Importance of IoT in Service Provider Gateways

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Place holder

- **Chris and Joep - live talking heads for Intro**

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Is IoT Relative and should I participate?

- **75% of buyers in US have a smart gadget at home**
  Source – Digitized House

- **By 2023, the Smart Home industry automation in US homes will exceed 50%**
  Source – Wonder

- **The smart homes market was valued at USD 79.13 billion in 2020, and it is expected to reach USD 313.95 billion by 2026 and register a CAGR of 25.3% over the forecast period (2021 - 2026).** Source – Mordor Intelligence

- **47% of US millennials use smart home products today**
  Source – Alarms.org

Traditional Service Provider services = "Triple-Play"

Television

High-Speed Internet
plus **Home Wi-Fi**

Home Phone

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IoT / Smart Home is the Fourth Play

- **Security**
- **Lifestyle**
- **Multi-family buildings**
- **Wellness**
- **Energy management**
- **Data gathering**

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IoT Controller Evolution

- **Dedicated Hubs / Border routers** –
  - Original Controller Option.

- **Smart Speakers** –
  - Example of multi-purposing a gateway

- **Wi-Fi Extender w/ IoT** –
  - New trend. Convenient location to host IoT radio.

- **Wi-Fi Gateway/Router w/ IoT** –
  - Growing trend. Obvious place to initiate IoT control/ network.

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Service Provider Testimonials

- **Place holder for Testimonial video from Comcast**

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Business Model Aspects
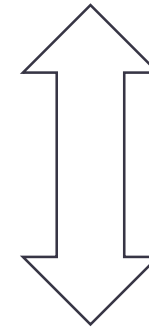
- **CAPEX**

