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Revitalize Hearing Skills with Advanced Speech Processing Technology

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ABSTRACT

Revitalizing listening skills with advanced sound processing technology is an interesting concept, especially in today's digital era where technology is advancing rapidly. Listening skill is the ability to understand, analyze, and respond well to information conveyed through sound, and this is a key skill in various contexts, such as interpersonal communication, business, education, and others. This includes using speech processing algorithms, speech recognition techniques, and even artificial intelligence (AI) to optimize speech understanding and interpretation. Hearing Skills Training Speech processing technology can be used in hearing skills training. For example, an application that can record, analyze and provide feedback on a person's hearing ability. Such applications can be used in the context of business education or training. Automatic Transcription and Translation, Voice processing technology can be used to convert conversations in foreign languages into text or translate voice content in real time. This can help someone understand a foreign language or content displayed in a language they are not familiar with. Improved Business Communications, this can help improve business communication skills. Providing Better Customer Service Many companies use voice processing technology to improve their customer service. Advanced voice interactive systems (IVR) can be used to route customer calls more efficiently and provide necessary information. Sentiment Understanding Advanced voice processing technology can be used to analyze sentiment in conversations or customer reviews.

Keywords: *Revitalization, Skills, Technologies*

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INTRODUCTION

In the current era of globalization, the development of technology and information has progressed very quickly(Maulana & Noriska, 2023). In almost all aspects of business, people, whether individually or together, are always related to technology. Technology is a term that refers to the knowledge, tools, methods, and processes used to design, create, and utilize useful goods and services in a human context. It is a way of applying science to meet various human needs and solve various problems(Salam et al., 2023). Technology can cover various fields, such as computer technology, medical technology, information technology, automotive technology, and many more. This can include everything from hardware (e.g., computers, mobile phones, cars) to software (e.g., computer programs, mobile applications) and even more abstract technologies such as artificial intelligence, natural language processing, or renewable energy technologies(Puspitasari et al., 2023). In its development, technology has become an integral part of everyday life and has changed the way we work, communicate, play, learn and live as a whole. It continues to evolve rapidly, creating new opportunities and new challenges as time goes by. Technology also has a significant social, economic and cultural impact around the world. Developing media has seen an increase in addiction to using electronic devices such as tablets, iPhones, iPads and Androids so that access to information tends to be via an internet connection. Data on the number of cell phone users reported by the International Telecommunication Union (ITU) states that currently 86 out of 100 people have at least a cell phone.(Ardiansyah et al., 2023). Therefore, we estimate that the total number of Mobile Phone users worldwide has exceeded 6 billion. The advent of the Internet has revolutionized the way people communicate. At that time, the internet had positioned itself as an information center that could be accessed from various places without being limited by time and space. The internet is considered a barrier-free information center because it can be connected quickly from one news site to another. The development of increasingly sophisticated technology has many significant impacts and benefits in various areas of life. The following are several important aspects of increasingly sophisticated technological developments. Communication Increasingly sophisticated technology has changed the way we communicate(Nurfitriani et al., 2023). You can now connect with people around the world via cell phone, text messaging, video calls, and social media. Faster and easier communication enables greater global collaboration and faster exchange of information. Health Technological developments have brought a revolution in the health sector(Alit Badrika & Bagus Widiana, 2023). Medical technologies such as MRI scans, CT scans, surgical robots, and health apps have improved patient diagnosis and treatment. Telemedicine has also enabled access to health services without having to come to a hospital or clinic. Education Increasingly sophisticated technology has changed the way we learn and teach(Namrud & Lakoro, 2023). There is more access to online educational resources, online courses and interactive learning platforms(Aditya Nirwana et al., 2023). This enables distance learning and increases access to education for many people around the world. Industry and Production Automation, Internet of Things (IoT),

