pages. Issue with text alignment in header at 200%."

"It looks professionally designed. It has all the information about you expect about us, what CiCi is and how it can be used."

"I think the website looks very professional and the menu icons look clear. I like the interactive animation on the website as well."

"On the landing page there was a moving image of someone on a mobile phone scrolling through. It had a heading on it, but as the image was moving this was distracting and took away from what the heading was stating. I like the colours, just to note that the 4 text boxes after the heading what CiCi can do for you, they were not aesthetically pleasing the first box was bigger than the other 3 when it did not have to be. This is a minor point but it took away from the uniformity of the page."

"It's visually clear and attractive Menu options are clear Subsequent pages are clear and informative"

"It looks very modern which is good but in my opinion there's too many options on the navigation bar. I think a lot of options could be embedded within another webpage as it isn't relevant enough to warrant a button and takes away the sleek feel of the modern site to instead an overwhelming one of too many options. Meet the team for example can go in about us. I also am not so sure the blog needs to be on the nav individually, this could also come under about us. Finally, testimonials could potentially sit under "what CiCi can do" potentially."

"Meet the Team' and 'About us' should be merged. The site is very accessible and it's good that videos are included, though I feel they should be made larger on the page. The website does load quite slowly, however."

"The layout is simple and it's quite easy to use. One thing that isn't very important, but could be improved is that the website could look more 'inviting."

"The website is really nice and can easily appeal to a younger audience too. Its accessible and well put together. I like the name and logo too."

"The website is user friendly and inspirational. It needs clear links to the chat box."

"The website is very easy to manage and has a nice look overall. I have no negative comments about it."

"I think it's good as its colourful and attractive so maybe CiCi itself could be the same. I think it is good how there is sub categories and it's simple to understand what CiCi does."

"Some good information on the website. I like the front page, as it is not fussy and seems simple to navigate. Some parts looked quite amateur such as the page about dmh associates, but who am I to judge. The photos used are good quality and show some 'action' and not just portraits. I am not sure about the underlying colour of the website - it seems to be a pale green blue. It is not a colour I am fond of, but again, who am I to judge."

3.0 Conclusion

Overall, considering this was a prototype version, CiCi – the little powerhouse that supports your career™ appears to have been reasonably well received. There were some "teething" problems where a number of users could not log on or the system crashed during the test. Though we have noted the system only crashed once during the volunteer testing. Negative experiences will have influenced some responses to certain questions. However, most of the volunteer testers managed to access and use all of the features. Not every feature was applicable to all of the test volunteers e.g., Self-employment was not applicable to 55% (n=70) or Volunteer Opportunities was not applicable to 39% (n=39). However, in all cases those that did manage to test the features offered by CiCi reported that the chatbot provided at least some or a lot of help for a significant proportion.

The fact that over 2/3 (n=83) expressed that they would "*probably*" or "*definitely*" recommend CiCi to a friend or colleague and a further 245 (n=30) stated "*maybe*" they would recommend CiCi is a positive endorsement of the work to date. There is sufficient "customer" confidence to justify our commitment to producing a BETA version.

As expected from a prototype there were some problems. A few volunteer testers could not log on and for some the system crashed. These individuals have fallen into the 9% (n=11) who either would definitely or probably not recommend CiCi. For others their perceptions or expectations of the chatbot were not entirely met. Again, this is mainly because some of the features did not work as well. This is not entirely a fault of the programming of CiCi but may be more a result of the local data (or lack of) that can currently be accessed by CiCi. The referrals feature is another example of a function of CiCi which has suffered as some testers had expectations that they could be referred to local organisations with which CiCi has yet to be partnered or agreements reached to allow CiCi to make referrals to. Also, the depth of information provided can be improved. The *"About Jobs"* feature explaining the various types of jobs and skills required was cited as a good example that the other features could match up to. For each feature there were the expected mixed responses from the volunteer testers, with recommendations for the CiCi technical team where improvements can be made to each.

Finally, it is important that the appearance of CiCi is improved. While it was reported by most users 66% (n=73) that CiCi had a "Supportive and Friendly Tone" there were reports that the screen is bland and boring and that the opening screen is not welcoming and sometimes confusing. The display needs to be improved along with the opening screen in which for many there was no welcome message and it was not obvious that the user was expected to type first to initiate the conversation. The CareerChat website was well received and the constructive feedback provided will help inform the next planned upgrade.