

## HW7-Team: Customer Development

### Template

#### Team Number and Name:

#### List all students who actively worked on this Assignment:

1. Name: Akash M Dubey
2. Name: Dhrakshayani Priyanka
3. Name: Shiqi Yu
4. Name: Rutuja Kale
5. Name: Divyank Jain

**Part 1: List Your Three Target Customer Segments** (*Note: if you propose a platform that connects “buyers” and “sellers” like Uber, Airbnb or Rover, you need to do it twice, for “buyers” and “sellers”*)

Segment 1: Educational platform-seekers with low internet (Low internet crowd)

Segment 2: Students (poor students with limited financial resources)

Segment 3: Laid off Employee/Office workers

**Part 2: Where will you find them?** List three places you would go to find your customers and interview them (*as mentioned above, you might need to do it twice, for “buyers” and “sellers”*):

Place 1: Rural areas of Maharashtra, rural areas in Nepal

Place 2: Regions like ‘Dharavi’, Slum areas in Mumbai

Place 3: LinkedIn & other online sources (via Employee’s layoff posts, News, Online forms, reddit, Hiring tags etc.)

**Part 3: Write your Top Three customer interview questions** (*as mentioned above, you might need to do it twice, for “buyers” and “sellers”*). Use EXACT wording. AVOID “closed” questions and do not ask about FUTURE! Make sure to review lecture slides with examples.

Q1:How do you normally manage seeking online education and what are your Major Problems ?

Q2:How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one’s?

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

GOAL : Discover the **present** customer pain points via Interview methods (Virtual/In-person) for targeted 3 customer segments to develop elearning solution

**Part 4: Get out of the building to validate your problem is real!** *Interview five customers per person and take interview notes.*

Include specifics: person's info (first name only, age, occupation), place where you interviewed, answers to questions and any additional insight they shared with you. NOTE: it is understood that during COVID-19 you might not be able to interview in person, do it via phone, Zoom, email, etc. \* [List your notes in Appendix 1.](#)

**Appendix 1: Notes from Interviews**

Team member #1 name: Divyank Jain

Interview Notes #1: Keshav, age 16, Dhule Village, Facebook Chat Segment: Student, Maharashtra

Q1:How do you normally manage seeking online education and what are your Major Problems ?

I am Keshav and I am living in a village in Maharashtra called Dhule. I recently finished school and I was in my first year after 10th grade and Covid struck. Low internet bandwidth and limited financial resources were the major problems I faced because of Covid-19 college shutdown.

Q2 :How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Colleges shut down and we were asked to get internet connections at our places to attend classes online and because of limited connectivity I was able to set up a low bandwidth connection at my house but because of low internet bandwidth I could not attend live lectures and then I got to know about these online education platforms but they were too costly for me, my family could barely pay college education fees and so I could not subscribe for those, I asked for student aid but didn't get any response from these platforms. These platforms require high bandwidth internet connection and so I could not do much even when I signed up for the trial period.

Q3: Do you need a cost effective educational platform and how a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

The problems I faced were low connectivity and high cost of these courses on the online platforms. Yes, I would love to have an option that provides me a cost effective way to learn and simultaneously is able to run on low bandwidth. A forum where someone can solve doubts at any time sounds like a very good opportunity for me to grow and educate myself that will help me follow my dreams.

Interview Notes #2: Akshay, age 27, Bangalore, Whatsapp Call, Segment : Laid Off Employee, India

Q1:How do you normally manage seeking online education and what are your Major Problems ?

I was recently laid off because of Covid-19 and the reason for me getting fired was that I do not have the skills compared to my colleagues. Because of that I started looking to enhance my skills through online education but the courses available online are very expensive and I am the sole earner in my family and cannot afford such costly mode of education because I do not have a job currently.

Q2 :How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Laying off in these tough times was more harsh than I imagined because I started applying to a lot of companies but they had stopped hiring and some had very high requirements because of which I could not compete with the highly skilled people. So I started educating myself using the free online videos available but those videos didn't have good content, no discussion forums where I could post my doubts and interact with an expert.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, I would really love to know about a platform that is cost effective and interactive at the same time which helps clearing my doubts. This way I can learn new things sooner and very well and may be able to compete with the demands/requirements for different positions at various companies.

Interview Notes #3: Riya, age 34, Mumbai, Email, Segment : Laid Off Employee, India

Q1:How do you normally manage seeking online education and what are your Major Problems ?

I am a single mother who recently got laid off because of Covid-19 and since then I have been struggling to find another job and it is getting difficult to manage expenses with each passing day. To provide my kids with a good education, I got high speed internet installed so that they can learn new things online. When I got fired, someone suggested enhancing my skills via education platforms available online and I found out that the certifications required to land a job were very expensive and with no fixed source of income I could not add another expense to my list.

