**Instructions**

This activity presents a case study of a 3D printer and printer cartridge company called 3DMall (fictitious). 3DMall has a patent on proprietary 3D printing technology and has decided to sell these novel user-friendly 3D printers and cartridges to consumers. The unique benefit to using 3DMall printers is that consumers do not have to design their own products by using complex scanning and design programs which require a certain level of technological expertise. Instead, they can choose to immediately print ready-made designs they find on 3DMall’s online store.

The designs in 3DMall’s store are provided by third-party organizations who submit these to 3DMall for sale. 3DMall hosts these designs, and consumers can browse and purchase them via the app or 3DMall’s store website. When a consumer purchases a design through the 3DMall store, they are purchasing a one-time use design from a third-party and using it to print the item immediately using their own printer. 3DMall receives a percentage of every purchase made in the store. Once a consumer has purchased a design and uses it, the design automatically deletes itself from their printer.

* Read the case study below and answer the multiple choice questions.
* At the end of the activity, the instructor will review the steps of the activity and share the correct answers for each question.
* This case study will be revisited in later activities.

**Case Study Information**

3DMall decides it needs to more closely integrate its headquarters and distribution centers with its manufacturers, suppliers, third-party design providers, and retailers. After numerous meetings with the involved parties, they decide to run a project to integrate all supply chain participants so they all have information on actual demand as well as actual supply and capacity. Part of this effort will be to produce an extranet site that publishes reports on what designs are being printed by region and the resulting printer cartridge demand forecasts. Also envisioned is a customer relationship management portal that collects customer feedback and design requests as well as other information on customer requirements.

The first tier suppliers and the manufacturer in Thailand as well as the new manufacturers in Mexico and Turkey all have ERP systems. Therefore the first project will be to develop an advance planning and scheduling (APS) system to link these ERP systems with the organization’s ERP system at its headquarters and distribution network. Part of this project will also implement a supply chain event management (SCEM) system to provide retail sales data up the supply chain in real time to enable the push-pull frontier to be moved back to the Mexico and Turkey printer plants and, for items with short lead times, back to suppliers. One key goal of the project will be to improve available-to-promise (ATP) and capable-to-promise (CTP) information to customer service when working with retailers. The Thailand cartridge plant will also integrate but the customer demand information will primarily be used to improve their make-to-stock forecasts and make medium-term adjustments to the production schedule. Finally, the organization plans on implementing a cloud-based software-as-a-service version of a customer relationship management (CRM) system to enable all partners to contribute to and share customer requirements and interactions despite having different ERP systems.

To facilitate involvement, the organization forms an executive team with executives from the other organizations as well as a number of other teams such as a technology team, inventory team, and delivery team. These teams have representatives from the various organizations. They also decide to contract with a project management firm to acquire a project manager as a consultant to ensure he or she has significant experience in cross-organizational technology projects. The organizations agree to share the project funding in a fair way and sign off on a project charter committing to a high-level timeline and budget, which includes commitments to devote sufficient internal staff from each organization to the project.

Once you have answered all of the questions, click the **Summary** button at the bottom of the screen to view your final score and complete this activity.