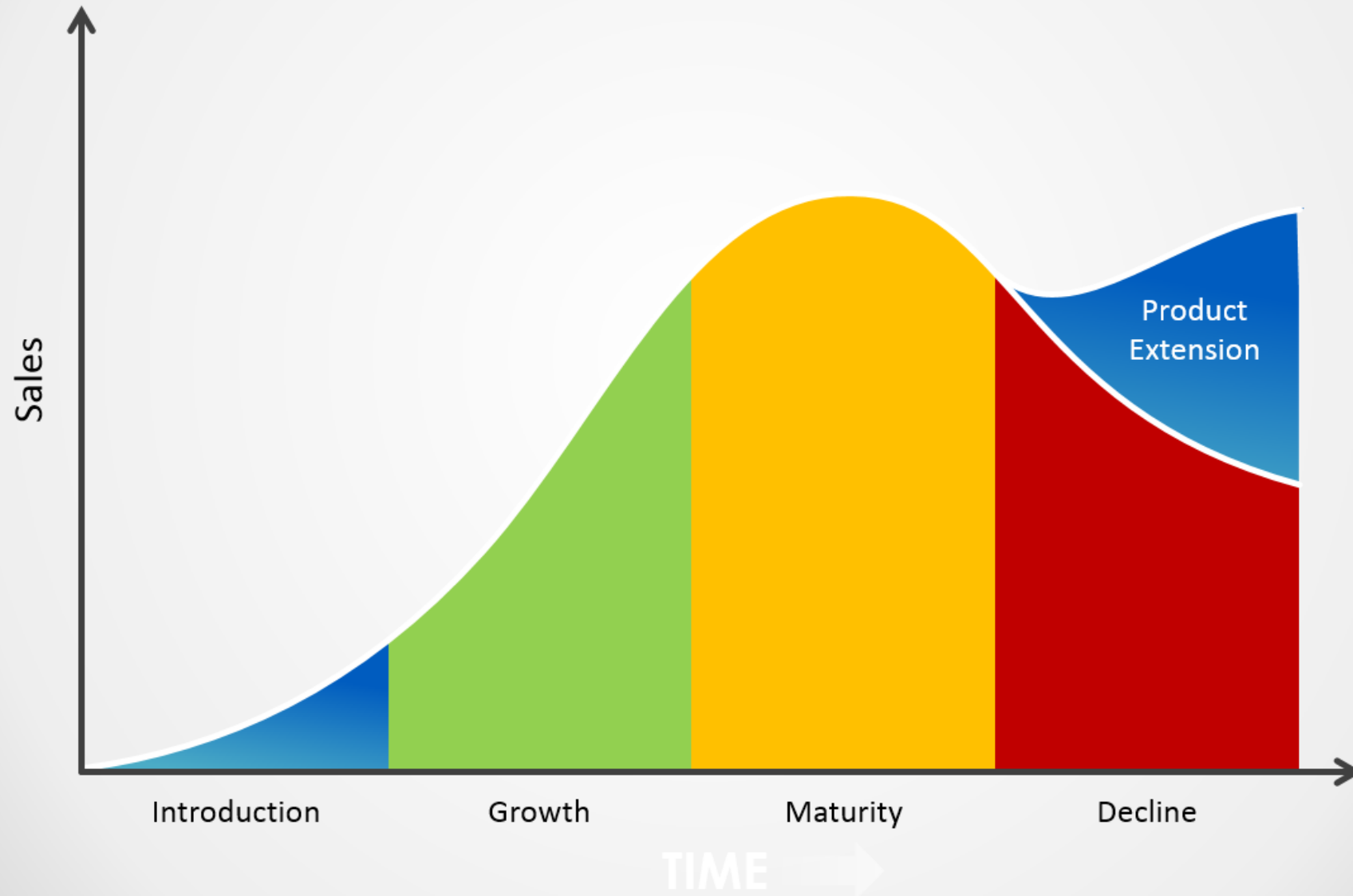


Product Life Cycle Phases and WBS

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Product Life Cycle Template



Introduction Phase

- ▶ The introduction phase is when the public first sees or hears about a product.
- ▶ The product appears in stores for the first time, and people start seeing print and television ads. During this phase, a company may choose one of two pricing strategies.
- ▶ They may set prices high to recoup initial expenses that went into producing the product. For example, a mobile phone manufacturer with new technology may introduce mobiles 10 percent to 20 percent above the prices of most premium mobiles. They may price their phones higher because of the hype and anticipation of the new technology. The company also knows enough people will pay the extra 10 to 20 percent for it to earn substantial profits.
- ▶ Contrarily, the same company may introduce a mobile with basic features at reduced prices in hopes of gaining lots of new customers.

