Task 2 - Project Research Narrative

Engineering Project Management

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1 Project A: Raspberry Pi

The Raspberry Pi is a single board computer developed by the Rapberry Pi Foundation in the UK. The original Model B board was released in February 2012, after which it rapidly gained popularity becoming the best-selling british computer by 2015 (Collins, 2022). It is a credit-card sized circuit board that includes an ARM-compatible CPU as well as a GPU, making it capable of running a full-fledged desktop operating system. The Pi was originally intended to give students access to programmable hardware, which would increase the number and calibre of students that apply for computer science at Cambridge (Collins, 2022). However the model was far more popular than anticipated, and has seen use in areas outside it's target market due to it's low cost and modularity.

The project is extremely relevant to the discipline of software engineering. The purpose of the Raspberry Pi is to give young people the tools equip themselves with important programming knowledge that can shape their career. It is a fundamental building block to gain domain knowledge in areas such as embedded software development and has also seen uses in robotics, web development and automation, making it an instrumental tool for software engineers.
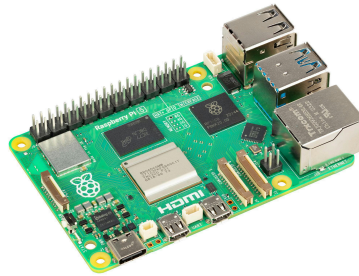

Figure 1: A Raspberry Pi board

1.a Why the Pi was successful

Initially, the Raspberry Pi Foundation set out to build a curcuit board that meets the criteria of being small size, low cost, and low power consumption (Yu, 2016). This was a well-defined scope which was not subject to change over the course of the project, which gave it stability inspite of the challenging criteria.

2 Project B:

3 Project C:

4 Project D:

5 Project E:

Bibliography

Collins, S. (2022). *The life of Pi: Ten years of Raspberry Pi*. https://www.cam.ac.uk/stories/raspberrypi

Yu, H.-L. (2016). *Understanding the Secrets Behind the Success of Raspberry Pi*. https://blog.techdesign.com/understanding-the-secrets-behind-the-success-of-raspberry-pi/