Personalizing Touch Panel – *Panel Typewriter*

Masao Wakabayashi^{a,*}, Mataharu Tanaka^a

^aSoftware Engineering Co., Ltd., 1-1-29 Kitahorie, Nishi-ku, Osaka-city, Osaka 550-0014, Japan

*Corresponding Author: waka@softeng.co.jp

1. Introduction

Recently, touch panel is widely used in manipulations of computers and smart phones. However, it is still unable to learn from the figure operations, just applied as traditional keyboard, mouse and feature phones. Our company, which is a main software company, developed the device named panel typewriter for anyone to input easily, in the company's 30th anniversary.

Panel typewriter is a kind of input device with touch panel. It can be used with connection to computer by USB interface. The most significant feature of panel typewriter is that there is manipulation sheet set under the touch panel. By using it, optimum manipulations can be defined for each application. The illustration of application is shown in Fig. 1.

2. Conventional Computer Input Devices

There are various applications running on computers. The input devices of them include keyboard, mouse and other devices for special purposes. When we use keyboards

3.2 Example of application

Firstly, the driver of patch panel and the program of signal processing should be installed to computer. Secondly, the manipulation sheet which is good for certain application

Fig. 1. Computer, display and panel typewriter.

to manipulate applications, it is possible to cause misoperations by pressing wrong keys. The situation can be avoided if special designed input devices are applied. However, since hardware has to be changed according to different applications, cost will be quite high.

3. Features of Panel Typewriter

According to the situation stated above, our company developed the keyboard named as panel typewriter, which can be changed by software.

3.1 Structure of the Device

The panel typewriter is a kind of input device which can be easily connected to computer by USB port. By employing it, the keyboard and mouse can be controlled at the same time. Meanwhile, the power of the device is supplied only by computer. There is no requirement about specific source of power.

The software is constituted by the program which deals with the signal from panel typewriter, and the panel layout maker program which makes the panel image.

Fig. 2. Hiragana keyboard.

Fig. 3. Homepage guidance sheet of Higashimiyoshi-cho in Tokushima.

Fig. 4. Sheet applied in elderly monitoring system.

should be made by panel layout maker and be input into program. The examples of panel hiragana keyboard and the homepage guidance sheet of Higashimiyoshi-cho in Tokushima are shown in Fig. 2 and Fig. 3. The size of keys and the picture on them can be customized easily. Meanwhile, the keys can be defined not only for inputting characters, but also for starting program, playing sound, linking URL and so on.

Fig. 5. Elderly monitoring system.

3.3 Future Applications

Until now, panel typewriter is applied in hiragana keyboard, children education set, unmanned reception system and so on. Since it is easy to be used even for elders, the panel typewriter is adopted as input device in elderly monitoring system (Fig. 4 and Fig. 5).

We are considering to make the panel typewriter wireless and to make the change of manipulation sheet automatically in the future.

4. Conclusions

Nowadays, computer, smart phone are so widely around the world that our lives become more and more convenient. However, the speed of development is too fast. The people who cannot follow the speed of development should not be ignored. Especially, for elders, the system easy to use is necessary in the future. According to the situation, from now on, the development of computer easy to use is to be developed.