Q2 :How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Covid-19 resulted in me losing my job and because of school shut down, my kids were now dependent on internet and online lectures. Since they were completely occupying the internet bandwidth, I had to switch to a mobile network and these existing online education solutions run on very high internet bandwidth, so I could not study much because of the lag faced in video streaming. The certification courses were expensive and the free videos were not working properly because of mobile internet connection. Though my Learning wasn't affected much.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

A platform that runs is cost effective and provides discussion forums was something that I was looking for and I could not find it amidst the existing expensive online solutions. I would love to know if any such product was available in the market so that I can get certified and start working again to support the life of my kids.

Interview Notes #4: Dikshi, age 18, Mumbai, whatsapp call, Segment : Student, India

Q1:How do you normally manage seeking online education and what are your Major Problems ?

I am an undergrad student who was very much dependent on in-person education because of limited financial resources. I have a very basic phone which barely supports whatsapp so I could not download a lot of applications on my phone. This pandemic forced us to stay at home and rely on online education which was not very interactive. To learn more and compete with my peers, I tried signing up for online courses via my cell phone because I did not have a computer with internet connection at home.

Q2 :How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

I was only dependent on the internet connection offered by my mobile carrier and it was not enough to stream those high quality videos offered by the existing online education services. Apart from the low internet bandwidth available, I had very little savings which was not enough to fund my online education needs. Because of colleges getting shut down, it deeply affected my studies and left me with no alternative. I tried to google as many free services and educational videos possible but they were not always up to the mark. Moreover those were just videos and they lacked a chat page where people could post their questions and doubts which could be addressed by an expert

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Trying to find a platform to clear my doubts was a big task because of the uncertainties of replies, moreover I had to keep a track for all the different forum pages, so I would love to have a platform that provides cost efficient learning and discussion forums monitored by experts.

Interview Notes #5: Vivek, age 20, Ratnagiri, Phone call, Segment : Student, India

Q1:How do you normally manage seeking online education and what are your Major Problems ?

I recently got admitted to a very reputed college in Mumbai and I was going to shift to Mumbai in Summer of 2020. Because of the pandemic all my classes shifted to online mode and I lived in a village where the internet connectivity is pretty low. Trying to stream through the college lectures and not having direct interaction with the professors made me explore my options to try online education. I came across a few certification programs to develop more skills, but they were very expensive. (Udemy - 100\$ Rs for a course). Trying to afford these extra expenses along with the college fees was very difficult.

Q2 :How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Due to the shutdown of colleges, I missed out on the opportunity to meet and study with bright minds who could motivate me and help me with my shortcomings. I tried to keep up with my fellow students but I needed a little more personal touch and because of no in-person classes my interaction with the experts was limited and so I tried to switch to online education solutions but those were too expensive for me to afford. Not just the cost, but the high internet requirement was another problem I faced.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Interaction with the experts was one of my main reasons to move away from my home town all the way to Mumbai, but I could not. Also I could not find any forums with dedicated experts who offer cost efficient services like video lectures and live doubt solving sessions. I would very much love to have a platform that tackles both these problems and helps me to become a better professional.

Team member #2 name: Rutuja Kale

**Interview Notes #1:**

INFO: Vihaan, age 12, India, Phone call, Customer Type: Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am in 7<sup>th</sup> standard and due to this pandemic and school closures we are attending classes online. I am living in a rural area and I don't have a laptop or computer system at home, so I am using a mobile phone to attend the class but the major issue I am facing is slow internet connection.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

My school along with many other schools decided to use an online education platform to keep us learning while we cannot attend school in person. However, the eLearning platform requires a high bandwidth internet connection to attend lectures online. But due to slow internet connection I frequently face an issue with internet disconnectivity which reduced my academic performance.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, the problems I face are due to slow internet connection. It will help me financially to attend these lectures on low bandwidth internet as I will not have to spend money on high data usage. I would love to have an option that provides me an eLearning platform where someone helps me to solve my problems and guide me like a teacher is a very good opportunity for me to learn.

#### **Interview Notes #2:**

INFO: Kritika, age 20, India, Zoom meeting, Customer Type: Undergraduate Student.

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a second-year engineering student. I had to spend a handful of money to get a reliable internet connection so that I can attend online classes without any interruption. Also, in order to learn new technologies, I decided to enroll into other online courses provided on various online learning platforms like Coursera, Unacademy, Upgrad, etc. but they do not offer any free courses and require paying either for monthly subscription or per course. As I have limited financial resources it is very difficult for students like me to spend additional money on such resources.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Due to covid 19, we had to move to the online platform (Zoom) to attend lectures. It became difficult to interact with the professor apart from lecture time to discuss doubts virtually. So, I thought of enrolling into some online courses to clear my doubts. But there are only a few of them which provide free access and most of them charge a handful amount to enroll in those courses.

Q3: Do you need a cost-effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Definitely, it will be helpful for students like me to clear doubts by going through some free courses provided online.

**Interview Notes #3:**

INFO: Sunita, age 35, India, Phone call, Customer Type: Primary Teacher.

