## Week 6: Boundaries create scope and opportunities for business modelling.

### Why do business models focus on infrastructures and processes?

### A business infrastructure is the combination of how the business is structured and the internal, documented processes. One of the most important aspect for a business is profit. To maximize it, they must strive to optimize the internal operation and increase the efficiency of communication between departments. These objectives can be achieved with a well-designed infrastructure and streamlined processes. Furthermore, it can helps business scaling to be more efficient without sacrificing on many aspects, provides better consistency to both business management and customer experience. Good infrastructures can helps with risk management, and streamlined processes will help to resolve the situations when those risks become reality more effortlessly. And last but not least, it also provides confidence for business to innovate faster and respond more quickly to market demands, giving it an edge to the competition.

### How can you become an Influencer for a social network business model?

### Social network, as the name implies, focuses heavily on connection and interaction between people. In this modern day and age, Internet has been helping to expand this network to reach almost every corner of the world. For businesses, online social network is a great way to increase brand exposure and lessen the gap with the customers.

### To become an influencer for a social network business model, the first and most important task is to have a brand account on as many major social network platform as possible. This helps your brand to reach more groups of customers and to be more flexible on types of content to produce, since each platform will focus on one or a few forms of content. After the initial step, you should push hard on producing marketing materials and content in as many formats as possible (blog posts, short-form/meme posts, long-form videos, short videos, etc.). This will boost brand exposure and increase the chance of going viral, creating a short-term trend. Lastly, you need to encourage customer interaction with call-to-actions (like share, follow, like, comment, etc.) and replying to users’ comments. Comments are very valuables since they are direct feedback and reviews provided by the customers, and sharing is a form of indirect, free brand advertisement.

**Week 7:** Modelling for Business Process Improvement is a critical task for service system design and improvement.

**Describe how Business Process Improvement methods work.**

Models built with ArchiMate can have three layers: *Business, Technology, Application*; and three aspects: *Active, Passive, Behavioural*.

The Business layer can include departments whose role related to money, law, resource, management, strategy and operation. Meanwhile, the Technology layer can include departments and components that helps to provide communication and means to work with data to aid the Business layer to be more interconnected and improve efficiency. Lastly, the Application layer helps to present the data and provide interaction between the Business and Technology layer. As we can see, these three layers represents the real world structure of an enterprise system.

Within each layer, there are three aspects. The Active aspects includes things that will be processed. The Passive aspects includes things that are more static, like processed data. The Behavioural aspect includes actions that will be done within the layer.

**What should your models show to assure business value realization?**

Enterprise Architects are people who are responsible for:

* Analyze, design and validate changes to the architecture following the principles and needs of the enterprise.
* Provide consultancy on architecture and solution design for departments within the enterprise.
* Formulating and enhancing the strategies of the enterprise.

In short, they are the people who proposes the overall structure and process of an enterprise to match its needs.

## Week 8: There are many standard services frameworks that act as service reference models.

### Why are these models so complex and confusing?

Most business will have many employees from many departments interacting with its data. This requires the business to have a server to serve and collect the data from its employee. However, owning a server (or cluster of servers) can be very costly, both to acquire and maintain them. The cost and complexity will also scale up for large and international corporations. Therefore, instead of owning servers, business can rent them from third parties that provide the necessary services. This helps the business to save money on many aspects: infrastructure, human resource, R&D, maintenance, and more. It can also save money if the business provides laptops and/or workstations for their employees as they don’t need to need as much overhead specification-wise, since most processing power and data will be provided by the server.

**How is ITIL used to assure technology services satisfy a customer?**

The three layers of Cloud services are: SaaS, PaaS and IaaS. For a better visualization, let’s use one of the more popular MMO game titles – *World of Tanks*, as an example.

**SaaS**: *World of Tanks* has a large user-base and an active online community forum. The publisher, *Wargaming*, doesn’t need to build this by their own. Instead, they can build one on top of a forum framework. This help them to save time and resources by avoiding the need to develop and maintain the software themselves.

**PaaS**: The game also provide ways to sign up and login with third-party authentication methods. This can be achieved by using the APIs provided by third-party to link with the user’s account, help them to access their account with ease and flexibility. The account link can also provide additional benefits for the user: for example, when linked with a *Twitch* account, user can receive rewards for joining the publisher’s official livestreams on the platform. This helps to improve the user experience, thus improve the business’ reputation.

**IaaS**: Since *World of Tanks* is a globally available game, they must have many physical servers and data centers around the world to reduce the latency and spread out the computational load. Instead of investing in these themselves, they can instead rent the required infrastructure and lower the cost of acquiring and maintain them.

## Week 9: Standardized modelling of services assures consistency and interoperability of service systems.

### Describe how TOGAF models management requirements.

NVivo 12 is a general purpose modelling software, one of which is service modelling. One of the key feature of NVivo compare to other service modelling tool is that it can handle large-scale and high complexity project, both process-wise and data-wise. NVivo divides a project into multiple areas, the main ones are *Data* *Codes* and *Maps*. *Data* is where all of the data related to the project and its metadata is stored. The files that hold the data are stored in *Files* and can be in many types: image, video, audio, text, numerical, dataset. Meanwhile, the metadata for data files are stored in *File Classification*, each can hold multiple attributes. Inside *Codes* area, *Node*s folder stored nodes, which represents the componenets, aspects or processes in our system. Each of these node can hold multiple related files and references, and they can also have child nodes. Finally, *Maps* area is where user can construct the models of relationships between the nodes can be visualized. User can also add notes and descriptions inside a preset of shapes within the map.

### When and how are project management models used to improve services?

NVivo focuses more on modelling a structure or relationships between components with complex data within a system, while ArchiMate focuses on the architecture and process of a system.

NVivo has a very robust support data organizing and processing. For example, it has built-in tools to change audio playback speed and generate transcription. This make NVivo suitable for researchers, or people who needs to structuralize a large set of data in/for their projects.

ArchiMate provides complete set of tools, shapes and connections to model a business structure as layers and aspects. This make ArchiMate suitable for enterprise architects, or people who needs to model the structure of a business, whether its an overview or detailed analytic.

## Week 10: INFS604 has four Learning Outcomes. Go to the Descriptor in Canvas and say how you have achieved each.

## ArchiMate Model

