

## Digital Transformation Business Case

Software Engineering, Course 2021-2022

Given the next business cases:

**Owner: Michelin Solutions**

Using IoT to extend the traditional business model and provide a more holistic mobility experience for customers

**Key facts**

- Michelin is a global player in mobility and one of the leading tyre manufacturers across the globe.
- Michelin has 107,000 employees and achieved revenues of €21 billion for period ending TTM 6/15 and an EBITDA of €3.4 billion; margins have increased from 13.8% in 2011 to 16.6% TTM 6/15.
- EFFIFUEL™ by Michelin Solutions was the first innovation in the market targeting increased efficiency in fleet fuel consumption.

**Uniqueness**

- Michelin Solutions makes a contractual agreement to meet pre-defined targets, or otherwise provides a refund in proportion to expenses incurred.
- EFFIFUEL™ is a comprehensive ecosystem that includes sophisticated telematics, training in eco-driving techniques and the EFFITIRES™ optimized tyre management system.
- EFFIFUEL™ provides a “satisfaction or your money back guarantee” by providing the fuel efficiency service risk-free to truckers.

**Value**

- EFFIFUEL™ encourages careful handling of the truck equipment, leading to extra savings for companies and a potential doubling of pervehicle profits.

- A reduction in fuel consumption of 2.5 litres per 100km represents annual savings of €3,200 for long-haul transport (at least 2.1% reduction in total cost of ownership and 8 tonnes in CO2 emissions).
- Business model shift from selling tyre as a product to a service guaranteeing performance, has helped Michelin achieve higher customer satisfaction, increased loyalty and raised EBITDA margins.

### **Approach**

- Michelin initiated the digital transformation internally, but they soon realized that in some critical areas, such as big data analytics or infrastructure they needed to partner with external experts.
- Cultural change was another prerequisite to successfully manage the digital transformation journey.
- The risk of changing the business model was mitigated since Michelin Solutions was created as a standalone entity and the company decided to test the solution by launching several pilots.

### **Owner: Spotify**

## **Extending the touchpoints and avenues by which users can stream music**

### **Key facts**

- In the entertainment space, Spotify has become a pioneering example of an atomized service, achieving ubiquity by enabling access through multiple third-party touch-points (e.g. Sonos, Ford, iOS, Android and Samsung Smart TVs).
- The company has released Software Development Kits (SDKs) for iOS and Android developers and more recently launched the Spotify + Uber integration, allowing users to remotely control music in enabled Uber rides.

### **Uniqueness**

- Spotify is extending the touchpoints and avenues by which users can stream music through their service by collaborating across sound system, home and auto entertainment providers.
- Spotify Connect sets up a connection between Hi-Fi and Wi-Fi – allowing streaming directly via Spotify and not via a user's phone (which instead can serve as a remote and remain free to use for other activities).

## Value

- Spotify is valued at over \$10 billion.
- Services 50 million users, with over 12.5 million paying subscribers.
- Approximately 30% of revenue is retained by the company, while approximately 70% is split among rights holders.

## Approach

- Spotify has created connections with 30+ partners.
- Spotify utilizes a Freemium business model, with potential to drive conversions from new partnerships and platforms.
- In order to benefit from the interoperability that Spotify Connect offers, users must subscribe to Spotify Premium (\$9.99/mo)

1. Select one business case.
2. Identify and enumerate the main business goals
3. Identify and describe:
  - a. Stakeholders

Name	Description
Stakeholder 1	Description 1 (interactions, etc.)

### b. Subsystems

Name	Responsibilities
Subsystem	-Responsibility 1

4. Create an initial set of business requirements (3).

ID	Title	Type	Source	Derived from
1	The <ENTITY> shall <action>...			
2				

5. Create an initial set of stakeholder requirements (3).
  - a. Check that this set can be derived from the business requirements.
6. (Optional) Create an initial set of system requirements (3).
  - a. Check that this set can be derived from the stakeholder requirements.
  - b. Can you distinguish between functional and non-functional requirements?