Q1: How do you normally manage seeking online education and what are your Major Problems?

As a teacher, it became hard for us to stay connected with our students. We spend a major chunk of salaries for better internet connection, devices to record our classes, etc.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

It became very difficult to keep track of each student's progress. Due to online education, interaction with individual students is almost not possible. Also, low speed internet became an issue for students to keep up with the class. It directly reflected on an individual student's performance and learning ability.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

It will be a game changer if there is any application which will provide better video quality, continuous connectivity on low speed internet connection. It will improve the overall learning experience for all students and also save money for their parents.

**Interview Notes #4:**

INFO: Kajal, age 22, India, Zoom meeting, Customer Type: Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a high school student from a rural area. In my area, we frequently face issues with internet speed. It is very difficult sometimes to attend online lectures when video is lagging, buffering continuously.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Traditional classroom learning was fun for me but now we have to get used to distance learning. All teachers use virtual platforms to teach. But if the internet speed is slow, these videos buffers or lags and because of that it gets really difficult to understand the concepts.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Of course, if we get some solution where it will seamlessly work with slow internet speed without lagging or buffering videos that will definitely help us.

**Interview Notes #5:**

INFO: Kunal, age 32, India, Zoom meeting, Customer Type: Laid off employee

Q1: How do you normally manage seeking online education and what are your Major Problems?

Many companies faced financial crises due to this unfortunate event. As a result, they had to lay off a few of their employees. I was also one of those unlucky ones. I immediately started applying for a job but only few of the companies are hiring. There are many people looking for jobs and as a result companies are looking for people who have a variety of skills. I started learning new technologies through different online learning platforms only few of them provide free access and most of these online learning platforms are costly. Also, most of the free ones do not provide offline learning.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Previously I used to attend in person classes to learn new skills. But as we can't do that anymore, I decided to go for online learning.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Absolutely, Any application with free as well as offline access will definitely help. As I am looking for free online courses that will help to save money as well. Also, I would like to connect to a platform for laid off employees so they could share their interview experience and job relevant posts.

Team member #3 Akash M Dubey:

**Interview Notes #1:**

INFO: Gaurav, age 30, Mumbai, Dharavi, Zoom Meeting, Customer type: Laid off employee

Q1: How do you normally manage seeking online education and what are your Major Problems?



I look at online education seriously as after I was laid off from my current company due to covid 19 outbreak. Companies have gotten hit badly and There is a need for people to increase their skills through online education platforms. I often spend too much time travelling, I find it difficult streaming content since we live in slum areas and the internet is costly so I look elearning platforms pocket friendly to be portable and easy to access and faster to be available through the Internet.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

I personally dislike all existing solutions since they are slow on my network. I used to spend some time in the Public Library, but sadly after Covid 19 that got closed. So I have hard time seeking free online resources since there's no platform that could provide me curated content for free

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes please, I am in need of community, i tried reaching out to few connections on LinkedIn but its difficult to have them connected on some community, i wish if there was any platform like Facebook for friends, if i could have that for Laid off employee so they could share about job postings, ideas to improve and right skill to work on.

#### **Interview Notes #2:**

INFO: Shivam, age 12, Mumbai, Dharavi, (Whatsapp Call), Customer type: Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

I used platforms from school premise like using school computer youtube through keyword search or google search, but often it is very misleading or more complex than the information i need. I feel major problem is not customized as per my age or level of need of information i.e as per basic level

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

After School shutdown, things are difficult for us since we have been into our home and cant use school facilities. Also the Internet is expensive for us to have, we could hardly manage house income and bread to have a living. Though Dad being head of our family has a phone but with a lower internet plan. So i use his phone to browse educational content but the major problem is. it is limited due to plan and i waste a lot of time in searching curated content

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

For free ? Why not! That's amazing. I miss interacting with my school teacher and my peers. I would be part of such a platform if it is free, if it has curated content and a chance i could have a class environment to have my peers playing quizzes and other fun stuff, i will be the first one to use it. I don't know but how community will be helpful, so i ain't sure how it could be implemented

**Interview Notes #3:**

INFO: Shraddha, age 30, Mumbai, Dharavi, Zoom Meeting, Customer type: Laid off Employee

Q1: How do you normally manage seeking online education and what are your Major Problems?