Growth Phase

- ▶ The growth phase is when sales and profits for the new product start rising. A company will usually keep product prices about the same during the growth stage to maximize earnings.
- ▶ Product quality is also maintained. However, a company will usually expand its product distribution during the growth stage.
- ▶ For example, a consumer-products company might start selling its organic cereal in new markets, based on positive marketing research from consumers. Eventually, the organic cereal will start appearing in stores across the country.
- ▶ Company marketers usually increase advertising during the growth phase, too, according to NetMBA.com.

Maturity Stage

- ▶ Success inevitably leads to increased competition.
- ▶ Other companies eventually will start introducing similar products, especially if the initial product is highly successful.
- ▶ Consequently, the demand for the product and its competitors will peak at some point. Sales growth will start to decline.
- ▶ Some companies may lower prices to capture additional market share or new customers.
- ▶ At this point, a company may need to develop new product features or services to differentiate its products from the competition's. For example, the company that first introduced the product may enhance its customer-service department to establish itself as the service leader in the industry.
- ▶ The company's stellar customer service may be the distinguishing element that spurs additional sales and customers. The company would then feature its superior customer service in most of its advertising.

Decline Stage

- ▶ Demand for the product will eventually wane as newer technologies are introduced. Hence, companies can either maintain the product, sell it at heavily reduced prices or discontinue the product.
- ▶ A company that maintains the product may continue increasing sales by finding new uses for the product. For example, a soap manufacturer may discover through marketing research that restaurants and industrial companies like the cleaning properties of its soap. Subsequently, the company would start selling its soap to both consumers and businesses. This strategy could help extend the life of the product.

Products and where
they fit.

Holographic Projection

video

DVD

iPad

Electric Car

Tablet

typewriter

Laptop

Betamax

Blue Ray

Cassette tape

3D TV

Plasma Screen

Video

CD

An example of the Product Lifecycle

This example shows how the yoghurt product category has moved through the product life cycle by remixing elements of the marketing mix. examples of stages and how PLC evolved:

Introduction

Yoghurt available in health food stores
Functional and plain packaging.
Promoted as a health food.

Growth

Yoghurt available in supermarket chiller cabinets.
Packaging gets a makeover.
New flavours introduced; Strawberry and Vanilla.

Maturity

Product re-invented with added fruit, added muesli, added chocolate!
Packaging changes into different shapes and sizes.
Promoted as a fun snack, luxury treat.

Decline

Not yet.

A tip is to review customer feedback continuously, to ensure your products don't reach the end of their shelf life,
carry out regular customer surveys. Get feedback and find out what works, what doesn't and why.

What to watch for

- ▶ If product sales are declining, you need to know why. Products move into decline due to improved offers from competitors, changes in behaviour or because there is no longer a need for the product.
- ▶ Across Morocco there are long-established 'Ecrivains Publics' or people who read your mail and write the responses. If the literacy levels in the country continue to improve (currently around 70%, from 60% ten years ago) this service will move into rapid decline.

The iPod in decline



Theory Challenged

- ▶ Many products have been around for generations, and show no signs of decline or death. Their survival is a function of keen attention to brand identity and equity. Companies that nurture consumers' impressions of the value the product delivers year after year can stave off indefinitely its demise.

Products That Defy the Theory

- ▶ A well-managed brand can live forever. American Express, Budweiser, Camel, Coca-Cola, thrive in their respective categories after years on the market. Even brands that have died can be reincarnated, though perhaps in more limited distribution.

