**Product System**: A product system refers to a collection of diverse but related items that work together in a compatible manner. For example, a computer manufacturer may have a product system consisting of laptops, desktops, monitors, and accessories, all designed to work seamlessly with each other.

**Product Mix**: Also known as product assortment, the product mix represents the complete range of products offered by a particular seller. It includes all the product lines the company offers. For instance, a clothing retailer might have product lines for men's clothing, women's clothing, and children's clothing, each containing various items like shirts, pants, dresses, and so on.

Certainly! Here are real-life examples of a product system and a product mix:

**Product System Example: Apple Ecosystem**

* Apple offers a comprehensive product system consisting of diverse but related items that function together seamlessly. This ecosystem includes:
  + iPhones (smartphones)
  + iPads (tablets)
  + MacBooks (laptops)
  + iMacs (desktop computers)
  + Apple Watches (wearable technology)
  + AirPods (wireless earbuds)
  + HomePods (smart speakers)
  + Apple TV (digital media player)
  + iCloud (cloud storage service)
* These products are designed to work together harmoniously, with features like AirDrop for easy file sharing between Apple devices, Handoff for seamless transitions between devices, and iCloud for storing data across multiple devices. The compatibility and integration among these products create a cohesive Apple ecosystem, enhancing user experience and loyalty.

**Product Mix Example: Nike Product Assortment**

* Nike, a global leader in athletic footwear and apparel, offers a diverse product mix to cater to various sports and lifestyles. Its product mix includes:
  + Footwear: Running shoes, basketball shoes, soccer cleats, training shoes, lifestyle sneakers, etc.
  + Apparel: Performance apparel (sports bras, shorts, jerseys, etc.), athleisure wear, outerwear, accessories (hats, socks, bags, etc.)
  + Equipment: Sports gear (basketballs, soccer balls, footballs, etc.), fitness accessories (yoga mats, resistance bands, water bottles, etc.)
* Within each product line, Nike offers a wide range of styles, colors, and performance features to meet the diverse needs and preferences of athletes and consumers. For example, in the footwear category, Nike provides running shoes tailored for different types of runners (neutral, stability, and motion control), basketball shoes endorsed by professional athletes, and lifestyle sneakers with trendy designs.

1. **Width**:
   * Example: A retail store that sells electronics, clothing, home goods, and groceries has a wide product mix with four distinct product lines.
2. **Length**:
   * Example: A bookstore offers a total of 5,000 books across all its product lines, including fiction, non-fiction, children's books, and textbooks. The length of its product mix is 5,000.
3. **Average Length**:
   * Example: A company that manufactures smartphones, tablets, and laptops has a total of 15 different products. With three product lines, the average length of its product mix is 5 products per line (15 products / 3 product lines = 5).
4. **Depth**:
   * Example: A company produces a line of sports shoes. Within this product line, there are different variants of each shoe based on color and size. For instance, a particular model of running shoe comes in five different colors and three different sizes, resulting in a depth of 15 for that product line.
5. **Average Depth**:
   * Example: A bakery offers a variety of bread, cakes, and pastries. Across all its product lines, there are 30 different variants (different types of bread, cakes, and pastries). If the bakery has a total of 10 products (bread, cakes, and pastries), the average depth of its product mix is 3 variants per product (30 variants / 10 products = 3).
6. **Consistency**:
   * Example: An outdoor equipment retailer sells camping gear, hiking gear, and fishing equipment. These product lines have a high level of consistency because they all cater to outdoor enthusiasts and may share similar distribution channels, such as outdoor retailers or online stores specializing in outdoor gear.