and artificial intelligence (AI) technologies have changed the way production and manufacturing are carried out. Production processes are more efficient, accurate and automated, resulting in increased productivity. Security Increasingly sophisticated technology also influences the security sector. Security systems such as video monitoring, data analysis, and cybersecurity are increasingly important in protecting individuals and organizations from physical and cyber threats. Energy and Environment Advanced technology plays a role in the development of renewable energy sources and energy efficiency(Hadi Muktadir & Usman, 2023). This helps reduce environmental impact and address climate change issues. Transportation Autonomous cars, electric vehicles, and related technologies have changed the way we move and transport. This can reduce air pollution, traffic congestion and improve road safety(Ong et al., 2023). Entertainment Increasingly sophisticated technology has also brought developments in the entertainment industry, including games, films and music. Virtual reality (VR) and augmented reality (AR) have also brought more immersive entertainment experiences. However, it is important to remember that increasingly sophisticated technological developments can also give rise to a number of challenges, including privacy issues, cyber security and structural unemployment(Shashanty & Nurhaeni, 2023). Therefore, it is important to manage the development of this technology wisely and ethically.

Advanced speech processing is an ever-growing field in computer technology and computer science that has wide applications in areas such as speech recognition, speech synthesis, music analysis, natural language processing, and many more(Ong et al., 2023). This technology allows computers to understand, process and reproduce the human voice with increasingly high levels of accuracy. One of the main aspects of advanced speech processing is speech recognition. This includes the ability of computers to identify and understand human speech or even other sounds, such as natural sounds or machine sounds. This technology has various applications, including Voice Recognition This technology allows computers to identify individuals based on voice(Sekar Mutiara Rachmi Putri Setyawan, 2023). It is used in security systems, authentication, and even speaker recognition in customer service call systems. Speech Recognition In natural language processing, speech recognition is used to convert human speech into text that can be understood by computers. It has many applications in automatic transcription, virtual assistants, and speech translation(Shamsuddin et al., 2023). Voice Synthesis involves the creation of a human voice by a computer. It is used in navigation systems, automated customer service, and many other applications that require voice communication with the user(Tambunsaribu & Abdi Insani Journal, 2022). Music Processing Advanced sound processing is also used in the music industry to produce audio effects, music analysis, and even automatic music creation. Audio Signal Processing This technology is used in removing noise from audio signals, improving audio quality, and even in audio compression to save storage space(Sekar Mutiara Rachmi Putri Setyawan, 2023). Emotion Recognition With advanced speech processing, computers can recognize emotions in human speech, which can be used in various applications such as customer satisfaction measurement, job interview analysis, and others. Advanced speech processing combines various techniques such as digital signal processing, machine learning, artificial neural networks, and more. Additionally,

major developments in cloud computing and more powerful hardware have enabled rapid development in this field(Jiwangga, 2023). As advanced sound processing continues to develop, we can expect improvements in the quality of applications that rely on this technology. From smarter virtual assistants to safer security systems, advanced voice processing will continue to help us interact with the digital world in more natural and efficient ways.

Listening skills are the ability to actively and effectively listen with attention and understanding to what other people say(Agusman et al., 2022). This is a very important ability in many aspects of life, including interpersonal communication, work, education, and personal relationships. Good listening skills can help in understanding, responding, and responding appropriately to others(Rahma et al., 2022). Here are some important aspects of Mindful Attention listening skills Effective listening skills involve full focus on the speaker. This means eliminating distractions, avoiding thinking while speaking, and paying full attention to the message being conveyed(Saferi et al., 2022). Not Being Defensive Sometimes, you tend to be defensive or feel the need to immediately respond or defend yourself when other people speak. Good listening skills involve the patience to listen until the speaker has finished speaking before responding(Octaviana et al., 2023). Empathy Effective listening skills also involve the ability to feel and understand the speaker's feelings and perspective(Edward et al., 2022). This helps in building better relationships and in providing better support to others. Ask Wisely Asking thoughtful and relevant questions can help clarify unclear information, broaden understanding, and maintain meaningful conversations. Summarizing and Responding After listening carefully, it is important to summarize what has been heard and provide an appropriate response(Arifah et al., 2023). This shows that you understand the message being conveyed and respect other people's opinions. Withhold Judgment Avoid making judgments or drawing conclusions before truly understanding all the facts and information provided by the speaker. Practice and Practice Listening skills can be improved through practice and practice(Syamsudin et al., 2023). Try to listen intentionally in a variety of situations, both in everyday conversations and in more formal situations. Good listening skills help in creating more effective communication, reducing misperceptions, improving understanding, and building stronger interpersonal relationships(Mestika Putra et al., 2023). This is an important skill to apply in many aspects of life.

