Toughbook Expense Report

Introduction

The toughbook is a rugged, industrial computer intended for low-performance, scalable, and cheap computational operations. The robotics storage cabinet contained a Lenovo ThinkPad toughbook which was, at the time of its discovery, severely damaged, both internally (software) and externally (hardware). The programming team invested significant time, energy, resources, and fiscal capital into the revival of this storied piece of digital infrastructure, thus restoring the ThinkPad and, by extension, the robotics team, to its former glory.

Software Modifications

The Toughbook originally ran a version of Windows 10, a severely damaged operating system with numerous security vulnerabilities. Given the amount of bloatware installed on it, the Toughbook was practically incapable of running even the simplest software programs. Its CPU had already been hijacked by a cryptominer and its SSD was corrupted by Windows-based malware.

> If Microsoft ever does applications for Linux it means I've won.
> –Linus Torvalds

To solve this problem, the programming team invested in a new Linux distribution, Linux Mint. This distribution, unlike the more popular Arch Linux, had

actual support for things like WiFi, USB, and more. As an added bonus, it featured something few Linux distributions have: a graphical user interface. This unique combination of features and the total elimination of the bloatware on the Toughbook turned it into a general-purpose computer. The price of this critical upgrade was the loss of two Dogecoin, costing the robotics team a whopping 12 cents, which should be included in any reimbursements.

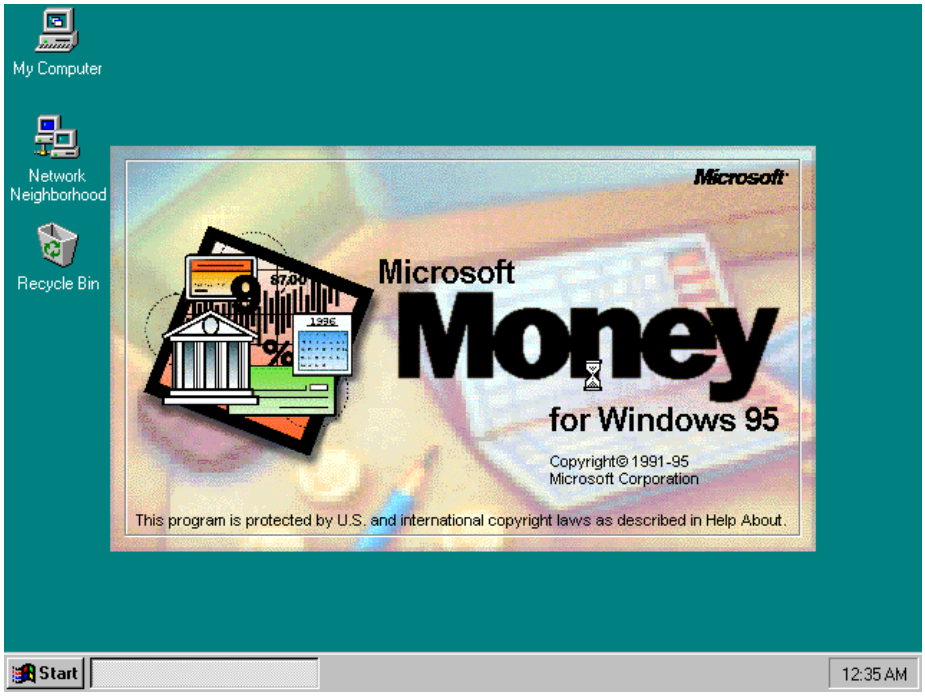
Hardware Modifications

The Toughbook's hardware was naturally jank. Despite its name, part of the outside had already been chipped (most likely by a high performance drop tester) and internal components were also damaged. The most notable of these damages was the loss of battery life, which had decreased to 35% of original capacity, rendering the Toughbook unusable without constant A/C power.

Due to the risks of buying from unsolicited sellers (see above graphic), the programming team chose the expensive option of searching Amazon Prime Day deals for a lucrative battery option. After purchasing a battery upgrade, the Toughbook can now survive for an unbelievable two hours on a single charge, breaking all records known to man.

Additionally, we noticed the Toughbook was severely overheating. Poor performance combined with the lack of an effective cooling system (Lenovo's adaptive cooling system failed to activate fans) signaled a significant hardware defect that had to be corrected immediately to preserve the robotics team's last functioning Toughbook. Thus, the programming team found a quick solution by purchasing an external fan array to significantly cool down the Toughbook. This likely prevented not only overheating problems but further internal damage to Toughbook hardware. Without this change, the Toughbook would be unrecoverable after only a few weeks of use.

Fiscal Analysis



The cost of upgrades includes a 12 cent opportunity cost incurred by the loss of Dogecoin assets, 25 dollars for the external fan array, and 35 dollars for the replacement battery. In total, we estimate the cost at $60.12 USD. If we consider the opportunity cost of *not* upgrading the Toughbook, we see the following as critical points of concern:

1. Loss of Team 1280's reputation and heritage
2. Lack of access to programming laptops for new members
3. Loss of computing power for mining cryptocurrencies

The first point incurs anywhere from $0.00 to $1000.00 USD of potential damages, as not having a Toughbook could significantly reduce loans and other financial packages given to the robotics team by companies. The second point incurs around $1000.00 USD of damages, which is about the cost of a new high-performance laptop. The last point incurs significant cryptocurrency losses, totaling much more than the 12 cents lost to software modifications.

Thus, we conclude that the decisions made by the programming team were not only economically justifiable but that they have significantly increased the stock evaluation of Team 1280.