- **OPEX**

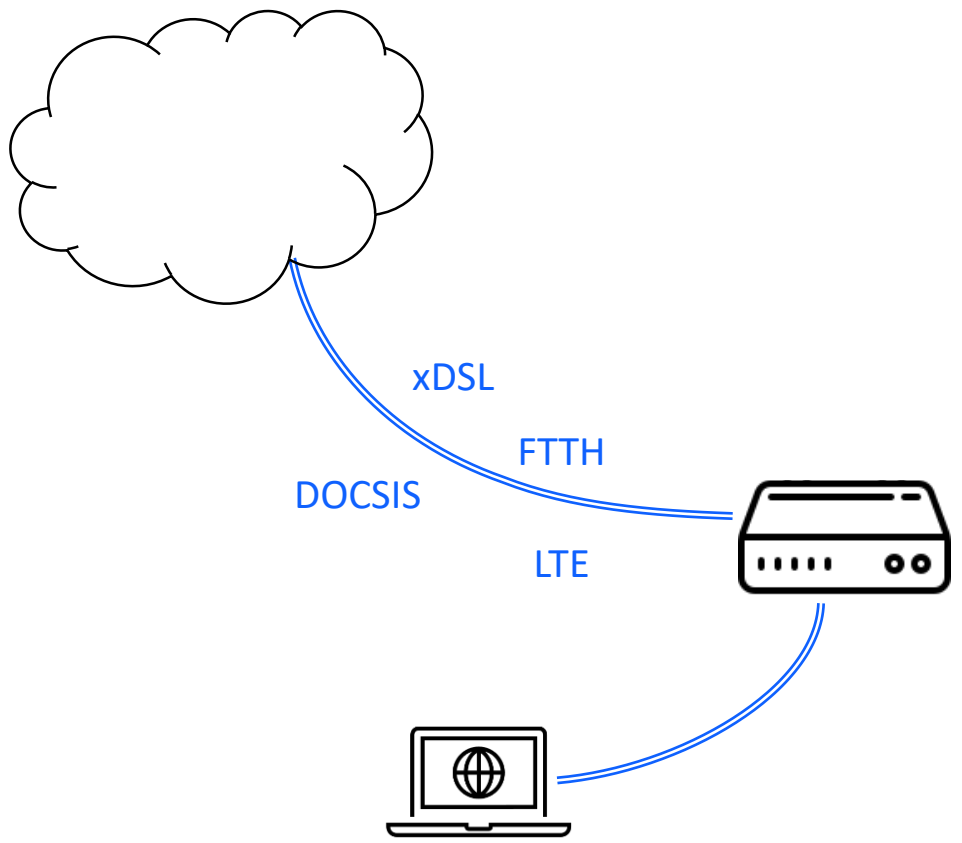- **Churn rate**

- **ARPU**

- **"Table stakes"**

Business Strategy

- **Internet Access To the Home**

- **Internet Access In the Home To the Device**
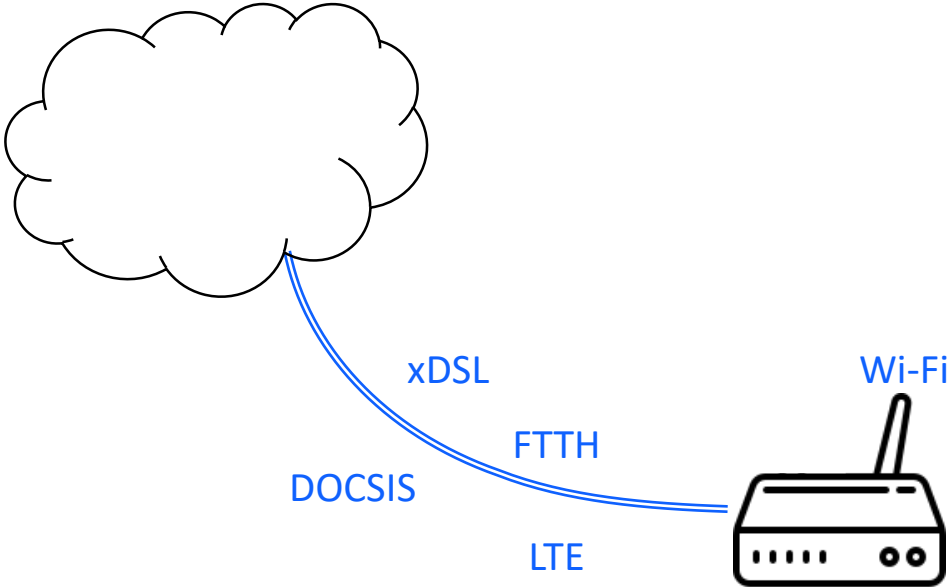
- **Connected Home Experience**

Passive

⇕

Proactive

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In the Beginning: Wired Internet Access Only

xDSL

FTTH

DOCSIS

LTE

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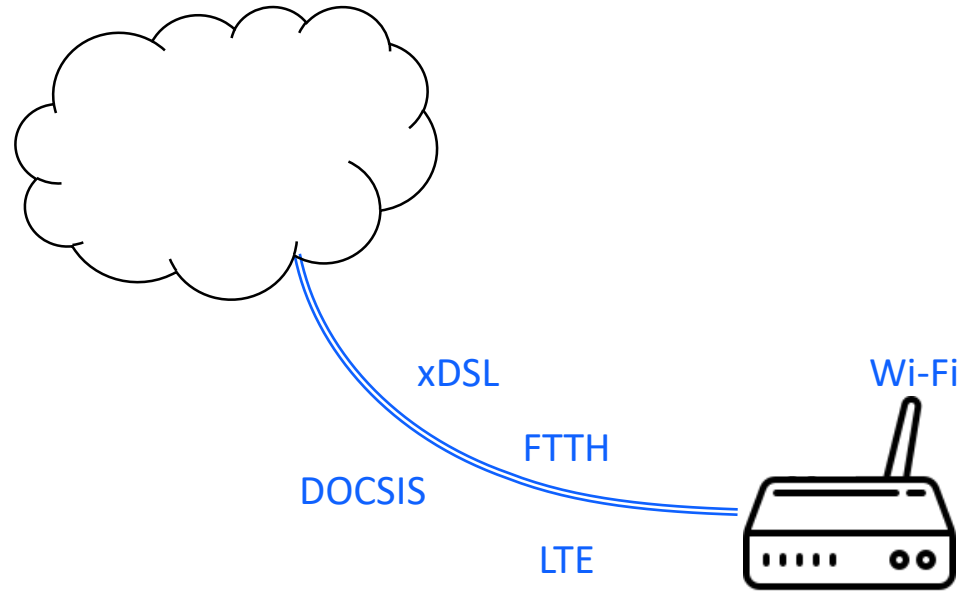
Service Providers start to offer Wi-Fi

xDSL

FTTH

DOCSIS

LTE

Wi-Fi

Capex	Opex	Churn	ARPU
↗			

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Poor Wi-Fi Backfires

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LTE

Wi-Fi

Capex	Opex	Churn	ARPU
↗	↗	↗	

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Good Wi-Fi Becomes a Minimum Offering