Revitalization is a process or effort to restore or revive something that may have experienced a decline or decline(Maulida Putri et al., 2023). Revitalization is a term that refers to an effort or process to revive or restore something that may have experienced decline or decline. It can be applied to a variety of contexts, including economic, environmental, cultural, or organizational(Juwaini, 2023). Revitalization usually involves steps to restore a better state or condition than before.

Review of Literature

1. Revitalization

Revitalization is an effort to revitalize an area or part of a city that was once vital/lively, but then experienced decline/degradation.(Rizki Nurul Nugraha, 2023). The scale of revitalization is at macro and micro levels(I Kadek Rama Adhi Aryana

et al., 2023). The process of revitalizing an area includes improving physical aspects, economic aspects and social aspects.

2. Listening Skills

Listening skills are a person's ability to understand, receive, and respond to information spoken by another person or conveyed via audio, such as a speech, conversation, presentation, or recording(Wildan Alvin Salis & Irwan Siagian, 2023). Listening skills are one of the important aspects of communication skills and play a key role in various contexts, both in personal and professional life.

3. **Advanced Sound Processing Technology**

Advanced Speech Processing Technology (Advanced Speech Processing Technology) is a field concerned with the development and application of more sophisticated techniques in understanding, processing and using human voice data. It covers various aspects in the analysis and processing of sound for various purposes.

This research aims to find out how much influence there is when using Advanced Sound Processing Technology to revitalize listening skills, with advanced sound processing it can really support listening skills, with listening skills it will create an atmosphere where the delivery is more conveyed and easier to understand.

In this research, there are several opinions of previous researchers, the first of which is according to Dr. Suyitno, M.Pd. With the title Vocational and Vocational Education Strategy and Revitalization for the 21st Century. The results of this research are the success of vocational education so that graduates are absorbed into business and employment opportunities, namely the problem of matching the number (proportion) of graduates of each skills program with the needs of the world of work. The second opinion is according to Anjani Maula with the title Revitalizing the Yellow Book Study Tradition in Building Tabayyun Character. The third opinion is by Ni Nyoman Sudewi I Wayan Dana I Nyoman Cau Arsana, with the title Revitalizing Legong Aesthetics and Kebyar Creative Strategy for Art Creation.

RESEARCH METHOD

Quantitative methods are approaches in research that use data in the form of numbers or figures to analyze phenomena and relationships between variables. This method aims to measure, calculate and generalize patterns or relationships that can be expressed in statistical or mathematical form. Quantitative methods are widely used in social sciences, economics, natural sciences and various other fields. The condensed approach mentioned may refer to more specific terms or specific contexts. However, if you define quantitative methods as a solid approach in general, this can refer to the use of complete, detailed and rich data in quantitative analysis. In this context, quantitative methods with a solid approach will focus on collecting, analyzing and interpreting data as a whole to produce a deep understanding of the phenomenon under study.(Fauzi, 2023). Quantitative is a term used to describe an approach or method in research that focuses on collecting, analyzing and interpreting data in the form of numbers or numbers. Quantitative methods involve the use of statistical and mathematical techniques to measure and generalize patterns, relationships, or trends in data. In

quantitative research, data is collected by measuring certain variables and converting them into numbers that can be processed. Quantitative methods are used to test hypotheses, identify statistical patterns, measure the impact of variables, compare groups, and make generalizations from samples to broader populations. Examples of quantitative approaches include surveys with questionnaires, experiments involving numerical measurements, analysis of secondary data from available sources, and mathematical models to describe relationships between variables. Quantitative approaches have the advantage of providing results that can be measured objectively, allowing for in-depth statistical analysis, and allowing for broader generalizations. However, this approach may not be able to describe the richer and more complex context that more in-depth qualitative methods can. Therefore, the choice between quantitative and qualitative approaches often depends on the research objectives, research questions, and type of data required.

