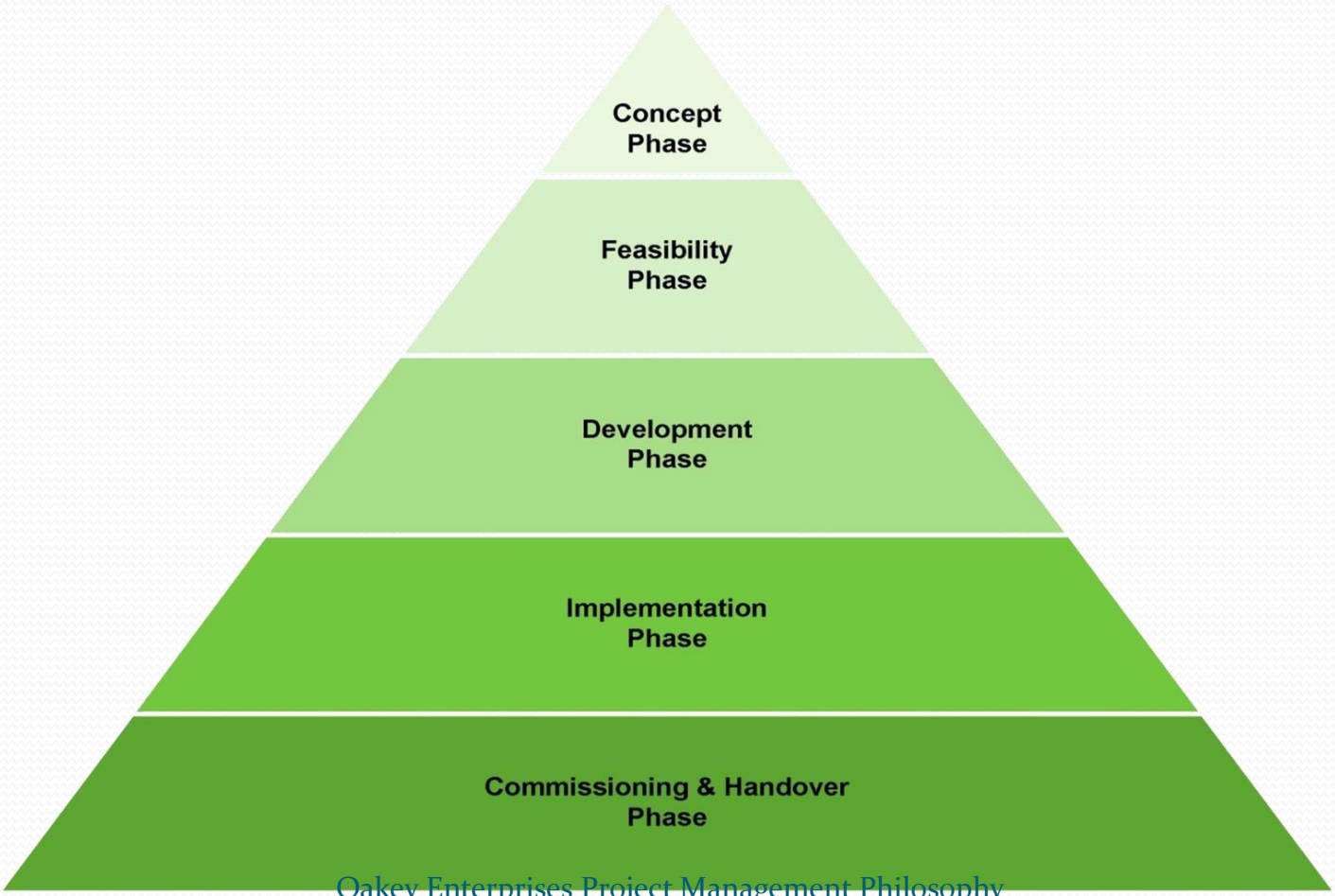
Product Development Phases

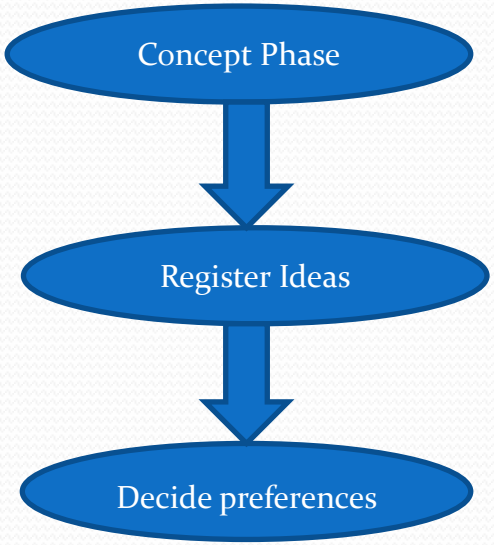
Mark Hall - January 2016

The Phases of Project Delivery



Concept Phase

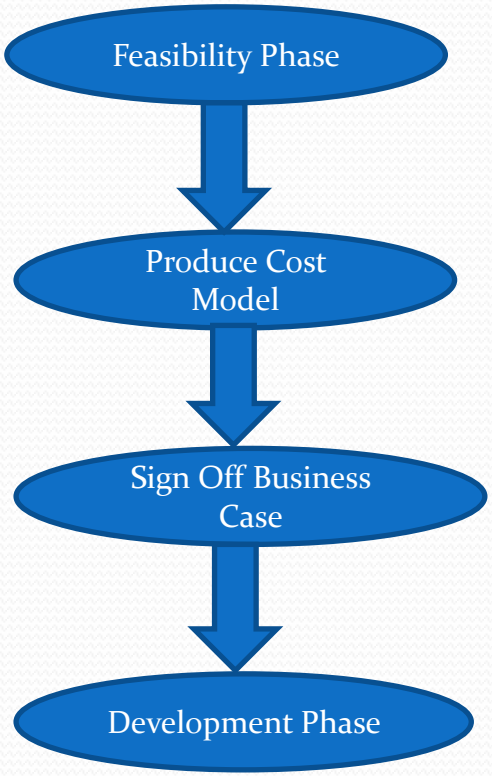
- A concept can come from anyone or anywhere, It is not the sole preserve of the designer, in fact the best ideas come from those not inhibited by thought.
- A concept is just what it says, and it is registered in general by a series of freehand sketches or drawing.
- This Phase is often supported with 3D Models that are used to demonstrate the concept and its functionality.
- A concept can often be called an A model, sometimes it only needs enhancing but on occasions it may need to be discarded and a B model is produced.