Meeting the market window

- ▶ Engineers often have the product 'taken away from them' before they are 'finished'
- ▶ A fast, accurate, efficient, measured and well understood process for releasing a product is critical to company profitability.
- ▶ Design and Development
- ▶ Service Support Planning
- ▶ Manufacturing Process
- ▶ Present drawings, specifications, costings to team

Documentation

- ▶ Product Specification Document - goals for design, test
- ▶ Release of part documents - Manufacturing need these in lead time to produce the item. Once a drawing has been reviewed by the team and signed by the author and acceptor it should be released.
- ▶ Milestones imposed by management or customer as in below example:
- ▶ Definition(Baseline-Product Spec release)
- ▶ Development (Baseline-pre-release of prototype)
- ▶ Pilot (Baseline-release of product)
- ▶ Production
- ▶ Phase Out (Baseline-product obsolete)

Documentation

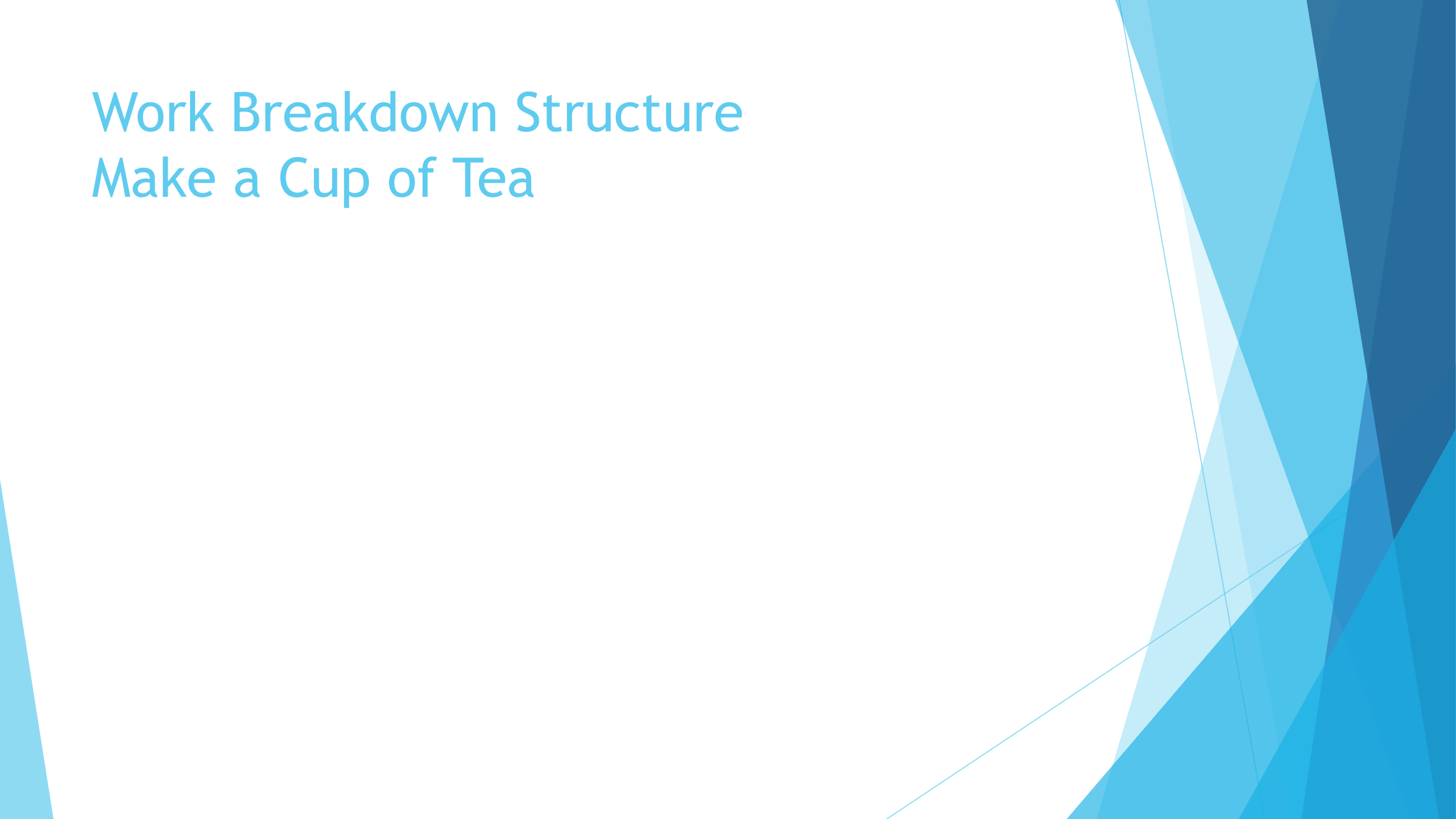
- ▶ Product lifecycle phases and baselines need to be defined and agreed upon. This is for reasons of clarity of communication and management expectation. Different companies may use different terminology. Defining terms removes communication barriers
- ▶ The phases should be limited to the fewest practical and applicable to whole company. Not just for one function
- ▶ Phases are established for New Product - not spin-off. New product release is the worst case. Phases can be skipped for the spin off.
- ▶ Phases determined at highest management level - critical
- ▶ Identifiable deliverables required to pass to next phase/ cross a baseline.