The data collection technique in conducting this research is using a questionnaire technique or distributing questionnaires. The questionnaire technique is one of the tools or tools used in research methods, especially in quantitative research. A questionnaire is a list of questions designed systematically to collect data from respondents. In distributing this questionnaire, researchers carried out it online. The questionnaire that the researchers created contained statements about Revitalizing Listening Skills with Advanced Speech Processing Technology. In making this questionnaire, researchers wanted to know how big an influence advanced sound technology has on developing listening skills. The questionnaire that the researchers created included questions about effectiveness, benefits, functions, and so on about developing listening skills through advanced sound technology. In this study, a research design was used, namely a survey. Data from these surveys can provide an overview of student needs and provide guidance for the development of more effective teaching methods(Nurwahidah et al., 2023). Quantitative data analysis is carried out by statistical analysis using survey data that has been previously conducted. The main advantage of quantitative research methods is their ability to produce objective and measurable data, allow for robust statistical analysis, and allow generalization of research results to a larger population. Research with survey designs and quantitative data analysis has a number of invaluable advantages, especially in the context of research to identify student needs and guide the development of more effective teaching methods. Surveys in quantitative research can be carried out relatively easily and efficiently, especially if researchers use appropriate data collection tools, such as online questionnaires or structured interviews. In interpreting the results, quantitative research tries to organize the scope of the research results and generalize them into general empirical truths or facts.

DISCUSSION RESULT

Listening skills are the ability to actively and effectively receive, understand and respond to information conveyed through oral communication. Good listening skills are very important in various aspects of life, including in personal, social, professional and academic contexts. The following are some important discussions about listening skills. Importance of Listening Skills: Good listening skills are very important in an effective

communication process. This helps prevent misunderstandings, conflicts, and confusion. In the workplace, good listening skills are necessary to understand coworkers' instructions, feedback, and ideas, which can improve productivity and collaboration. In a social context, good listening skills allow us to understand the feelings, needs, and views of others, which supports healthy interpersonal relationships. Components of Listening Skills: Active listening: This involves giving the speaker your full attention, eliminating distractions, and showing interest in what they are saying. Understanding: The ability to absorb and interpret the information heard correctly. Responding: Providing appropriate and relevant responses to what has been heard. Challenges in Listening Skills: Distractions and environmental noise can interfere with the listening process. Personal biases and prejudices can influence our understanding of what we hear. Lack of attention or impatience can hinder good listening skills. How to Improve Listening Skills: Practice: Active listening practice can help improve listening skills. Self-awareness: Recognizing factors that may hinder listening ability and working to overcome them. Questions: Ask questions to ensure understanding and provide feedback. Listening Skills in Academic Context: Good listening skills are important in the teaching-learning process. This helps students understand the material taught and participate in class discussions. In exams or presentations, good listening skills enable students to receive instructions correctly and answer questions appropriately. Listening Skills in Professional Contexts: In the business world, good listening skills help in meetings, negotiations, and customer relations. Good managers must be good listeners in order to understand their team's needs and problems. Ethics of Listening Skills: Listening skills must be used ethically. This means respecting the speaker's privacy and not exploiting the information heard for inappropriate purposes. Listening skills are an important aspect of effective communication. By understanding its importance and how to improve it, we can become better listeners in a variety of situations.

Revitalizing listening skills is an effort to improve a person's ability to listen more effectively and attentively. Good listening skills are an important aspect of interpersonal communication, both in professional and social contexts. The following are several discussions related to revitalizing listening skills. The Importance of Listening Skills: Good listening skills help individuals understand information better. Increase the ability to understand the feelings and perspectives of others. Enables someone to provide more appropriate responses and build better relationships. Challenges in Hearing: External distractions such as noise or distractions can hinder listening skills. Sometimes, we tend to listen to respond rather than to understand, which can reduce the effectiveness of listening. Strategies to Improve Listening Skills: Give the speaker your full attention and avoid distracting yourself. Make eye contact with the speaker. Practice empathy by trying to understand the speaker's perspective and feelings. Avoid interrupting and let the speaker finish speaking before responding. Practice listening by joining discussions, podcasts, or lectures. Relationship to Other Communication Skills: Good listening skills are an important component of effective communication skills. The ability to listen well can improve your speaking ability and convey messages more clearly. The Importance of Continuous Practice: Revitalizing listening skills requires consistent practice.