- Once the concept is registered then the process moves on to one of investigation into the proposals, this is called the Feasibility Phase.



Feasibility Phase

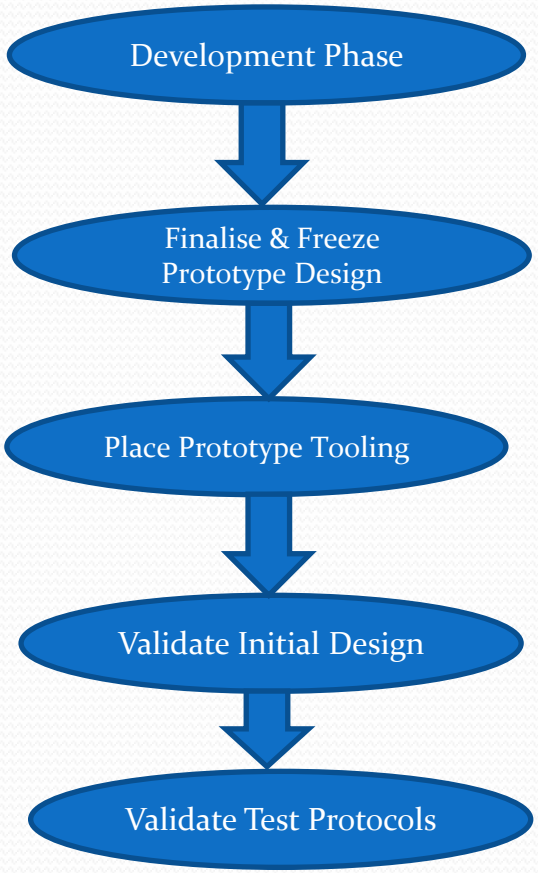
- The feasibility phase is where concept meets reality, or in other words can it be done effectively.
- The following items need to be addressed:
- 1. Specification of Product
- 2. Target Market
- 3. Target Volume
- 4. Target Price
- 5. Capital Investment Necessary
- 6. Marketing Strategy
- 7. Profit Line
- 8. Business Case

Once the feasibility phase is completed the design and development can progress.