My online learning was backed up by my office elearning methods majorly. After Layoff it's a difficult phase of my life to have cost effective learning ways. Major problems are cost for me and also on quality content that i generally fail to find for myself

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Learning got majorly affected since I got laid off. I have been using my friend's home's desktop to seek learning ways to improve my skills if I could get a new job. so learning has been affected since now most cafes and every other library are closed.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, I do need it. I feel I need mentors to guide me and a cost effective elearning that will help me to survive in such a market. If the platform could be a community forum kind that would be great help to me for seeking advice on what skills should i work on

**Interview Notes #4:**

INFO: Sagar, age 24, Mumbai, Dharavi, Zoom Meeting, Customer type: Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

I used public library computers mainly or school computers to learn about new stuff. However, at times I rely on my friend's cell phone, paying him a huge share which is soon an ending option for me since i couldn't afford the internet plan. Cost, quality and portable mobile elearning is what major problems are.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

As said, I used my office services more, then switched to my friends place and now looking for other options alternative to existing ones; since they are costly and require computer setup and environment to support learning modules etc. The reason existing solutions are irritating and not helpful in any way to me, or anyone facing financial crises.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Please, i need a platform that will help me to know what is relevant to the market and focus on those technologies, some interesting learning ways to learn new things easily and have it for free. All quality stuff along with it being so portable optional web based so i could run it offline too

#### **Interview Notes #5:**

INFO:Asad, age 23, Nepal, Zoom Meeting, (via LinkedIn), Customer type: Low Internet crowd

Q1: How do you normally manage seeking online education and what are your Major Problems?

Sadly In Nepal there are many places that are still under developing state, so E-learning is an innovation to us and people in Nepal, I have shifted to my uncle's place staying away from families for being in an area with good facilities. so e-learning here is manageable but a lot of platforms like coursera and others are already so expensive for us to afford

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

For us, things have gotten worse after covid, because most of our batch has got covid and now school is shut down, so learning has literally stopped. Here we don't have strong facilities for elearning. So everyone is waiting for school to reopen, meanwhile we are developing skills randomly through website

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, to be honest that's the need for us, I would like to have a community where I could share my doubts and ask for proper mentors to guide me and also if cost free education is needed for me since I don't have enough funds to invest into elearning platforms.

**Team member #1 name: Shiqi Yu**

**Interview Notes #1:**

INFO: Omprakash, age 24, Karnataka, Phone, Customer Type: Poor Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

As you know, the state I was born in is a state with very low productivity, which means that our economic level is not high. This means that many villages and towns in my state are very poor, the network signal is not good, and the traffic is not particularly developed. It is difficult for me to find online education. I always find experienced people for advice offline.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

Under the influence of the epidemic, the biggest impact for me is the inefficient use of teaching resources and the low efficiency of home study. Since there is no contact between people, I can only find online teaching websites, but the network signal of the place where I live has not reached 4g, and it takes a long time to load the web page. I am using Udacity, but I rarely use it because the cost is too high, the courses need to be paid, and the community is small, and there are many areas of knowledge that are not covered.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Because I haven't worked before, I think if I am laid off, I will need a cheap education platform to improve my skills, because I am not too old, I will not give up the opportunity to improve myself. My goal is to adapt to the future job market.

**Interview Notes #2:**

INFO: Som, age 25, Nagaland, Zoom Meeting, Customer Type: Educational platform-seekers

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a graduate student who just graduated at the end of 2020 and I am happy to receive online education. Due to the epidemic, our school is teaching online, and the network signal in the place where I live is very good, so I can enjoy all the teaching resources of the school. And there are many classmates living around me. We will regularly hold online meetings to exchange learning experiences.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

Due to the closure of the school, we cannot use the school library. We mostly use online teaching platforms, such as Zoom and Teams. Because I am a student of science and engineering, the online education platform I use is Udacity. It has many advantages. For example, it is easy to use and easy to operate, and the quality of their courses is very high, which can completely replace us. Price goes to school to study. But there are also advantages and disadvantages. The types of courses are limited. For example, when I want to learn about some professional biology courses in my free time, the types are very limited. I also hope that I can find a software with a low price and a very rich variety of courses in the future.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

As it happens, I participated in an internship at a company earlier this year. Due to the epidemic, many regular employees were fired. Unfortunately, after the internship period, I was mercilessly fired. I was also very anxious at the time, and I wanted to find the next job. Because I think my abilities are still good, I really don't need a platform to improve my skills. I hope to have a platform that is conducive to making friends and helping to find a job. However, I think that in today's competitive market, we still need to continuously improve our skills to adapt to the trend, so the skill upgrade platform may be a relatively small requirement for me. I like a community that learns from each other, where there are professional professors and friends who learn from each other, who can supervise each other to learn more efficiently.

### **Interview Notes #3:**

INFO: Sahana, age 26, Assam, Phone, Customer Type: Educational platform-seekers

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a college student living in a relatively poor area. The network signal here is not particularly good. We can only use offline paper teaching, and to a certain extent, offline teaching costs less than online education. Of course, if there is a platform where I can learn without using a fast network, I would be very happy. So my current online education is only limited to query related teaching materials.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

Due to the impact of the epidemic, my school did close some facilities such as libraries, restaurants and other crowded places, but normal teaching buildings are still open. Because we want to reduce the contact between people, I can't often ask the professor for questions. In

addition, my study group partners and I can only communicate online. Due to the slow internet speed, the efficiency of communication between us is not high. The online course platform I used to use is Coursera. I think Coursera is still good. It has a wide variety of courses and can meet my current academic needs. But it also has one disadvantage, that is, many courses are too old. As you know, I am studying computers, and the information I need must be the most cutting-edge news. You can imagine how disappointed you will be when you find a title that matches the information you are looking for, but when you open it and see that it is indeed what it was two or three years ago.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

After graduating from high school, due to family reasons and layoffs, I participated in a period of work. At that time, I was really helpless and I was very disappointed with my work. I just want to avoid these pressures, so I found some online learning platforms for learning. For example, I can get a degree from online courses in some schools. But because I couldn't find a suitable online education for my major, I chose to continue studying at an offline university. An online community learning can help us save a lot of money and provide me with many interesting learning methods.