Practice these skills in a variety of contexts to hone your listening skills. Impact in Educational and Professional Contexts: Good listening skills are very useful in learning situations, such as lectures or training. In a work environment, good listening skills can increase productivity and teamwork. Technology and Listening Skills: Technology can be a useful tool for improving listening skills, such as listening training apps or voice recorders. Importance of Feedback: Feedback from others can help you understand how far your listening skills have progressed. Understanding and applying good listening skills can provide significant benefits in many aspects of life, including personal, professional, and social communications. Revitalizing listening skills involves awareness, practice, and seriousness in developing better listening skills.

Advanced voice processing technologies refer to a variety of techniques and tools used to process, analyze, or interpret voice data at a higher level of complexity than conventional voice processing. It covers various areas in speech processing which include: Speech Recognition: This is one of the main aspects of advanced speech processing. Speech recognition technology is used to identify or convert human speech into written text. Key applications include voice recognition in mobile devices, human-machine interaction systems, and name recognition in automated telephone calls. Natural Language Processing (NLP): NLP technology is used to understand and generate human language using voice data. It involves the analysis of syntax, semantics, and pragmatics in spoken language. Examples include automated translation systems, intelligent chatbots, and voice sentiment analysis. Voice Synthesis: Voice synthesis is the process of creating natural-sounding computer-generated speech. This technology is used in applications such as virtual assistants, audiobooks, and voice notifications. Music Audio Processing: This includes audio analysis, music processing, and automatic music generation(Shafa et al., 2023). This technology is used in music streaming applications, sound effects processing, and music composition. Audio Source Separation: This technology allows the separation of multiple sound sources in complex audio recordings. Examples of applications include background noise removal or instrument separation in music recordings. Emotion Recognition: This technology tries to recognize emotions in the human voice. It can be used in various contexts, such as customer service call analysis to measure customer satisfaction or in medical applications to identify emotions in therapy. Biomedical Sound Processing: Sound processing is used in medical contexts to analyze the sounds of the human body to detect certain diseases or conditions. One example is voice analysis to detect breathing disorders or voice disorders in children.

Figure 1,Revitalize Hearing Skills with Advanced Speech Processing Technology

In figure 1 above is an example of Revitalizing Listening Skills with Advanced Sound Processing Technology. The benefits arising from the use of advanced sound processing technology are the revitalization of listening skills. Today's technological developments really help make it easier to develop listening skills so that they become clearer. Online advanced sound processing technology is very helpful in improving listening skills. In the process of revitalizing listening skills, it will be more quickly accessible if you use advanced sound processing technology because with this technology, in the revitalization process it will be easier to be brave and more confident. So that when listening, listeners feel satisfied and understand what the speaker is saying because it uses advanced sound processing technology. The use of advanced sound processing technology is usually used by people who lack clear hearing and people who are working so that listening can be clearer and more accurate.(Wildan Alvin Salis & Irwan Siagian, 2023). There are several examples of advanced speech processing technologies that may be possible to search for images or more information about: Speech Recognition Systems: This is technology that allows computers to recognize and understand human speech. Well-known examples are virtual assistants such as Apple's Siri or Google Assistant(Arifah et al., 2023). Natural Language Processing: This technology allows computers to understand and respond to human language in a way that increasingly resembles human-to-human communication. Examples include advanced chatbots and automated translation systems. Speech-to-Text (STT) and Text-to-Speech (TTS): STT technology converts speech to text, while TTS does the opposite, converting text to speech. It is used in many applications, including speech recognition and speech synthesis. Automatic Voice Recording: This is a technology used in many applications, including automatic dialing devices and voice transcription tools that allow computers to automatically record and recognize the human voice. Sound Signal Processing: This technology is used in many applications such as sound filtering, sound

effects processing, and in-depth sound analysis. Emotion Recognition in Voice: This technology can identify emotions in the human voice, which can be useful in a variety of applications, including assessing customer satisfaction and mental health. Speaker Recognition: This is a technology that can identify who is speaking based on their voice. It is used in many applications, including security and user identification(Eva Fachriyah, 2023). Voice Processing in the Healthcare Field: Voice processing is used in the healthcare field to diagnose voice disorders, measure heart rate, and even detect certain diseases.

