**Context:**

Microsoft’s mission/vision is to empower every person and every organization on the planet to achieve more. To do this, Microsoft wants to shift to a mobile-first, cloud-first approach. This means that Microsoft wants to make technology as flexible, accessible, and scalable as possible by leveraging cloud and mobile technologies. People should be able to carry out their everyday tasks on their mobile phones as seamlessly as possible, as long as they have an internet connection. To do this, Microsoft has made multiple acquisitions to break into the collaboration, network, and communication markets. It now aims to break into the Unified communications market. To break into the UC market, Microsoft is considering investing in MRTT (Mobile Robotic Telepresence technology). MRTT is a technology which involves the usage of remote-controlled robots that have audio-visual capabilities that can be used for communication and collaboration in multiple industries. Suitable Technologies is a company that is an expert at MRTT and Microsoft is considering whether they should acquire this company / invest in this technology to achieve their mission. To decide this, Microsoft is going to use Bass model to forecast the long-term adoption of this technology.

**Question 1:** **Summarize and justify alternative scenarios (i.e., compelling stories about the future) ranging from pessimistic to optimistic regarding the market performance of remote telepresence robots (RTU).**

Pros and cons of this technology**:**

Pros of RTU:

1. It has a wide range of applications across various industries.
2. Increased participation from users in meetings, classes etc – better communication and collaboration.
3. There is a growing need for telepresence technology: 50% of the US workforce
4. has a job with partial telework. In Fortune 1000 companies, many employees are not at their desk 50-60% of the time. The average attention span of a conference participant increases to 35 minutes for video conferencing, as opposed to audio only. This is probably because they are less likely to multitask during a videoconference. Thus, it stands to reason that work will be done more effectively in different businesses and organizations if this technology is adopted and used consistently.

Cons of RTU:

1. Technological barriers: Unreliable internet / wifi connection
2. Expensive to acquire and use this technology.
3. Highly dependent on uncertain factors such as geographic location of users and robots, availability of resources and enterprise culture.
4. Not enough value-add: this technology only outperforms IM (Instant messaging). But it does not outperform other existing technologies such as audio conferencing, video conferencing, face to face communication.
5. Privacy issues for large scale enterprises. (Privacy is not a major concern for small-scale companies/organizations/enterprises).
6. Low ROI – ROI is highly dependent on continuous usage of the tech. If Microsoft invests a lot and the tech is used only sometimes by the user then it’ll take years to get back returns.

**Question 2:**

**Develop forecasts of robotic telepresence penetration in the U.S. market from 2017 to 2026 along with a justification and explanation for your forecasts based on one or more scenarios you developed. (In applying the Bass model, note that market penetration data for the three analog products mentioned in the case, namely, fax machines, LinkedIn, and 3D printers, were all reckoned in terms of the percentage of the target market that adopted the product. Thus, the maximum market potential can be set to 100 for developing the forecasts).**

A graph with red dots

Description automatically generated

A graph with red dots

Description automatically generated

A graph of a number of calibration per data

Description automatically generated

P = innovation factor = 0

Q = imitation factor = 0.8

The fact that the p value is 0 means that a person is not going to adopt this technology unless someone else adopts this technology. Thus, the adoption of this technology is heavily influenced by other buyers, word of mouth and networking. people are not willing to experiment and try a new technology unless and until someone else has already tried it.

Initially, there is no adoption of this technology because it is new, and the adoption is heavily dependent on others buying the product. There is a ‘follow the crowd’ trend. Only if others adopt this technology, will a person adopt this technology as well. So, initially there is no adoption, but as soon as some people start adopting this technology, there is a steep increase in adoption.

A graph of a number of people

Description automatically generated with medium confidence

A screenshot of a graph

Description automatically generated

If we look at the forecast for fax, we can see that initially, there is no adoption and then there is a steep increase in adoption because again, adoption is heavily dependent on other adopters.

For linkedIn and 3d printers, during the early stages itself, people start adopting the technology and there is an increase in adoption as time goes by. This suggests that the adoption is not as heavily dependent on other adopters as compared to fax machines. People are more willing to adopt this technology based on advertisement and other external factors and not just on other adopters, when compared to fax machines. But in general, the q value is greater than p value which means that word of mouth and networking and other adopters still play a significant role in the adoption of this technology. This can be backed by the p and q values of all the three products.

**Question 3:**

**Recommend short-term and long-term strategies that Microsoft should pursue based on the forecasts that you develop.**

Short term:

The MRTT/RTU technology is more like linkedIn and 3d printers when compared to fax machines. This is because fax machines replaced teletype machines (an existing technology). But we know that the value-add of MRTT is not very high. The existing technologies such as audio and video conferencing and face-to-face time are still strongly/frequently/widely used by users. It is not going to replace it, at least in the short run. Thus, to adopt this technology, Microsoft should initially focus on how they can advertise this technology effectively. Once they advertise it effectively, a few people will adopt it (because there is a small group of people who are willing to try and adopt a new technology, irrespective of the influence of others) and these adopters will then influence the other non-adopters to adopt this technology. Advertising can include demonstrations, trials before buying the product, offering incentives like special discounts, exclusive access, and taking feedback from adopters to improve.

Long term:

If we think of long-term then MRTT is more like fax machines. It has the potential of replacing the existing technologies. But because the p value is 0, there is no group of people who are willing to try a new technology. They have to work on creating a group of people who are willing to try a new technology by addressing the factors that are preventing people from trying and adopting this technology. Educate people on its importance and benefits. Create demand for this technology. They should understand that the adoption of any new technology will take time and they should be patient, persistent and continuous in marketing efforts and strategies.