Module 3 deals with Process Models, specifically data flow diagrams, which are useful because they allow an analysis, “…of how data [flows] through an information system…relationships of the data flows… [and] the processes that change or transform data.” (Valacish and George, 2019)

Process models also help to, “…to define the scope of a project…[or] for data discovery and validation.” (Persons with Knowledge, 2022)

Because knowing the scope, relational complexity of the objects and entities, and how to validate the design are at the crux of a correct design, process models become important tools in this process.

Of the four guidelines to drawing DFDs laid out within the text I would consider iteration or an iterative approach to decomposition the most important factor. There are 16 rules to follow when constructing a DFD and the chances of getting all 16 correct in the first draft are low. Moreover, getting a correct understanding of the physical work steps carried out represented in the DFD on the first draft is also low. Therefore, if we value correctness, iterating multiple times to elucidate any errors in construction or understanding would be the way to prevent violations of the 3 other guidelines.

The decomposition of the Project One process would have the following:

* Sources
  + DrivePass Interview
  + Lucid Chart Tutorial
  + APA Guide
  + Modern System Design
* Sinks
  + Business Requirements Document
  + Model Application Short Paper
* Processes
  + Create Non-Functional Requirements
  + Create Functional Requirements
  + Compare Model Approaches
  + Create Gantt Chart

The Interview source would flow to the Functional and Non-Functional and Gantt Chart processes. The Modern System Design source would flow to both requirement processes and the Compare Model Approaches processes. The requirement processes and the Gantt Chart process flow into the Business Requirements Document. The Compare Model Approaches process flows into the short paper sink.

Valacich J. S., & George J. F. (2019). *Modern systems analysis and design*. [MBS Direct]. Retrieved from https://mbsdirect.vitalsource.com/#/books/9780135172841/

Persons With Knowledge. (2022). *Strap section 3 process models*. Retrieved March 16, 2022, from https://irp.fas.org/doddir/army/strap/strpsec3.htm

**Responses**

**1**

I wrote that iteration is the most important guideline. The book suggests that getting the decomposition correct takes time. Moreover, the book also suggests that having the DFD be unbalanced upon further decomposition is deleterious to the overall process  - again suggesting that accuracy/correctness is of the utmost importance.

In your decomposition I did not notice your sources and sinks. I had suggested the following sources/sinks:

* Sources
  + DrivePass Interview
  + Lucid Chart Tutorial
  + APA Guide
  + Modern System Design
* Sinks
  + Business Requirements Document
  + Model Application Short Paper

I forgot add the process of turning project one in on my decomposition! Which would be very unfortunate - so this seems like a very good and important process.

**2**

I agree that iteration is the most important guideline. Even the book says that getting the decomposition correct takes time. Moreover, the book also suggests that having the DFD be unbalanced upon further decomposition is deleterious to the overall process  - again suggesting that accuracy/correctness is of the utmost importance.   
  
In your decomposition I did not notice your sources and sinks. I had suggested the following sources/sinks:

* Sources
  + DrivePass Interview
  + Lucid Chart Tutorial
  + APA Guide
  + Modern System Design
* Sinks
  + Business Requirements Document
  + Model Application Short Paper

I like your process of spell check. I did not include any mechanical parts of writing the paper, e.g., spell check, writing, editing, etc.