#### **Interview Notes #4:**

INFO: Shubhada, age 26, Manipur, Phone, Customer Type: Laid off employee

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a person who has just been laid off and is still looking for a job. I am 26 years old this year. My current life is to find a job online and offline, and use my free time to learn professional skills. The biggest problem I encountered is that I can indeed find a lot of websites for knowledge filling, but the information is too scattered. And if you want to learn everything, you have to spend a lot of money. And in the near future, I want to save money by renting in a cheaper area. The news here is very blocked. Because the internet is not circulating, I have to spend a long time in the city during the day to find a good place to study or work. The search for it has virtually increased the cost.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

The closure of the school has no effect on me, after all, I have already entered society. But after the epidemic, I discovered that there were many more online teaching platforms, some of which were established by offline schools themselves to increase income. I have used Udacity and Coursera before, and I think these two platforms can cover almost 90% of the field of knowledge. For example, if I study computer principles, I will go to Coursera, and if I learn some programming languages, I will go to Udacity. They also have some free courses, but the

paid courses you know must have its value. So even if I spend money, I will pay. However, it would be better if someone could selflessly dedicate some valuable courses on a certain platform.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

As I mentioned before, it happens that I am going through the period after layoffs. I need to study and find a job, which are important tasks for me. Studying is to better find a job, but it is also necessary to find various job opportunities. Therefore, I need both an education platform to improve skills and an education platform to build connections to meet market needs. An efficient learning community can enable me to better understand our current situation and to check for deficiencies. We can supervise and learn from each other.

### **Interview Notes #5:**

INFO: Zaqaria, age 24, Haryana, Phone, Customer Type: Poor Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

Hello, I am a student from a slum in India. I am currently studying in a university in the city. I generally don't choose online education for several reasons. One is that the computer equipment here is limited, and I cannot afford a laptop. Second, our network coverage here is also very limited, only some areas have 4G. The third is that I have almost no time to study online. I usually have to work part-time to make money. I have free time to study on weekends, but I don't have any good resources other than textbooks.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

Our school has not been closed after the epidemic, because the number of people is small and there are not many face-to-face opportunities. However, learning has indeed been affected. For example, when I have academic problems and need routines, I often cannot contact my classmates, and I have no chance to search online. What I have now is to regularly download some literature on my mobile phone to a good place on the Internet. I haven't used any educational platform at all. If there is a platform that can provide download services, and a learning software that can be used without a fast network, it will be of great help to my study.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

I have not experienced layoffs, but my brother was laid off due to an epidemic. He still wants to go to school now and wants to learn a lot of new knowledge. He rented a house in the city and participated in

offline and online learning. But the price is high, and he also selectively participated in some learning seminars. And has been looking for an affordable platform to learn professional skills. Since there are too few friends around, we will try our best to find some expert forums that adapt to the current society. Absorbing expert advice can effectively avoid many misunderstandings. And a wide range of knowledge types can make it easier for us to learn the connections between knowledge.

Team member #5 name: Dhrakshayani Priyanka

### **Interview Notes #1:**

INFO: Mukesh, age 17, Andhra Pradesh, Phone, Customer Type: Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a Bachelors of Technology student and I do have a laptop. But I generally face a lot of internet connectivity issues as I stay in a rural area. Also, e-learning has become very expensive and I can't afford it. So I'm taking help from my friend who stays in a city by downloading or recording the classes and sending it to me. I use my mother's mobile data plan to access this but that also wouldn't last long as downloading requires a lot of data bandwidth.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

I just started my first year when the lockdown started and my classes were cancelled for almost 4 months. Even though I have a laptop, as I live in a rural area, I couldn't use it to the fullest due to the low bandwidth internet connections. I wanted to use this time in learning new technologies instead of sitting idle. I found remote learning quite hard and I feel like there was a lack of communication and there wasn't much support provided by the schools. My classmates who stay nearby would also face such difficulties and it was hard to get used to. The existing platforms are quite expensive to afford.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, that would be really helpful not only to me but to most of the students who live in rural areas. I would love to have access to a platform where we could communicate our doubts and get them cleared and that too without requiring a high bandwidth connection.

### **Interview Notes #2:**

INFO: Likitha, age 25, Hyderabad, Zoom, Customer Type: Graduated Student



Q1: How do you normally manage seeking online education and what are your Major Problems?