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Wi-Fi

Capex	Opex	Churn	ARPU
↗↗	=	=	↗

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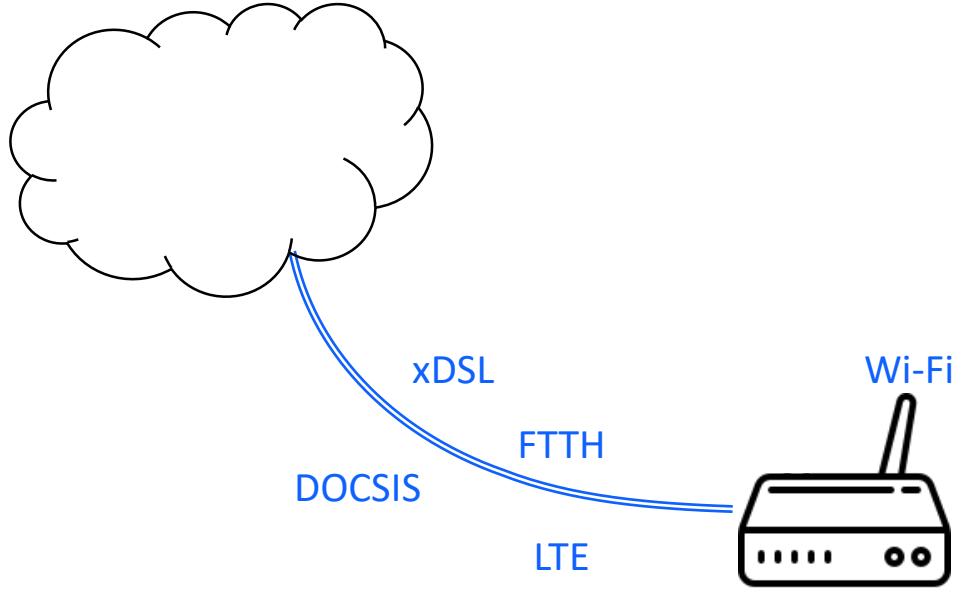
Wi-Fi Networks Grow Bigger

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Wi-Fi

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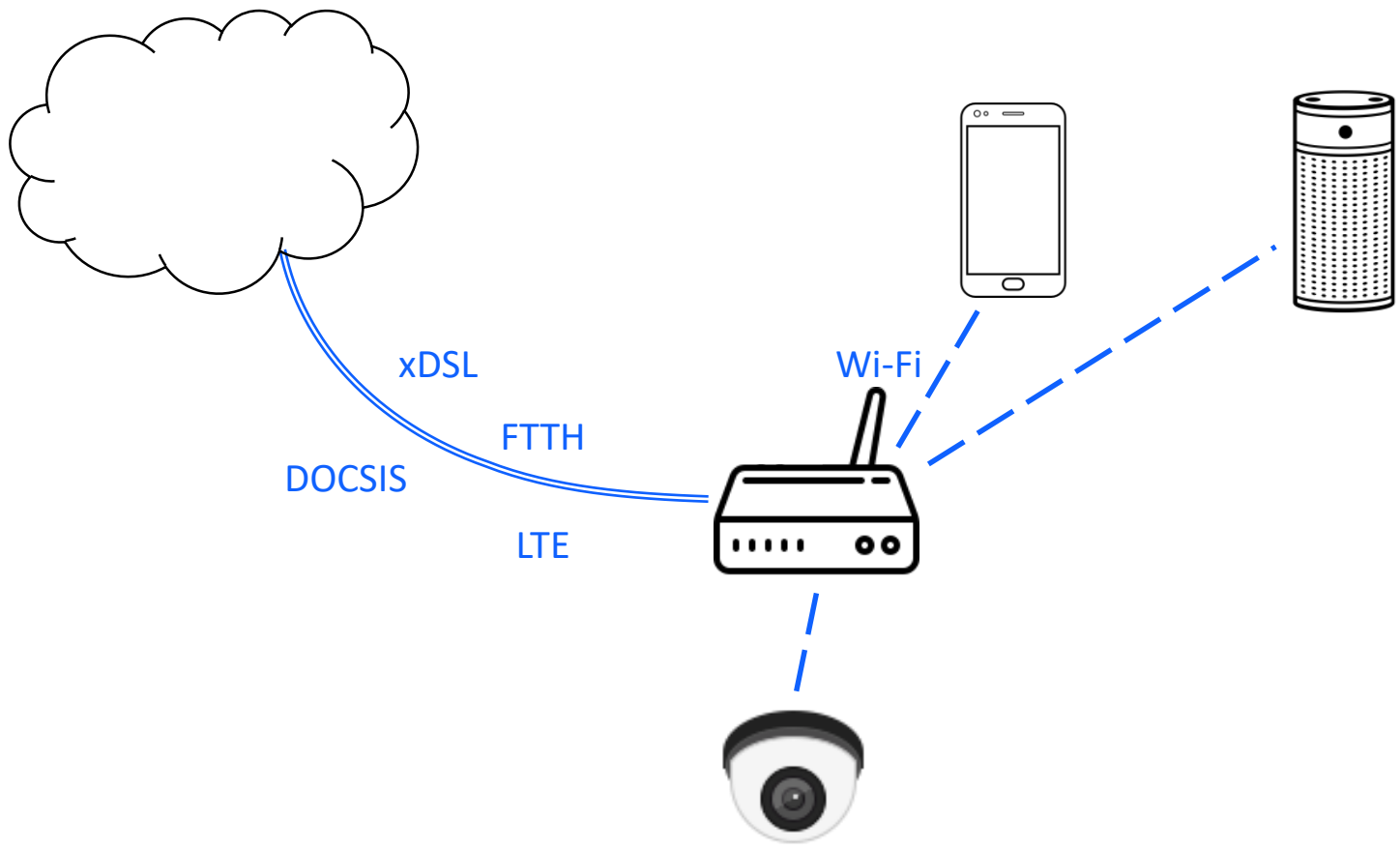
Smart Speakers Build own IoT Networks

