Industriell Digitalisering eksamen

1

a) A solution to improve the customer and stakeholder experience could be to have a real time track of where the goods are on the route from shipping to delivery. This combined with optimized delivery routes for faster delivery would enhance efficiency of the company operations.
b) There would be easier to keep track of goods by utilizing a bar-code scanning system and wireless networks. This is not a “very new” technology, but it is constantly improving.
c) My role as a CIO within UPS is to be responsible for managing the process of innovation. I would be originating new ideas and recognize innovative ideas made by other people.
d) I would tell HR what skills are required by a person to bridge this gap and have them look for a suitable employee that either already exist in the organization, or to advertise a position for this job.
e) By optimizing delivery routes for UPS there would be less up time for delivery cars and ships, and that would lead to less Co2 pollution. This would positively impact the SDG of climate action.

2

a) A digital solution to this could be a 3D virtual reality lab. This way students can be in a safe place and still have the ability to ask questions and see demonstrations in real time during an online lecture.
b) To enhance credibility and fairness during home exam you could have the exam be taken in a lockdown browser. This prevents the user to open any other web pages on their computer than the one with the exam.
c) The remote desktop technology could help to develop this solution.
d) There are a lot of challenges when it comes to online learning. Some of these issues are technical issues, adaptability, distraction, self-motivation etc.
e) My digital transformation solution could positively impact the SDG on quality education, this by despite having a pandemic the schools can still offer quality lectures via the internet.

3

a) A solution to mitigate healthcare personnel staffing shortage could be to increase the use of AI screening. This is a system that hospitals have adopted, which have automated voice systems and chatbots to screen patients and reduce the amounts of patients for support staff.
b) As mentioned in "a)", there will be used Artificial Intelligence (AI) to accelerate this transformation.
c) An advantage of implementing this solution to the cloud is that you would store all the data of all patients in one place. A disadvantage of having all this information in a cloud would be that internet failure could be devastating if a doctor needs some information of a patient to be able to help him/her, and the internet fails. The four different cloud models are: public cloud, private cloud, hybrid cloud and multicloud.
d) A solution to this problem could be to set up charity actions. This would help finance these kinds of projects.
e) The digital transformation will positively impact the SDG on good health and well-being. This by being able to help more people without being short staffed.

4

a) Offensive strategy: The offensive strategy is a corporate strategy type, which consists of trying to actively pursue challenges within the industry. Offensive competitive companies tend to heavily invest in technology, research and development to stay ahead of competition. An example of a company using this type of marketing strategy is that they might target an established industry leader's shaky product safety record while emphasizing its own products safety.

   Defensive strategy: this type of strategy uses management tool that can be used to prevent or fend off attacks from a competitor or potential competitor. This can be compared to a battleground, where you have to protect your share of the market to keep your profits stable and to keep your customers pleased. To defend your business strategy you have to know which market you are best equipped to operate in, and to know when its smart to enter new markets. An example of this defensive marketing

strategy is that the established company reinforce the customer confidence in their products to minimize the space or completely shutting off the space for new companies.

b) Telehealth is an example of digital technology that has been sped up by covid. Before the pandemic the adaptation was low, but because of the immense pressure of patients needing care because of covid, this technology was widely adopted to help reduce the spread of the virus.

c) Technical debt is defined by the cost of additional rework caused by choosing an easy and often limited solution and implementing that right away, instead of using more time to find a better solution that could stick for a longer period of time. Contrary to monetary debt, technical debt doesn't need to be a bad thing but is sometimes needed to move a project forward.

d) Some of the leading indicators of failure in industrial digital transformation is: lack of top-down support, lack of ITD strategy, inward focus rather than industry sector trends and customer's perspective and too much focus on technology rather than cultural shift.

e) Lights-out manufacturing is when an entire production line is fully automated and the only purpose of the people in the factory is for maintenance or repair. Lights-out manufacturing would make the process more cost efficient, and it would also speed up production.