Documentation

- ▶ Product and document lifecycles
- ▶ Should be able to tell what phase a document is for
- ▶ Documents have revision control by date during product development.
- ▶ At pre-release the revision changes to numeric and the master drawing goes to the vault

Work Breakdown Structure

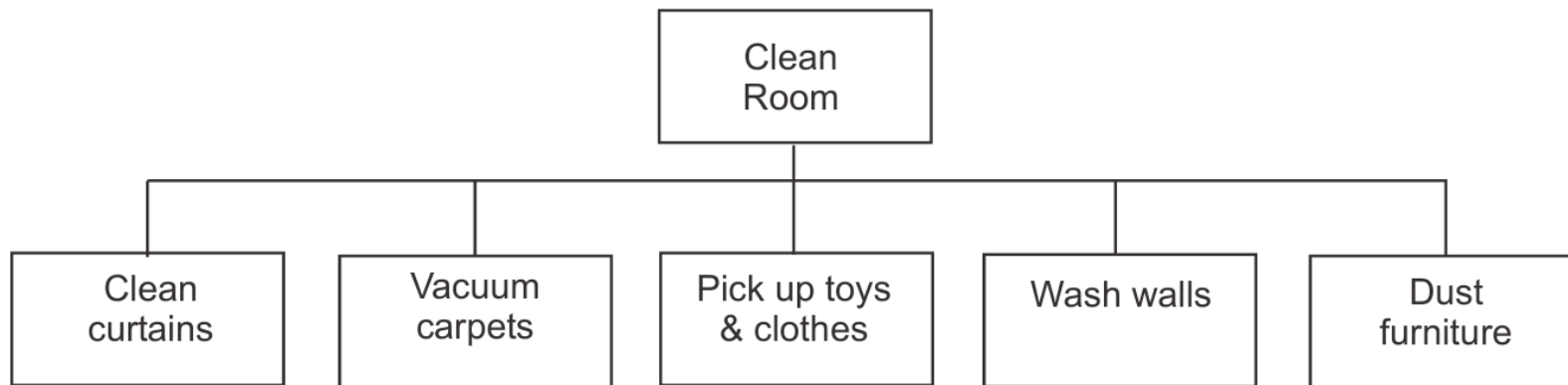
Make a Cup of Tea



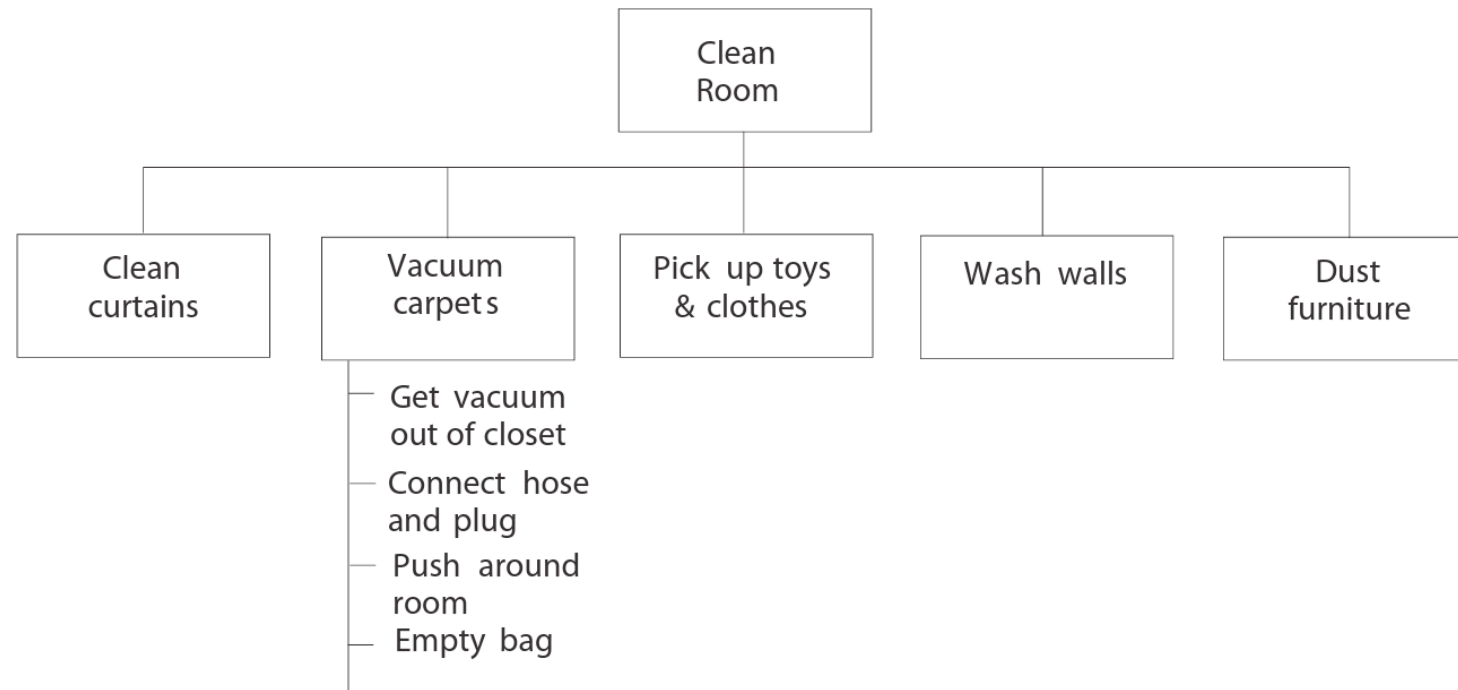