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Wi-Fi

IoT network

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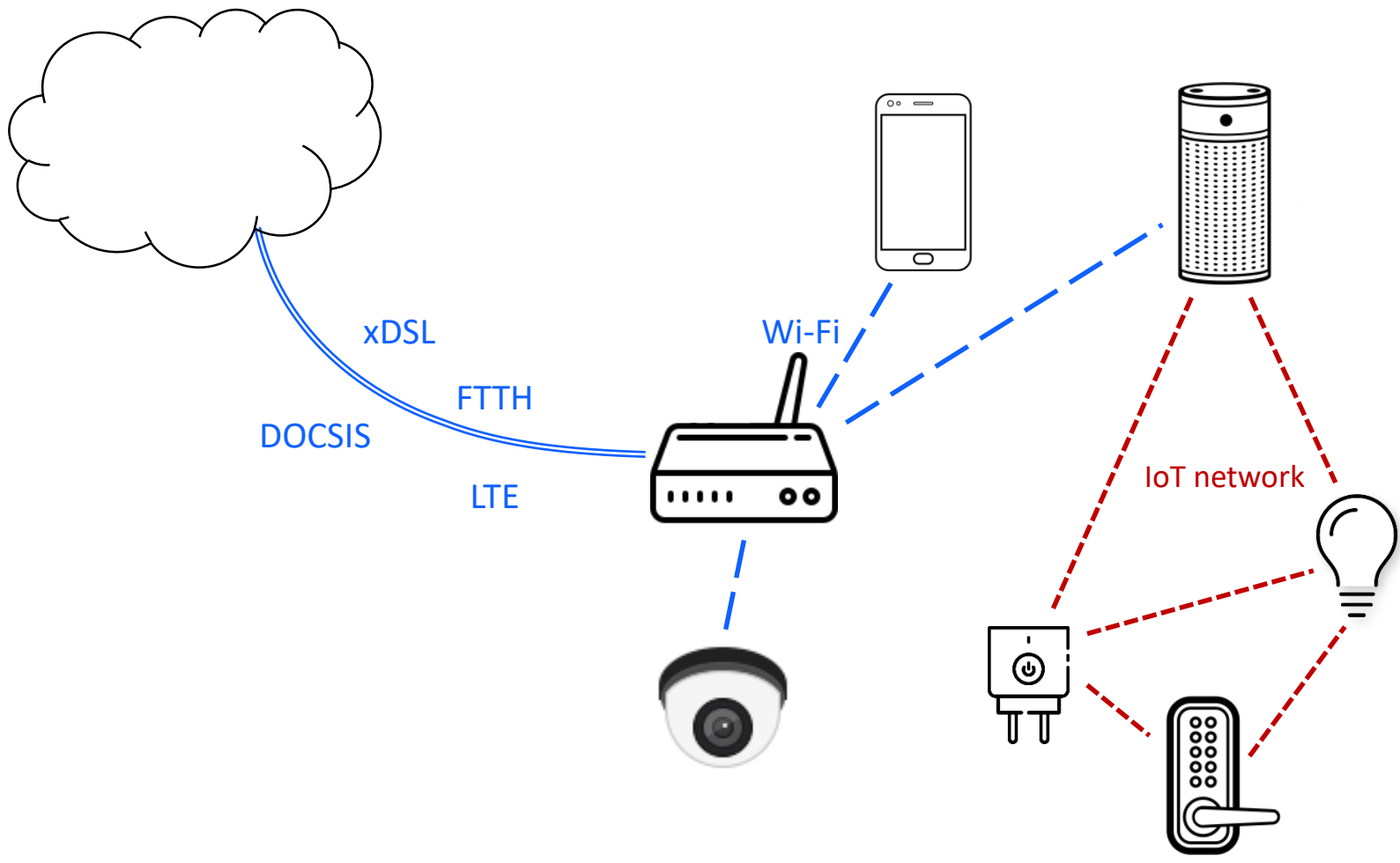
The Result of a Passive Approach to IoT