I have a laptop and use e-learning as a major part of my learning as I no longer have access to my classes since I have graduated. I have a good bandwidth connection but as I am searching for a job, trying to do courses that can boost my resume. As I am jobless now, unable to afford sites that offer online education.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing ones?

I graduated from college by the time the lockdown started. This made my chances of landing a job even more difficult as we didn't have access to on-campus placements due to the pandemic. I have started using this time to boost my resume by learning new technologies and doing some certifications that my college didn't offer. But the e-learning platforms have become so expensive that I couldn't afford it since I am unemployed.

Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, I need a platform, where I could be mentored and taught within affordable prices. Since I'm a fresher, I have a lot of doubts and a platform that could enable communication with the mentors who can clear my doubts would be much appreciated.

**Interview Notes #3:**

INFO: Sunny, age 21, Chennai, Phone call, Customer type: Graduated Student

Q1: How do you normally manage seeking online education and what are your Major Problems?

I am a fresh grad who is currently looking to improve my skill set. I have been trying for full time opportunities but due to the pandemic I am not able to find one. I live in a backward state which does not have a proper bandwidth. It is really difficult for me to do courses online to improve my skill set.

Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

Due to the pandemic, the market for new hires has fallen drastically. Companies have started looking for people with more skills with less pay, so I have decided to do some courses which can increase my skill set, but the main problem is I don't have a stable high internet connection.

Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes it is much required to have a cost efficient education for people like me who do not have a job and do not have a stable internet connection. Courses or lectures can be uploaded online which does not need a very high band width, it would be great if someone could mentor me, a person who has good communication skills or a person who has past experience in that field.

#### **Interview Notes #4:**

INFO: Raghu, age 14, Delhi, Whatsapp Call, Customer type: Student

##### Q1: How do you normally manage seeking online education and what are your Major Problems?

Coming from a lower middle class family it's really hard for me, that I share a room with my brother who has classes during the day. All members in my family have to use the internet at the same time since my parents work from home due to pandemic. It becomes really hard for me to concentrate during the class. We don't have a stable internet connection and we face bandwidth issues. I needed some outside help to learn my coursework and online courses are the best way to do that. Major problems are internet usage and cost since I'm a high school student and I can't afford costly courses.

##### Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

As a developing country we did not have enough resources to migrate to online classes after the shutdown of the school. Due to the traffic and low internet speed the recorded classes buffer at time and It is very difficult for me during exams. I lose a lot of time in that.

##### Q3: Do you need a cost effective educational platform and how can a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes please, I would like to use a platform which uses low bandwidth connection. So that I can concentrate on my courses and at the same time everyone in my family can use the internet.

#### **Interview Notes #5:**

INFO: Soumya, age 25, Mumbai, Zoom Meeting, Customer type: Laid off Employee

##### Q1: How do you normally manage seeking online education and what are your Major Problems?

My online learning was managed by elearning methods provided by the company that I used to work for. After I got laid off, it is difficult to find cost effective learning ways. Major problems for me are cost and quality content.

##### Q2: How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

I have been using my desktop at home to learn since I got laid off to improve my skills. So learning has been affected since now that the cyber cafes and libraries are closed.

Q3: Do you need a cost effective educational platform and how a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

Yes, I do need such a platform. I would require guidance with few skills and a cost effective e-learning that will help me to survive in such a market where we could easily get laid off. If the platform could be a community or voluntary forum that would be great help to me for seeking advice on what skills I should work on.

## HW7- Part 5 : Product: SkillUp

### Summary of key findings

- a. Most of the people are in need of low bandwidth support elearning platforms
- b. 90% of the interviewed people have strong problems with respect to costs of e-learning platforms
- c. 3 key reasons that people aren't settling on existing solutions:
  - i. Low Bandwidth, portable elearning is not yet available option to them
  - ii. All existing platforms are too costly for users to support
  - iii. No Community forum to help them with concerns with respect to skill building process; no new interesting ways to learn

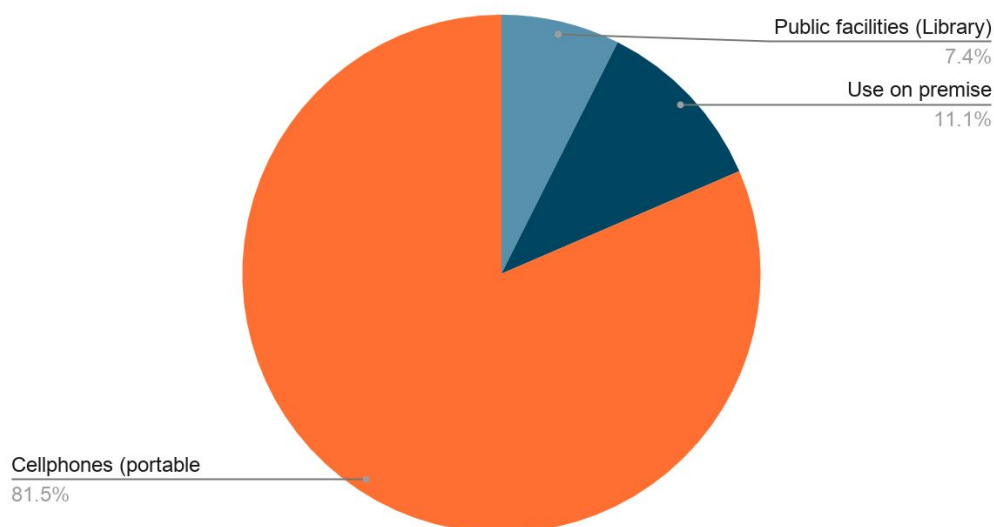
### Data collection : Data sets (5x5 =25)

