Consider the following case scenario:

There are global problems in the supply chain for getting the necessary parts to manufacture and sell digital devices (e.g., computers, notebooks, smartphones).

One organization called "DeviceAssembly" procures various parts and assembles digital devices. The organization "DeviceAssembly" wishes to digitize many of the documents it shares with its external partners, including orders, payments, invoices, and delivery tracking. "DeviceAssembly" also wishes to automate the many document transmissions related to its supply chain.

As a result, "DeviceAssembly" joined forces with multiple organizations along the supply chain to set up a network called "SupplyNET". The network aims to improve the vertical communication along the supply chain for manufacturing and selling digital devices. Instead of paper-based communication, the participating organizations plan to roll out an interorganizational information system "CommSYS". The participating organizations hope that "CommSYS" will improve control functions and operational efficiency.

At the time of the case, however, the network "SupplyNET" remains plagued with slow progress, low levels of automation, a proliferation of incompatible data standards, and many independent players. All of these factors complicate the digitization efforts. "DeviceAssembly" and "SupplyNET" must make several important decisions related to system implementation and rollout of "CommSYS" to keep everything on track and not lose the commitment of the participating organizations.

You are an independent consultant, integration, and network expert, providing advice to "SupplyNET" and "DeviceAssembly" on managing the network, the organization, and the rollout of "CommSYS".

Question 1 0.5 pts:

Due to slow progress and increasing costs, some participating organizations want to rescind their commitment to "SupplyNET" and "CommSYS". Please elaborate on how you can convince these participating organizations to remain committed to "CommSYS".

Question 2 0.5 pts

Both "SupplyNET" and "DeviceAssembly" require explicit management to make the network activities successful. Which approach to management is suitable to manage "SupplyNET", and which approach to management is suitable to manage the network activities of "DeviceAssembly"? Please elaborate on the purpose and goals of each approach.

Question 3 1 pts

Provan and Kenis (2008) outline various network governance models. Assume that "DeviceAssembly" is the facilitator of "SupplyNET" and the largest participating

organization. "DeviceAssembly" has a lot of buyer power in the supply chain. Which network governance model is likely to occur? Please explain the governance model and your reason why that model is likely to occur.
Question 4 1 pts Many times during BPIL lectures the concepts of a centralized approach (e.g. Hub, Control Tower) and decentralized (federative) approach were discussed.
a. What are the drawbacks of both architecture approaches?
b. What might be characteristics that define the choice between both?
Question 5 1 pts In the guest lecture of prof. Christopher Brewster, the Ploutos approach was presented. a. Can you explain what problem is addressed by the Ploutos approach?
b. Can you explain how the Ploutos approach should work?
Question 6 1 pts What is Data Sovereignty and why is it important?
Question 7 1 pts In the course the International Data Spaces approach was presented. In that context: a. What is a data delivery contract?
b. Why is it important to data publishers?

c. And what is the difference with a SLA?
Question 8 1 pts About Linked Data: a. What is most complicated for <i>publishing</i> Linked Data (name 2 issues)?
b. What is most complicated when <i>using</i> Linked Data (name 2 issues)?
Question 9 1 pts About Knowledge Graphs: a. What are the most important reasons for <i>data publishers</i> to use knowledge graphs?
b. Name 2 potential use cases for knowledge graphs in supply chains.
Question 10 1 pts About Solid:
a. What is the problem with current (personal) data sharing on the Internet? And what is the parallel with current data sharing paradigms in supply chain?
b. How will Solid solve this in supply chains?