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LTE

Wi-Fi

IoT network

Capex	Opex	Churn	ARPU
↗↗	↗	↗	↘

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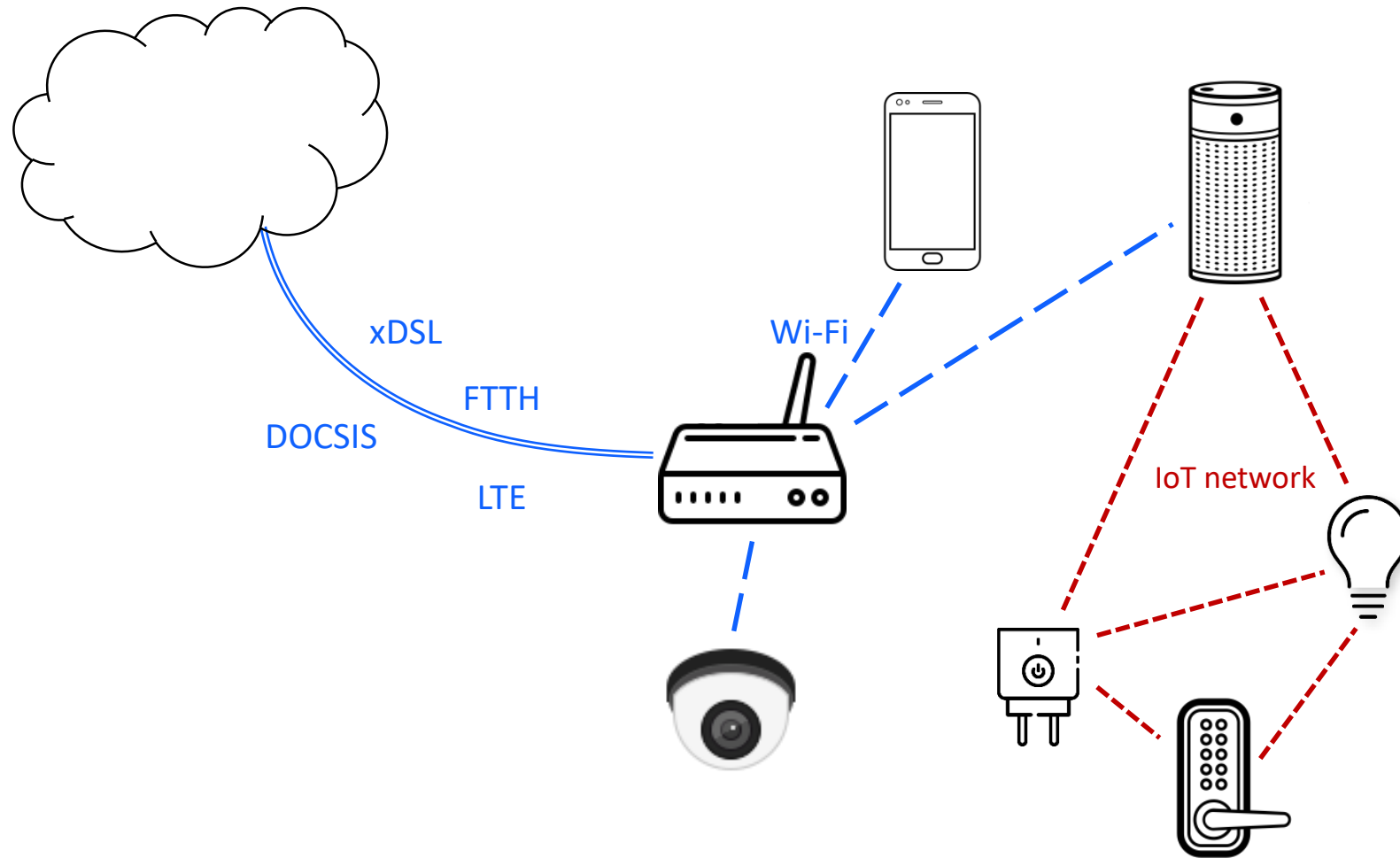
Good Wi-Fi is a Minimum Offering (Proactive Scenario)

