The Product line Context Examples

This document contains several examples from past students. This includes both On the Mark and Off the Mark examples. All examples are annotated with instructor’s feedback.

On the Mark Example 1

Product line: Microsoft Surface

URL: https://www.microsoft.com/en-us/surface

Overview: Microsoft Surface is a line of premium computing devices developed and marketed by Microsoft. The first Microsoft Surface device, the Surface RT, was introduced in 2012 as a tablet with a detachable keyboard cover. Since then, Microsoft has expanded the Surface lineup to include various iterations of tablets, laptops, and hybrid devices. The Surface product line has garnered acclaim for its sleek design, high-quality displays, and integration with Windows and Microsoft's software ecosystem.

History: The first Surface device, launched in 2012, the Surface RT ran on Windows RT, a version of Windows designed for ARM-based devices. Later in 2013, the Surface Pro was launched, which featured an Intel processor and the full Windows operating system, making it a fully functional laptop-tablet hybrid. Over the next few years, Microsoft released various iterations of the Surface Pro and Surface RT, improving design, performance, and software. Microsoft launched various versions of Surface with various features to cater to diverse user needs. This includes features like 2-1 computing experience, detachable screen, large touch screen, innovative hinge design, cloud integration. Microsoft Surface holds vast potential for future innovation. Improving battery life , reducing bezels for an immersive display, and enhancing camera technology would appeal to business and creative users. Optimizing thermal management, providing more ports, customization options, and competitive pricing would cater to diverse user needs.

Market Served: Microsoft Surface caters to a broad spectrum of users, including students, professionals, creatives, and everyday consumers seeking premium computing experiences. Microsoft Surface targets a global market, available in various countries and regions. Its availability and support extend to North America, Europe, Asia, Australia, and other parts of the world. Microsoft Surface finds adoption in diverse industries, including education, business, creative, and enterprise sectors.

Why is this On the Mark?

Overview covers main features of products in this product line.

captures how the products of the product line has evolved over time. Also, proposes potential future features to expand and advance the products, such as extended battery life, reduced bezel size etc.

Captures market served by the product line w.r.t users, geography, and industry.

Product List:

This product line contains these products:

Product 1: Microsoft Surface Pro 7

- Type: 2-in-1 Laptop/Tablet
- Key Features: Versatile design, high-resolution PixelSense display, Surface Pen support
- Primary Functionality: Productivity and creativity on-the-go, with the flexibility of a laptop and tablet
- Platform: Windows 10
- Key Technology: Intel Core processors, Surface Pen technology for digital inking

Product 2: Microsoft Surface Laptop 4

- Type: Laptop
- Key Features: Premium design, PixelSense touchscreen display, choice of Intel or AMD processors
- Primary Functionality: Traditional laptop experience for everyday computing and productivity
- Platform: Windows 10
- Key Technology: Choice of Intel or AMD processors, PixelSense touchscreen

Product 3: Microsoft Surface Book 3

- Type: 2-in-1 Laptop/Tablet
- Key Features: Detachable screen, high-performance processors, NVIDIA GeForce GPUs
- Primary Functionality: Powerhouse performance and versatility for creative professionals
- Platform: Windows 10
- Key Technology: Intel Core processors, NVIDIA GeForce GPUs, PixelSense display

Product 4: Microsoft Surface Go 2

- Type: Tablet
- Key Features: Compact and portable design, PixelSense touchscreen display, Surface Pen support
- Primary Functionality: Lightweight and versatile computing for students and casual users
- Platform: Windows 10
- Key Technology: Choice of Intel Pentium Gold or Core m3 processors, PixelSense touchscreen

Product 5: Microsoft Surface Studio 2

- Type: All-in-One Desktop
- Key Features: Large and adjustable PixelSense

Captures 5 products under the product line. For each product it covers its type, key features, primary functionality, platform and key technology.

touchscreen display, powerful processors

- Primary Functionality: Creative workstation for designers and content creators
- Platform: Windows 10
- Key Technology: Intel Core processors, NVIDIA GeForce GPUs, Surface Pen support

On the Mark Example 2

Product line: Google Nest

URL: https://store.google.com/us/category/connected_home

Overview: Nest product line includes a range of smart devices designed to make homes more connected, secure, and energy-efficient. These devices use advanced technologies and AI-driven features to offer users greater control over their homes, enhance energy conservation, and provide peace of mind through improved security. The main features of google nest include Smart Home Integration, Voice Control, Energy Efficiency, Security and Monitoring through security cameras, video doorbells, and smoke detectors, automated routines and schedules, triggering specific actions based on time, location, or other events, enhancing the overall innovative home experience, App Integration, and Environmental Sensors.