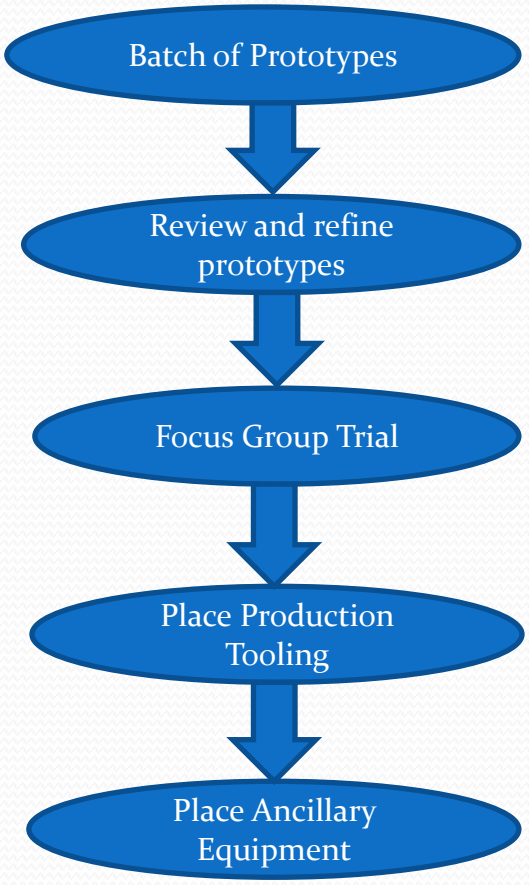
Development Phase

- This phase focuses on the detailed design of the product.
- All the elements are taken from the Concept and a Development exercise is undertaken to ensure a working solution is available.
- In many companies this is the stage when prototype tooling is first placed.
- This is the most important time in the development programme and the iterations during this phase are most important economically.
- The design is frozen at this point and a series of documents, specifications and test protocols developed.



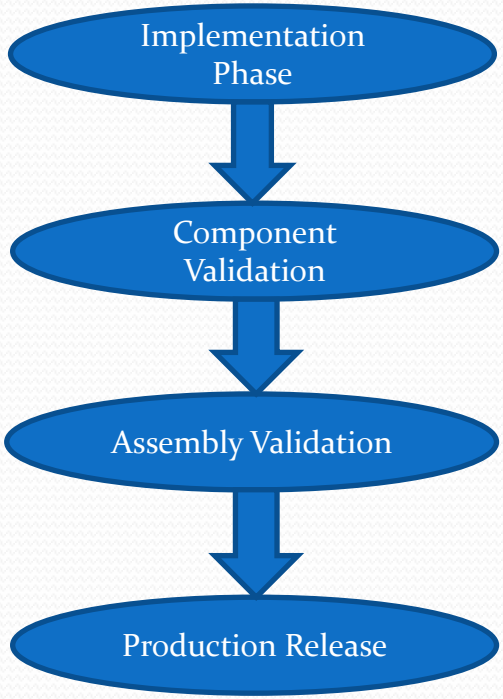
Development Phase cont'd

- A series of repeatable Prototypes are produced to verify the Concept and suitability for volume manufacture.
- The Concept is then proven and tested against its Protocols.
- On completion it is advisable to hold focus group discussions to engage the consumer review for both positive and negative feedback.
- The prototype tooling is often then refined in response to the focus group discussions.
- This period has a huge impact on delivering the higher cavitation solutions so it needs to be correct at this stage- no more room for error.
- The build of the production tooling can then commence in the knowledge that any changes should be minimal.



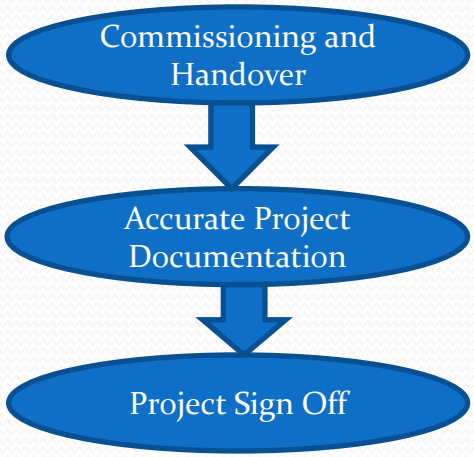
Implementation Phase

- This is when the industrialised solution is finally validated.
- Any multi impression tooling is a validated- this is called a Qualification Procedure.
- Each area has its own peculiarities so it is vital to have expert knowledge of each process.
- This is also the period when most money can be wasted if things are not quite right.
- It is therefore of utmost importance to ensure all the problems are solved in the early phases.
- The most likely source of error during this phase is non conformance of component parts.
- The product is ready to be released for production!



- # Commissioning & Handover

- Some Projects have a period where ownership of a project is in warranty and not fully signed off.
- This period is when people lose the ability to sign the documents that will pass ownership to them.
- Important that accurate Documentation is available to resolve disputes and finally close the project.
- These are eventually signed but this period can be protracted and dogged by every conceivable excuse.



Thank You for your Time Today

Mark Hall