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Wi-Fi

Capex	Opex	Churn	ARPU
↗↗			

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Good Wi-Fi and IoT Considered Minimum Offering

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IoT   Wi-Fi

Capex	Opex	Churn	ARPU
↗↗			

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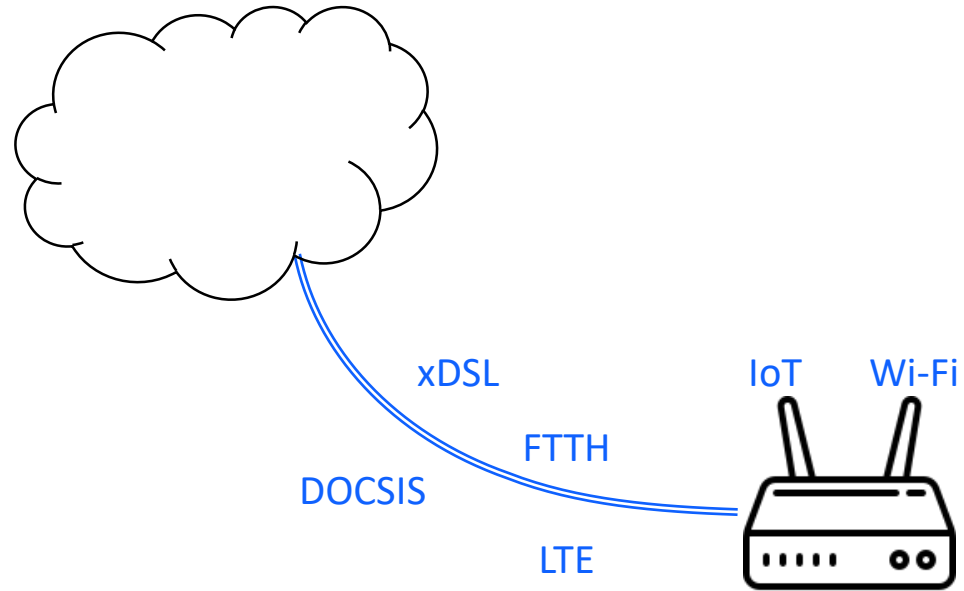
Service Provider Offers Smart Home Services