History: The Google Nest product line started with the launch of the Nest Learning Thermostat in 2011, an innovative device that could adapt to user preferences and optimize energy consumption. In 2014, Google acquired Nest Labs, paving the way for further expansion. Over the years, Google Nest introduced various smart home products, such as smart speakers, smart displays, security cameras, doorbells, and more. Google Nest holds vast potential for future innovation to maintain its position as a leader in the smart home. For example, enhanced AI and Machine Learning would enable Google Nest devices to learn from user habits and anticipate their needs, providing more personalized and automated experiences. Advanced Environmental Sensing to detect air quality, allergens, and other environmental factors would promote healthier living environments and allow users to take proactive actions for their well-being. Edge Computing Capabilities would allow for quicker response times and Greater privacy, as some data processing can occur locally on the device rather than relying solely on cloud servers.

Market Served: Google Nest serves a wide range of users in both residential and commercial settings, including homes, apartments, offices, and small businesses. It targets homeowners and renters who seek to create smart and connected living spaces. Additionally, Google Nest devices are popular among users who prioritize seamless integration with

Why is this On the Mark?

Overview covers main features of products in this product line.

Captures how the products of the product line has evolved over time. Also, proposes potential future features to expand and advance the products, such as enhanced AI and Machine Learning, Advanced Environmental Sensing etc.

Captures market served by the product line w.r.t users, geography, and industry.

Google services and voice-controlled home automation through Google Assistant. The availability of Google Nest devices extends to North America, Europe, Asia, Australia, and other parts of the world. Google Nest's primary focus is on the consumer electronics and smart home industry. While Google Nest devices are widely adopted in the residential market, they are also increasingly used in businesses, hospitality, and other industries for their energy-saving and security-enhancing capabilities.

Product List:

This product line contains these products:

Product 1: Google Nest Learning Thermostat

- Type: Smart Thermostat
- Key Features: Auto-scheduling, energy-saving suggestions, remote control via app
- Primary Functionality: Optimizing heating and cooling to save energy and create a comfortable environment
- Platform: Google Assistant, Google Home app
- Key Technology: Machine learning algorithms for adaptive temperature control

Product 2: Google Nest Cam Indoor

- Type: Smart Security Camera
- Key Features: HD video streaming, night vision, two-way audio
- Primary Functionality: Home surveillance and remote monitoring of indoor spaces
- Platform: Google Assistant, Google Home app
- Key Technology: High-quality video streaming and motion detection

Product 3: Google Nest Hello Video Doorbell

- Type: Smart Video Doorbell
- Key Features: HD video and audio, facial recognition, pre-recorded messages
- Primary Functionality: Enhanced home security and remote communication with visitors
- Platform: Google Assistant, Google Home app
- Key Technology: Facial recognition for personalized alerts

Product 4: Google Nest Protect (Smoke + CO Alarm)

- Type: Smart Smoke and Carbon Monoxide Detector
- Key Features: Voice alerts, mobile notifications, self-testing

Captures 5 products under the product line. For each product it covers its type, key features, primary functionality, platform, and key technology.

- Primary Functionality: Early detection of smoke and carbon monoxide for improved home safety
- Platform: Google Assistant, Google Home app
- Key Technology: Advanced sensors for early threat detection

Product 5: Google Nest Hub (Smart Display with Google Assistant)

- Type: Smart Display
- Key Features: Visual responses, touch interface, media playback
- Primary Functionality: Voice-controlled hub for accessing information, controlling devices, and entertainment
- Platform: Google Assistant, Google Home app
- Key Technology: Touchscreen display and voice-based interaction

Off the Mark Example 1

Product line: Tesla Electric Vehicles

URL: https://www.tesla.com/

Overview: The fully electric Roadster, the first vehicle offered by Tesla Motors, was introduced in 2008. In corporate tests, it reached a range of 245 miles (394 km) on a single charge, a record for an electric vehicle in mass production. Additional testing revealed that the Roadster's performance was on par with that of many gasoline-powered sports cars, with a 0-60 mph (96 km/h) acceleration time of less than four seconds and a top speed of 125 mph (200 km/h). Lithium-ion cells, which are frequently found in laptop batteries, were utilized to power the vehicle's electric engine, and could be recharged from a regular electrical outlet.

History: Tesla (TSLA) still dominates US electric car market with 68% of the electric auto market share. It has a total of 53.8 billion revenue worldwide. Tesla also delivers close to 255k vehicles every quarter to their customers.

Market Served: No data.

Product List:

This product line contains these products:

Product 1 Model S

The Model S has long, low design lines akin to those of a Jaguar, and is definitely an executive saloon. When it first debuted in 2012, the Model S contributed to establishing Tesla as a major automaker. Since the Model S's debut, Tesla has kept it updated. Price: $104,990

Product 2 Model 3

With prices having decreased to make it the most cheap Tesla, the Model 3 was introduced in the US in 2016 as an affordable alternative to the Model S. The Model 3 is the most prevalent Tesla on the road today thanks to its enormous success. The Model 3, a four-door sedan, came with a variety of options at launch, but there are now only three left. Price: $46,990

Product 3 Model X

The "soccer mom's" solution to the electric car is Tesla's Model X. It is a seven-person SUV-style electric vehicle.

