

## **THE ROLE OF INFORMATION TECHNOLOGY IN MUSIC MAKING**

Have you ever wondered what would be modern music without the participation of computer technologies in its creation? The influence of new technologies on music can be traced from ancient times. Music developed along with the development of means of its execution, that is, musical instruments. It is impossible to imagine, for example, Mozart's 40th symphony, played, say, on a branch sticking out of a stump.

In the last decade, any musician has a powerful assistant – a computer. With the invention of sound cards for a computer, it became possible to insert chips on them with a tool bank from any modern synthesizer. With the help of special sequence programs in the computer, you can “insert” any melody, play and mix it. Not so long ago software samplers appeared that allowed you to record a sample of sound, indicate which note it corresponds to and, connecting to the synthesizer, play this timbre. It used to take a long time to study in music schools, and now you can compose only with a computer, knowing a little musical literacy and not knowing how to play anything.

The process of sound recording has gone a long way. Musical notation is technically simple, and therefore the most ancient way. No tools, except a pen with ink and a piece of parchment, and then paper for it was not required. However, in the process of the formation of music as art, there was a need for a more perfect method of sound recording than notes. After all, not everyone who loved music knew how to play something. They just invented the first device, which allowed to reproduce music, not knowing how to play anything. It was a barrel organ. And at the end of the nineteenth century, Thomas Edison invented a phonograph. This invention is considered to be a turning point in the history of sound recording. Then, over the course of many years, the improvement of the wave technique of sound recording progressed, in proportion to the technological progress of mankind. Approximately in the mid-1970s a new generation of musical instruments appeared: microprocessors - basically they were all sorts of different synthesizers, and later computers. Currently, every person who has got a computer, sound card and microphone, has the ability to record any instruments and vocals without leaving home.

Due to the intensive development of computer technologies, there is the possibility of distance musical education. Hence, first of all, the history and theory of music, but, in part, and practical advice, are already available in any geographical point remote from respectable educational institutions. The computer today is already ready to offer much of what will finally allow us to realize the historically and socially-ripe slogan "Music is for everyone!".

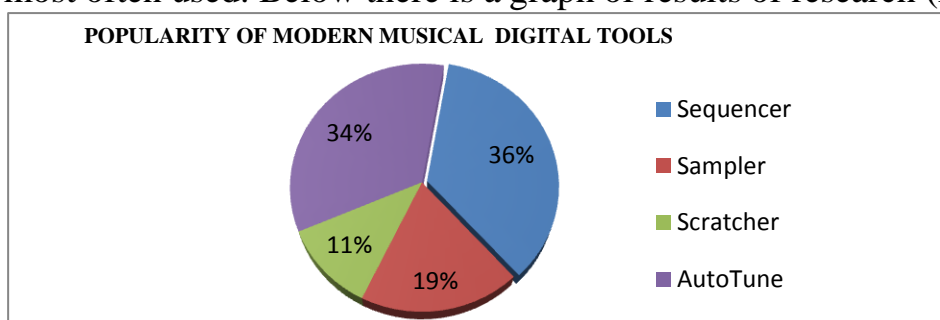
The availability of computer technology and the convenience of software create unprecedented scale for music creativity. Expressions "my music", "my home studio", "my CDs", "my video clips", "my music site" (everywhere "my" - meaning "created by

me") already become familiar mass concepts. Today everyone can try himself as a composer, an arranger, a sound engineer, a composer of new timbres and sound effects.

Against the backdrop of such a massive enthusiasm, the prestige and quality of music education is multiplying, the content of which changes significantly due to the computer, becomes more high-tech and intensive, flexibly customizable for any specific tasks. Every music teacher will be able to master the music and computer technologies in the near future.

Musical-computer technologies increasingly replace the labor-intensive musical professions, because of which, under the compulsion of parents, for the time being, not too often assiduous boys and girls are deprived for 10-15 years of their children's happiness. The joy of instant direct music making will bring them even more ingeniously designed synthesizers and music computers. And virtuosi (violinists, pianists, clarinetists, trumpeters), as before, will become only truly talented, enthusiastic and patient musicians.

A survey was conducted among musicians to find out what modern musical digital tools are most often used. Below there is a graph of results of research (Figure 1):



*Figure 1. Popularity of modern musical digital tools*

Each musician chooses the necessary tools depending on the tasks that it should perform (for some tasks it may be necessary to use several of the utilities provided). We see that most musicians work primarily with sequencers.

In conclusion, it should be noted computer technology is growing incredibly. Work with a computer is becoming more convenient and comfortable. However, do not forget that music is a great art and it is created by people, whereas computers only help to implement it.

## REFERENCES

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