Monetization models for IOT use cases

IoT Monetization

- Monetization is the process of deriving **revenue** from the value you offer to your users.
- Monetization is essentially the final piece of a systematic look at a business model.
- Monetization creation: Advertise, deliver a service, Acquire users.
- A monetization strategy is a plan to generate revenue from a certain platform, audience, or type of content.
- Shows how an organization creates, delivers and captures values.

Barriers in IoT Monetization

- Communication Service Providers (CSPs) and their enterprise customers are struggling to monetize IoT.

- key barriers for IoT monetization are integration complexity, and the lack of a holistic approach.

- IoT, end applications ultimately deliver desired business outcomes by combining devices, data, and analytics to produce new, business-relevant insights. IoT applications need to be integrated into multiple endpoints.

- endpoints can be an IoT and network domain, but they can also be an IT system

Reasons for IoT business model

- **Increased business opportunities**: explore new revenue streams developed by advanced business models and services.
- **Efficient processes:** data collected by IoT network allowed businesses to be smarter with real-time operational insights.
- **Enhanced asset utilization:** improved assets tracking (equipment, machinery, employees etc.) using sensors and other devices
- **Increased productivity:** employees, improved labor efficiency, and reduced mismatch of skills.
- This leads the major drivers to move to IoT business models.

Subscription model

- Greatest benefits of a connected device is that it enables recurring revenue. Now instead of having a one-time sale, you can offer a subscription model in which you charge your customer a fee for providing continuous value.

- subscription model enables you to implement many of the benefits available to software-only products within your IoT solution.

- SaaS models as an example, you can find ways to monetize your product not only with a monthly subscription, but also by providing paid upgrades.

- Active relationship with the customer. Device gathers more data, you will be able to learn more about your customer and provide more valuable features tailored to their specific needs.
- Applications: monitoring as a service

  predictive maintenance as a service

Outcome based model

- Innovative business model where the client side is kept away from the hard work of collecting, analyzing, processing, and generating the output and charge for the outcome.
- Idea is for customers to pay for the outcome (or benefit) the product.
- Company can be creative. Manufacturer decides to lease or sell the product.
- Based on customer outcome, reduce the unwanted payment for assets.
- Example: paying for water pump(asset). customer is not buying a pump. Instead, they are paying a variable fee per month for the amount of water they source. They are paying for the outcome, which is water sourced.

Outcome based model

- Example:
  - Rolls-Royce Motor Cars Limited, a luxury automobile maker now provides jet engines as a service for commercial airlines.
  - Company keeps the ownership and maintenance of the jet engines. charges a fee per engine flying hour to rent their engine to the airline.
- Advantages: Higher margin, More satisfied customers, Reduced negotiation
- Challenges:
  - Change in infrastructure required based on current process
  - Cost involved in desired outcome
  - Output accuracy.

Asset sharing model

- Reduced utilization of equipment to the maximum capacity leads to asset sharing.
- selling your extra capacity back into the market.
- allows businesses to share their costly IoT-enabled assets with other business entities
- maximize the utilization of your product across multiple customers.
- Example: smart batteries to commercial buildings. Batteries provide energy to building, extra capacity can be used to grid. Batteries act as asset. Customers can get their system for reduced price.

Razor Blade model

- IoT product can be designed for selling other products.
- sell the IoT product at cost or even at a loss. goal is to get the product in the customer's hands, so you can start selling your other products.
- business model can be very lucrative for products that have consumables needing constant replacement.
- customer never run out of the consumable. Otherwise, the product loses its value proposition.
- Goal of this IoT business model is to turn a "normal" product into an IoT product to automatically reorder its consumable before it runs out.
- Examples: Printers: Automatically reorder ink cartridges.

Razor Blade model

- Amazon's goal is to provide "contextual shopping", meaning the ability to reorder a product right when you need it.
- Amazon also uses this model with their Amazon Dash buttons. These "connected buttons" come pre-configured to order a specific product.
- Amazon Dash Button is not a revenue maker in itself, it is just a vehicle to sell other products in Amazon's catalog.
- product that needs to reorder parts is a candidate for this IoT business model

Monetize your IoT data

- can build your product to provide value to the end user and also to collect valuable data you can then sell to a third party.
- goal is to deploy as many devices as possible to collect data.
- more devices leads to more attractive of your data proposition to third parties.
- Example: LinkedIn or Facebook. They collect a huge amount of data from all of us (often for free) and although they provide us (the user) with value for providing that data, the real value is provided to advertisers and other third party companies that use the data to promote their products and services.
- LinkedIn or Facebook are tools for collecting data to offer it to advertisers.