In this study, the researcher will present a table which will explain how important the use of advanced sound processing technology is in revitalizing listening skills. In the process of revitalizing listening skills through the use of advanced sound processing technology, here the researchers distributed a questionnaire in the form of questions which can find out how big the influence of advanced sound processing technology is on the revitalization of listening skills.(Astuti & Mulyanto, 2023). In the table below the researcher has presented the data on the results of filling out the questionnaire, which was completed by respondents. In filling out this questionnaire, respondents are actively involved in filling out the questionnaire, with advanced voice processing technology. In the description of the data in the form of a table below, we will explain the results of the questionnaire that has been distributed. The table below will explain in detail about Revitalizing Hearing Skills with Advanced Sound Processing Technology.

Table 1,Revitalize Hearing Skills with Advanced Speech Processing Technology

NO	Question	Answer				
		SS	S	RR	T.S	STS
1.	I feel that advanced sound processing technology makes it easier to develop listening skills	43%	57%	-	-	-
2.	I feel that technology has had a positive impact on revitalizing listening skills	45%	55%	-	-	-
3.	I feel that the use of advanced sound processing technology can develop listening skills	40%	60%	-	-	-
4.	I feel that advanced sound processing technology can support self-confidence and enthusiasm for learning	30%	70%	-	-	-
5.	In my opinion, the development of digital technology must be followed by every education	60%	40%	-	-	-
6.	I feel that utilizing advanced sound processing technology is great in improving listening skills	70%	30%	-	-	-
7.	I think developing listening skills is well suited to the use of advanced sound technology	65%	35%	-	-	-
8.	In my opinion, technology can help with listening skills	50%	50%	-	-	-
9.	I think technology really helps every education in	60%	40%	-	-	-

	many ways					
10.	I feel that with advanced sound processing technology it is quickly available.	75%	25%	-	-	-
11.	I feel that advanced sound processing technology can optimize the process of developing better listening skills	80%	20%	-	-	-
12.	I feel that everyone should have listening skills	40%	60%	-	-	-
13.	I feel maintaining listening skills can enable learning activities.	75%	25%	-	-	-
14.	I feel that advanced sound processing technology can revitalize listening skills to become even clearer	88%	12%	-	-	-
15.	I don't think using advanced sound processing technology takes much time.	95%	5%	-	-	-

Information:
SS = Strongly Agree
S = Agree
RR = Undecided
TS = Disagree
STS = Strongly Disagree

The table above is a table of the results of questionnaires that have been given to students, the responses and responses that have been given by students to the questionnaires that researchers have distributed, have a very important influence on the achievement of the results of this research. In the responses and responses by students to this research which is entitled Revitalizing Listening Skills with Advanced Sound Processing Technology. Give a very extraordinary assessment of this research. In this assessment there are 5 assessment categories, the first is strongly agree (SS), the second is agree (S), the third is doubtful (RR), the fourth is disagree (TS), the fifth is strongly disagree. Based on this table, the first highest research result was obtained at point 15, namely obtaining a percentage of 95%, in the strongly agree category, while the second highest assessment was obtained at point 14, namely obtaining a percentage of 88% in the strongly agree category. Meanwhile, the third highest assessment was at point 11, namely getting a percentage of 80%. Revitalizing Listening Skills with Advanced Sound Processing Technology has a very positive impact on revitalizing listening skills. Thus, it can be interpreted that advanced sound processing technology greatly influences the way of hearing, which in activities that really require listening skills, without the ability to hear, what is said by everyone will not be heard. Advanced sound processing technology can be used anywhere and anytime to use it.