Q1:How do you normally manage seeking online education and what are your Major Problems?

a. Customer ways to seek Problems:

Public facilities (Library)	2
Use on premise facilities (school/office computers)	3
Cellphones (portable devices)	22

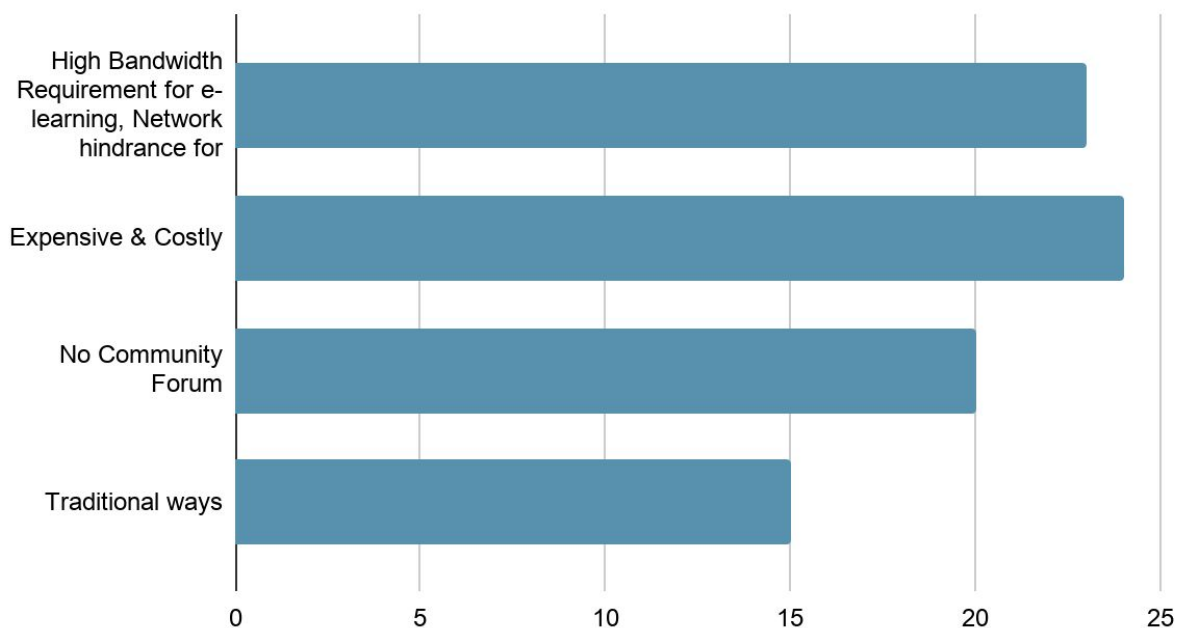
Access Methods by Customers



b. Major Problems(Multiple select poll) :

High Bandwidth Requirement for e-learning, Network hindrance for Elearning platforms etc.	23
Expensive & Costly	24
No Community Forum	20
Traditional ways	15

## Major Problems

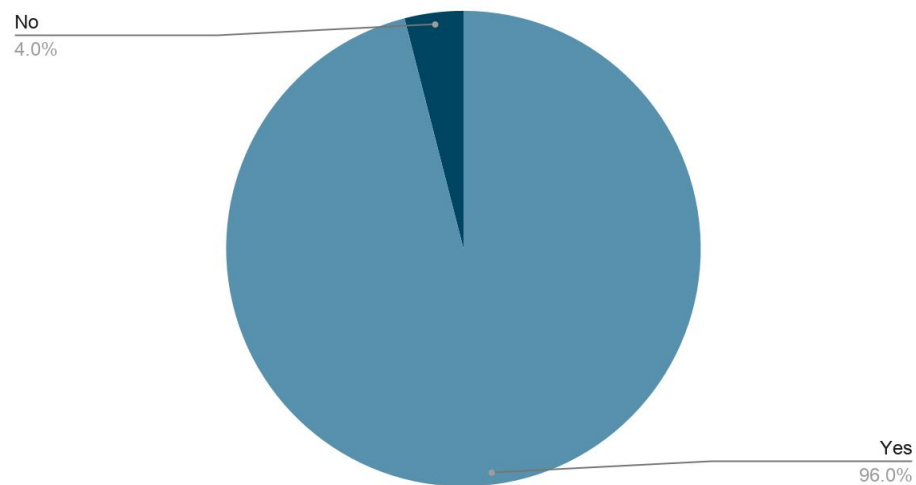


Q2:How did your learning get affected after the shutdown of your school/educational premise or under influence of the epidemic with existing platforms; Are there any problems you face with existing one's?