Capex	Opex	Churn	ARPU
↗↗	=	↘	↗↗

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IoT Wi-Fi

IoT network

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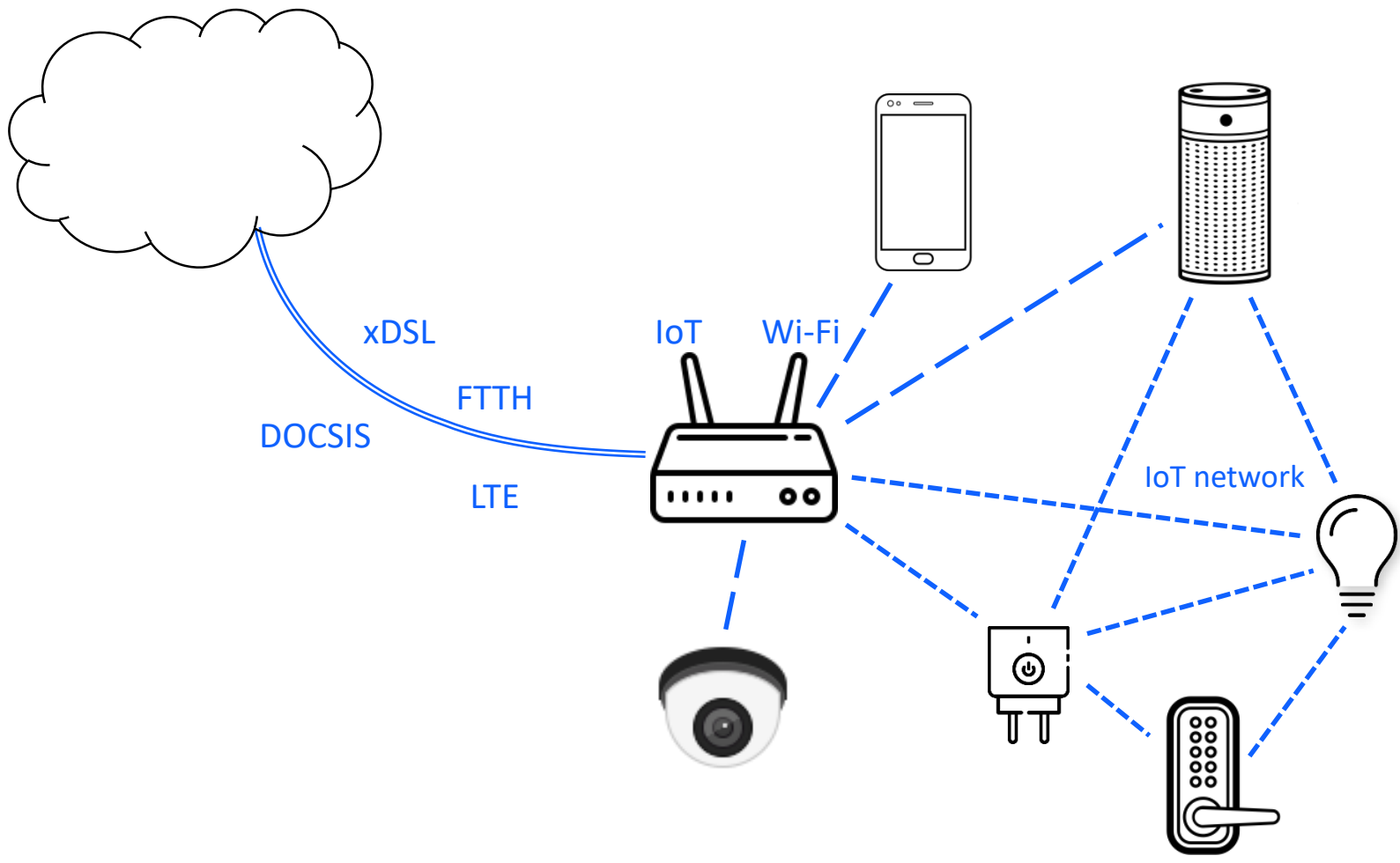
Passive versus Proactive Approach to IoT
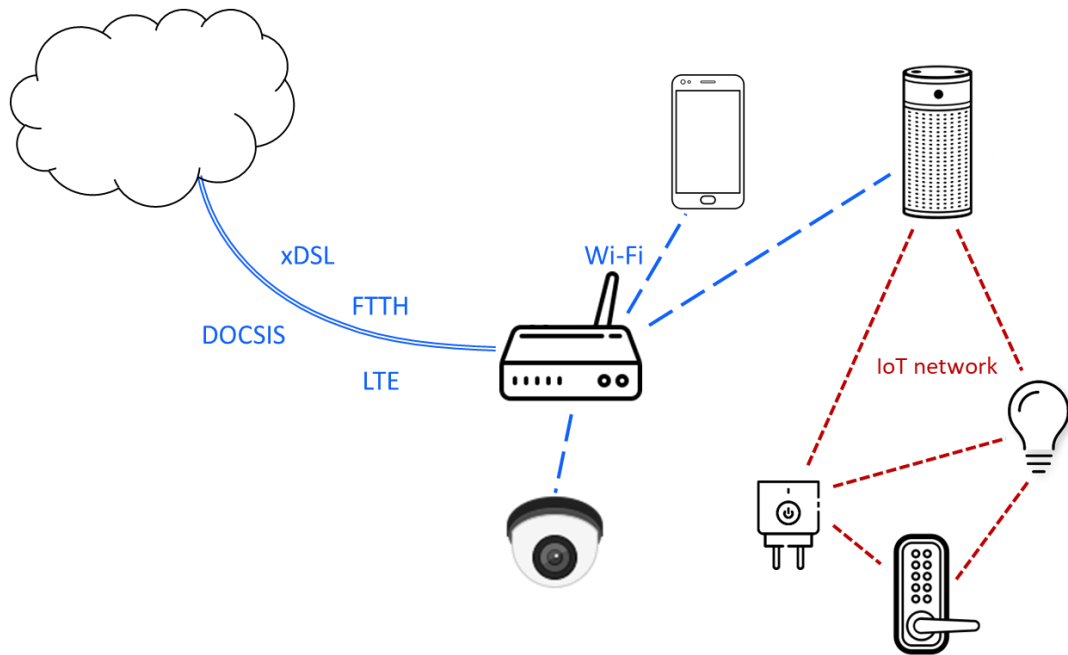
Capex	Opex	Churn	ARPU
↗↗	↗	↗	↘
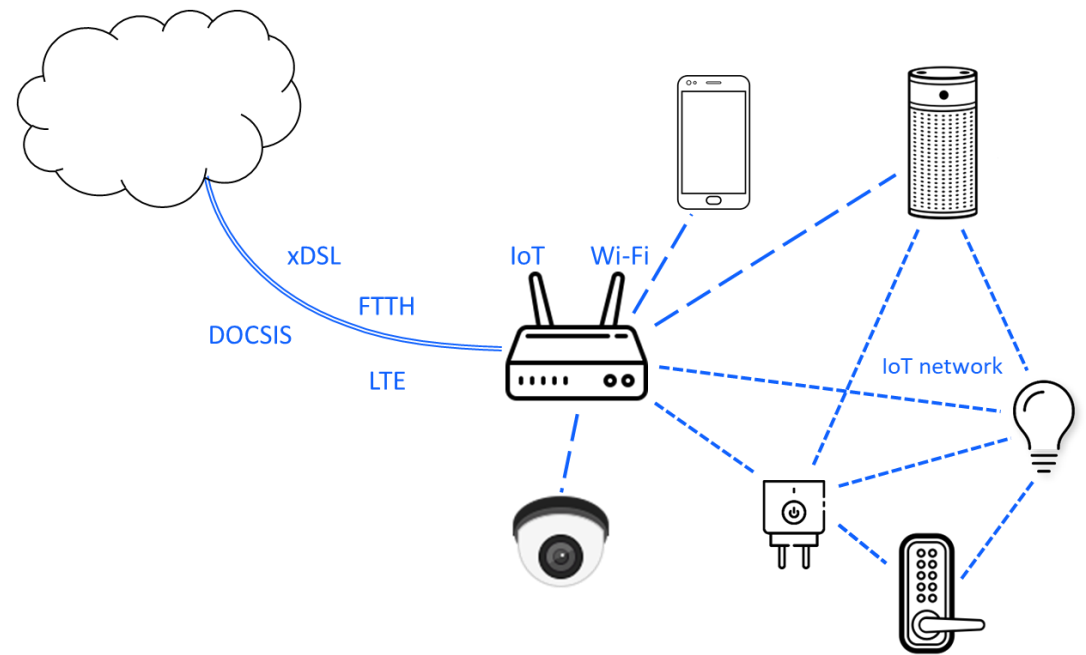
Capex	Opex	Churn	ARPU
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Gateway Architectural Considerations