Why is this Off the Mark?

Overview doesn't cover main features of products in this product line. It talks about a specific product Roadster.

It just captures details about Tesla. It doesn't specifically talk about electric vehicle and its evolution.

Student didn't capture market served by Tesla electric vehicle the product line.

The student captured five products under the product line. However, each product doesn't cover its type, key features, primary functionality, platform, and key technology.

Along with the enormous touchscreen inside, its distinctive rear Falcon Wing doors will give your kids the impression that you purchased a futuristic vehicle. Price: $120,990

Product 4 Cybertruck

In November 2019, the Cybertruck was launched as Tesla turned its focus to the pick-up truck model. Although reservations are accepted elsewhere, it is likely that this will be far more popular in the US. The Cybertruck will have a stainless steel body, armoured glass, anda distinctive angular form. It will also have 100 CU FT (2830 litres) of storage and a towingcapability of 7,500+ lbs. All of these specifications are for the US, and according to Tesla, other countries' specifications will be developed based on demand. Price: $39,900

Product 5 Model Y

As a small SUV, the Tesla Model Y fills the void between the Model 3 and the Model X. It has room for five people, will seat them comfortably, and will particularly appeal to those searching for something less expensive than the Model X. Price: $65,990

Off the Mark Example 2

Product line: google Services

URL: https://about.google/products/

Overview: Google Services is Alphabet's biggest customer facing business line. Their goal is to make life easier with the help of their products. These are software products, most of which can be used on any phone, tablet, computer or laptop or smart device. The products offered are divided into three categories:

1. For all: Utilities such as a documentation suite (Google Suite), Internet Search (Google Search), Navigation (Google Maps), email, video conferencing, mobile wallet (Google Pay) to name a few are offered to individuals.
2. For business: These are services and products that can be directly integrated with other business applications to assist with operations. For instance, Analytics (for app usage), Google Ad Manager, Surveys etc.
3. For developers: Google advocates open-source development and provides a wide array of tools to enable the same TensorFlow, Flutter and Android are some examples.

History: The official launch was marked by the release of Google Search (today, one of the many services offered by Google) in 1998 by the founders Larry Page and Sergey Brin. It gained popularity quickly and has been the leading search engine used on the internet for over a decade.

Market Served: No data.

Product List:

This product line contains these products:

Product 1 Google Chrome

A web browser that is directly available for download to the end-user, this is platform independent and can be installed on any OS for free. It provides an in-built task manager to track the memory and CPU usage of each tab. The address bar (called the omnibox) can also be used for a web search and to access browser history. It also offers developer tools such as a step debugger to walk through your front-end flows on the

Why is this Off the Mark?

There is no specific product line called "Google Services" offered by Google as a standalone entity. However, it is essential to note that many of Google's products and services are collectively referred to as "Google Services" due to their wide range and integration within the Google ecosystem.
The overview is with respect to Google Services which is not relevant to the assignment.

The history is with respect to Company Google itself and not with respect to any specific product line.

Student didn't capture market served by Google.

As the student failed to identify the product line correctly, he/she ended up capturing products from different product line, which is not what is expected in this assignment.

screen. It is built using C and C++ (Native Client). HTML, CSS and JavaScript are used for web extensions10.

Product 2 Google Maps

These are digital maps that integrate real-time traffic data and road conditions with the help of remote data capture to provide directions and/or a journey navigation experience. It also offers proximity-based recommendations such as gas stations, restaurants, airports etc. Google Maps are easily integrable with any application, given the coordinates of a location. It enables user collaboration by inviting them to add places / details to a place to improve the overall accuracy of their location data. It is built using JavaScript, TypeScript. For features like 360-degree view, Time-zones and coordinates, it integrates with external APIs.

Product 3 Android OS

Android is a mobile development programming language. Google has developed its own mobile operating system called Android OS utilized heavily across the world. Android OS enables rapid integration and testing for mobile app developers on either simulated phone environments or actual phones. Due to the strong developer support offered, beta or test versions of apps can be installed directly on an Android phone even if it is not on Play Store. Android is based on Java and uses XML for UI Components. Android OS in general is built on a Linux kernel.

Product 4 Gmail

This is an email service provided by google. Users can create their unique email ID with the '@gmail.com' extension. Each Gmail account is associated with integrated perks – 15 GB Google Drive free storage space, single sign in and one click account set up on websites and integration with all other google services products like Google Meet, Google Hangouts (IM app). It is built using HTML, Google Analytics and jQuery.

Product 5 Google Lens

This is an image search engine integrated by default in all Android phones. It not only supports static image upload but also real time search via an open phone camera pointing at the object of interest. Thus, it enables quick and seamless QR Code Scans without the need of a separate app. It is used to translate one language to another just by scanning an image. Image recognition, deep learning and text-to-speech

have realized Google Lens.