a. Learning Affected Poll : (Single option poll)

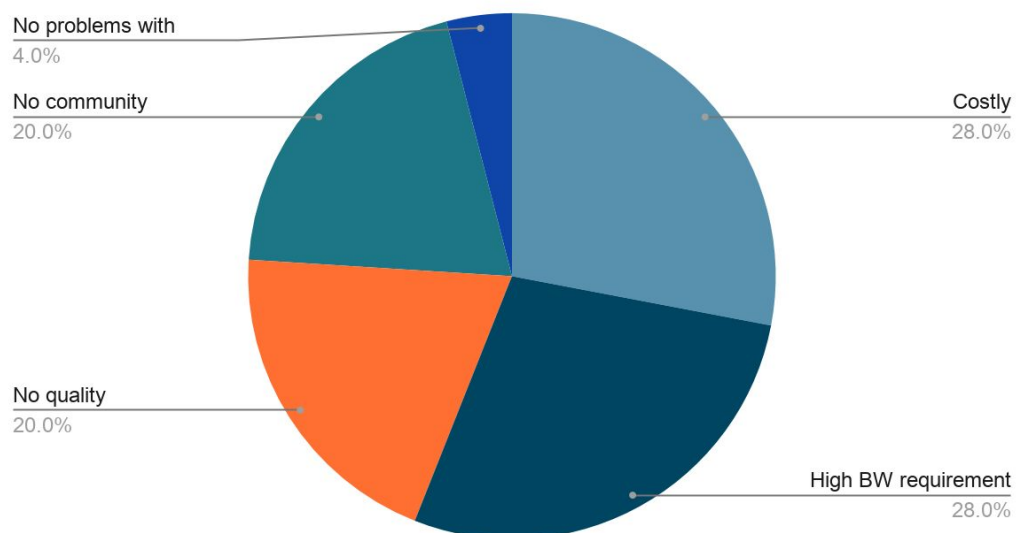
Yes	24
No	1

Did your Learning got Affected ( Poll results )

b. Priority Problem summary ( Priority option poll ) :

Costly	7
High BW requirement	7
No quality	5
No community	5
No problems with existing	1

Problem by Customer Priorities - For feature Prioritization

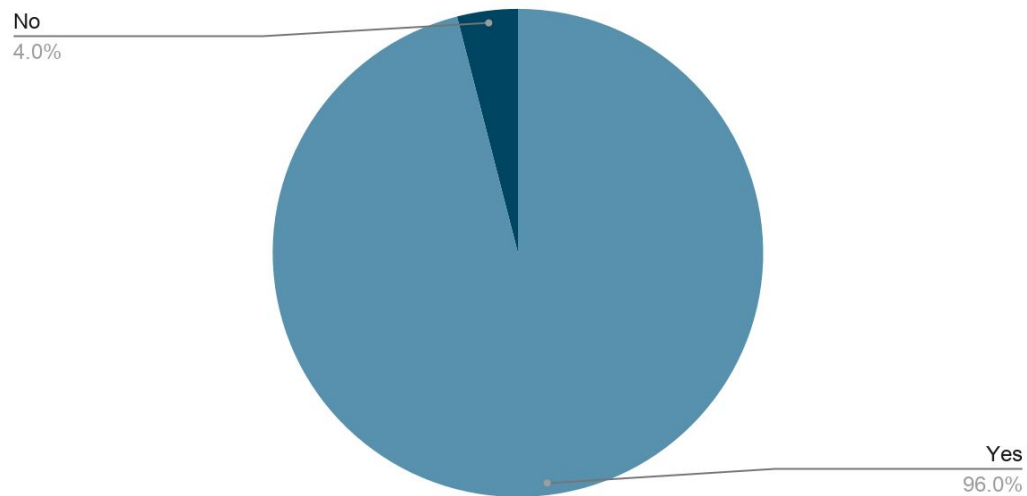


Q3: Do you need a cost effective educational platform ? and how do you think a community can help you skill up or an educational platform to help you turn adept to demanding market needs as a solution to the challenges that you have faced?

a. Need for E-learning, Community Poll : (Single Choice Poll)

Yes	24
No	1

Do you need a Community & E-Learning to solve your current challenges ?



b. Solution Features by customer : (Multiple Select Option Poll)

BW flexible & Community forum	24
Fun way to learn ( quiz, gamification)	15
Cost effective	21
Skill categorized topics	22
Quality/ Curated content	18

## Solution Feature suggestion by Customers

