Digital Transformation Report

**Recommendation part:**

* Recommendations about how **Vodafone** can make use of three emerging technologies to transform its current operations. Recommendation should be imbedded in an **implementation plan**, which will outline the details of the **implementation and adoption** of these three emerging technologies (e.g. 5G)
* **Potential impact (e.g., reduction of costs, streamlining processes, improving customer service)** of these technologies in the chosen organizational context. Furthermore, an implementation plan digital transformation should be proposed **based on the roadmap for digital transformation.**

Related Resources:

* Wikipedia: <https://en.wikipedia.org/wiki/5G>
* <https://www.qualcomm.com/invention/5g/what-is-5g>
* <https://www.vodafone.com.au/support/network/5g>
* <https://www.vodafone.com/what-we-do/technology/5g>
* <https://www.huawei.com/en/about-huawei/publications/communicate/87/roadmap-for-operators-in-5g-and-cloud-era>
* <https://inform.tmforum.org/insights/2018/07/delivering-5g-digital-transformation/>
* <https://ec.europa.eu/digital-single-market/en/blogposts/5g-olympics>
* <https://www.zdnet.com/article/new-5g-business-models/>
* <https://www.ericsson.com/en/5g/5g-for-consumers>
* <https://www.mca.org.mt/sites/default/files/5G%20discussion%20paper%20and%20survey.pdf>

Papers:

1. 5G roadmap: 10 key enabling technologies: <https://www.sciencedirect.com/science/article/abs/pii/S1389128616301918>
2. How disruptive is 5G: <https://www.sciencedirect.com/science/article/abs/pii/S0308596118301654>
3. Impact of 5G Technologies on Industry 4.0: <https://link.springer.com/article/10.1007/s11277-018-5615-7>
4. A Review on 5G Technology: <http://foresight.ifmo.ru/ict/shared/files/201310/1_42.pdf>
5. Technologies for 5G Networks: Challenges and Opportunities: <https://ieeexplore.ieee.org/abstract/document/7839836>
6. 5G key technologies: Identifying innovation opportunity: <https://ieeexplore.ieee.org/abstract/document/6632571>
7. An academic study of roadmap of 5G implementation in Indonesia: <https://ieeexplore.ieee.org/abstract/document/7871067>
8. 5G Business Models: <https://www.researchgate.net/publication/337221122_5G_Business_Models_Evolving_Mobile_Network_Operator_Roles_in_New_Ecosystems/citation/download>

Recommendation about 5G for Vodafone (750 words):

* 5G Intro, Background and related technology (250)
* Impact on the telecommunication industry and response of the users (100)
* Implementation plan based on roadmap for digital transformation (400)
  + Sketch of the business model, value chain and actors, customer requirements
  + Set objectives and prioritize business model dimensions
  + Design of the business model, best practices, digital transformation enablers
  + Evaluation of customer requirement and objectives, digitally fit?
  + Finalize and implement business model

Recommendation about AI for Vodafone (350 words):

* AI Intro, related technology (100)
* AI in telecommunication and Vodafone organizational context (150)
* Impact on the telecommunication industry (100)

5G presents new opportunities for telecom operators. The introduction of the new technology can improve their current consumer business and enable them to address new value chains and revenue streams in the digitalization of industries. With the deployment of the first commercial 5G networks rapidly approaching the time is now to design the 5G business strategy.

Mobile broadband is the first use case for 5G. Addressing rapid growth in data traffic and higher consumer expectations, the introduction of 5G will bring more efficient networks with increased capacity and improved customer experience. Our economic study of enhanced mobile broadband shows that evolution to 5G will enable 10 times lower cost per gigabyte than current 4G networks.

5G also presents an opportunity for operators to tap into revenue streams emerging from the digitalization of industries. Enabling new use cases, new services new business models and new eco-system, operators can benefit from up to USD 619 billion market opportunity globally in 2026, based on Ericsson’s report The 5G business potential, representing potential of additional up to 36 percent growth in revenues.