Next, the researcher will describe the research results by filling out a questionnaire. For the first question, namely Revitalizing Hearing Skills with Advanced

Sound Processing Technology, I feel that the existence of advanced sound processing technology makes it easier to develop listening skills, getting responses in the strongly agree category of 43% and agree of 57%. For the second question, I feel that technology has had a positive impact on revitalizing listening skills with the strongly agree category being 45% and agree being 55%. For the third question, I feel that the use of advanced sound processing technology can develop listening skills with the categories strongly agree at 40% and agree at 60%. For the fourth question, I feel that the existence of advanced voice processing technology can support self-confidence and enthusiasm for learning with the strongly agree category being 30% and the agree category being 70%. For the fifth question, I think the development of digital technology should be followed by every education with the strongly agree category being 60% and the agree category being 40%. For the sixth question, I feel that utilizing advanced sound processing technology is very suitable for improving listening skills with the strongly agree category being 70% and the agree category being 30%. For the seventh question, I think developing listening skills is very suitable with the use of advanced sound technology with the strongly agree category being 65% and the agree category being 35%. For the eighth question, namely: In my opinion, technology can help with listening skills with the strongly agree category being 50% and the agree category being 50%. For the ninth question, namely: I think technology really helps every education in many ways with the strongly agree category being 60% and the agree category being 40%. For the tenth question, I feel that with the existence of advanced voice processing technology it can be quickly achieved with a strongly agree category of 75% and an agree category of 25%. For the eleventh question, I feel that advanced sound processing technology can optimize the process of developing better listening skills with the strongly agree category being 80% and the agree category being 20%. For the twelfth question, namely I feel that everyone should have listening skills with the strongly agree category being 40% and the agree category being 60%. For the thirteenth question, namely I feel maintaining listening skills can activate learning activities with the strongly agree category being 75% and the agree category being 25%.For the fourteenth question, namely I feel that the existence of advanced sound processing technology can revitalize listening skills to become even clearer with the strongly agree category being 88% and the agree category being 12%. For the fifteenth question, namely: In my opinion, using advanced voice processing technology does not take up much time with the strongly agree category being 95% and the agree category being 5%.

CONCLUSION

Revitalizing listening skills with advanced speech processing technology is a very positive step in the development of human communication abilities. In conclusion, several important points can be identified: Improved Communication Abilities: Revitalizing listening skills with advanced speech processing technology can help individuals improve their communication abilities. This technology can help in understanding difficult languages, different accents, or even different types of sounds that are difficult to understand. Innovation in Learning: Application of advanced speech processing technology in education can bring innovation to the learning process. This

can help students understand the material being taught better, especially in subjects that involve speaking and listening, such as foreign languages or audio-based lessons. Benefits in Various Fields: Advanced speech processing technology is not only useful in educational contexts, but also in various other fields. It can be used in the development of virtual assistant applications, speech recognition systems, or even in the medical industry to improve diagnosis and treatment. Ethics and Privacy Challenges: In adopting this technology, it is important to consider ethical and privacy issues. The use of advanced voice processing technologies must be strictly regulated to protect personal data and ensure ethical use. Continued Development: Advances in sound processing technology continue, so the revolution in listening skills will continue to develop. It is important for individuals and organizations to keep track of these developments and make the most of them. By making wise use of advanced speech processing technology, we can improve our listening and communication abilities, opening the door to opportunities in a variety of fields, while remaining mindful of the associated ethical and privacy issues.

Engagement in the Digital World: Advanced voice processing technology allows us to be more engaged in the digital world. This creates opportunities for more detailed and real-world interactions with devices and applications, such as smarter virtual assistants, which can help us with a variety of everyday tasks, such as searching for information, managing schedules, or communicating with other devices. Impact on Quality of Life: Improving listening skills through this technology can also impact quality of life. It helps individuals with hearing loss or speech difficulties to participate more actively in society and the environment around them, increasing self-confidence and social integration. Influence in Business: In a business context, revitalizing listening skills can help in improving customer experience and expanding global markets.Companies can use this technology to better understand customer preferences, provide better customer service, and market their products to a wider audience. Development of Human Skills: While advanced speech processing technologies provide many benefits, it is also important to remember that development of human skills in listening and communicating directly remains important. Technology can be a very useful tool, but the ability to interact and communicate effectively with fellow humans remains essential in everyday life. Final Conclusion: Revitalizing listening skills with advanced sound processing technology is a positive and important trend in the modern world. It opens the door to progress in various fields, improves global connectivity, and provides solutions to many communication challenges. However, it is important to remember that the application of this technology must be done wisely and ethically, with particular attention to issues of privacy and data security. With a balanced approach, we can take full advantage of this technology's potential to enrich lives.

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