

## **Roles of IT in Music Production**

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### *Abstract*

*Music production can be done by using either analog or digital recording systems. Both systems provide almost the same quality of the songs but the digital recording system requires less investment costs. The Information technology (IT) is playing a major role in the digital music production. IT helps musicians to produce the songs with more support and more flexible functions that are easier to use. Instead of using a number of devices as in the analog recording system, the computer hardware and software can be used to record the sound and store it for later operations, such as editing, mixing, mastering, and transferring it to other applications,. In digital recording systems, since the sound is being sampled and recorded to the hard drives, its processing will be much faster when compared to the analog systems that require sequential processing. Nowadays, most of the recording studios are replacing their analog recording systems by digital recording systems for being less expensive and more flexible.*

**Keywords:** *IT, music production, analog recording, digital recording, gears.*

### **Introduction**

Since the term Information Technology (IT) includes all the devices that use electronics to gather, communicate, process, display and store information, the social impact of IT has been to transform the way we work and the products we produce and consume. People always think that IT is only used in an organization for storing, processing, and retrieving data. In fact, IT can do more than input-output processing tasks, such as robot control in factories, quality control of the products, etc. (Laudon, et al. 1997). Music production is another area where IT can play the major role in storing, editing, processing, and producing the songs. The traditional recording studios used various equipments to record and process the sound – the so-called outboard gears. Outboard gears are expensive and require a large room for their storage. But the digital recording studios can produce the same musical product in smaller rooms and with lesser expenses by using IT and installing some necessary recording equipment. Music related companies are also developing the computer hardware and software to have more

flexible functions, better performance, and faster processing speed. IT is helping most musicians to have their own albums without recording in the large analog recording studio.

### **Analog vs. Digital Recording**

In this section, some parts of the infrastructure needed to build up a studio room with a good acoustic system are not considered. Hence, studio layout, acoustic materials, and microphones are not included. This section focuses on the necessary recording, mixing, and mastering gears for both analog and digital recording systems after receiving the signal from the microphone.

The recording techniques of both analog and digital formats are similar but the gears for recording and processing are different. The analog recording requires a number of outboard gears wired together by using a patch bay while the digital recording requires less hardware but more software gears with an internal patch bay that can reduce the electrical signal loss. In analog recording, the basic hardware gears required to produce music can be an analog