- **Protocol:**

- **Multi-protocol options:**

- **What does app partner use?**

Does Thread / Matter change landscape for the Wi-Fi gateway?

- **Matter devices use Wi-Fi or Thread**

- **With Wi-Fi and Thread in the gateway - can manage both networks**

- **No dependence on 3rd party border routers**

- **Prevent interference between Wi-Fi and Thread via Packet Traffic Arbitration**

- **Option to use Thread radio for Zigbee simultaneously**

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Bridging Protocols

- **Challenge**:

  Multiple IoT protocols/devices in single home.

- **Solution**:

  Gateway "bridge" can link multiprotocol networks. (ZW/ZB/BLE/WiFi/Matter etc...)

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Gateway Equipment examples

- **<u>Askey</u>**: Wifi gateway with ZW / ZB

- **<u>Technicolor</u>**:   Gateway + Wifi extender with ZW and ZB / Matter

- **<u>Commscope</u>**:   Wifi Gateway with ZW and ZB / Matter

- **<u>Sercomm</u>**:   Wifi Gateway with ZW / ZB

- **<u>Arcadyan</u>**:   Wifi Ext with ZW / ZB

- **<u>Sagemcom</u>**:   Gateway with ZW / ZB

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ODM Testimonials / Examples

- **Placeholder for Technicolor video testimonial – 2 minute video**

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Questions & Answers

Q & A – Live Video of Moderators

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Thank You:

- **For independent meetings / consultation:**

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