Clean A Room



Work Breakdown Structure

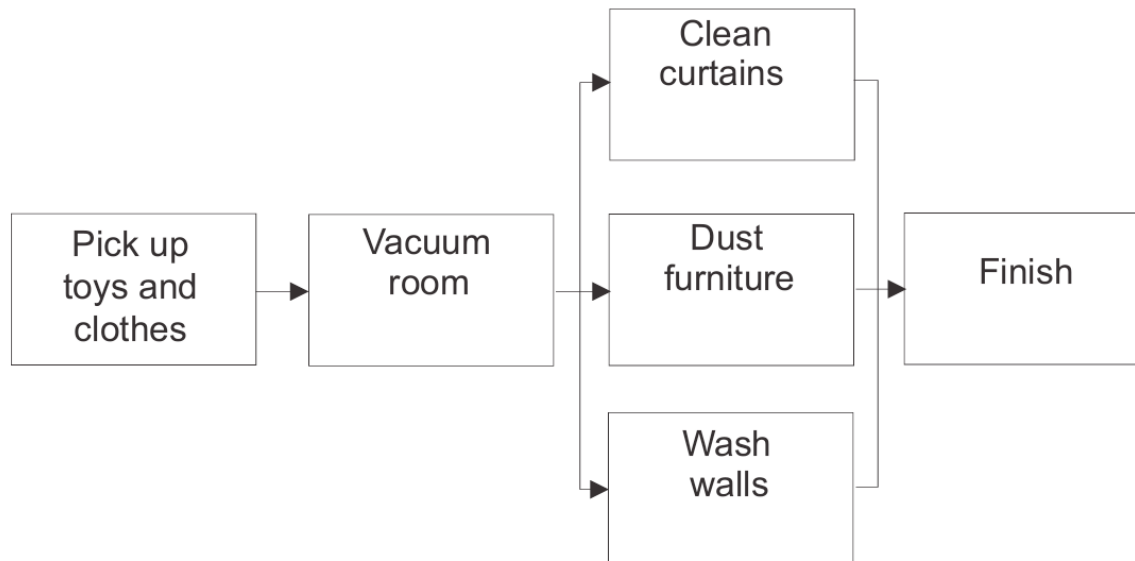


Add Sub-Task



Add the Sequence

Answer



Names of Levels

- ▶ Programme - Aeroplane
- ▶ Project- engine, wing
- ▶ Task - Design wing mounts, design engine mounts
- ▶ Subtask
- ▶ Work Package
- ▶ Level of effort -
- ▶ Coordinating wing and engine so they fit together is called system integration

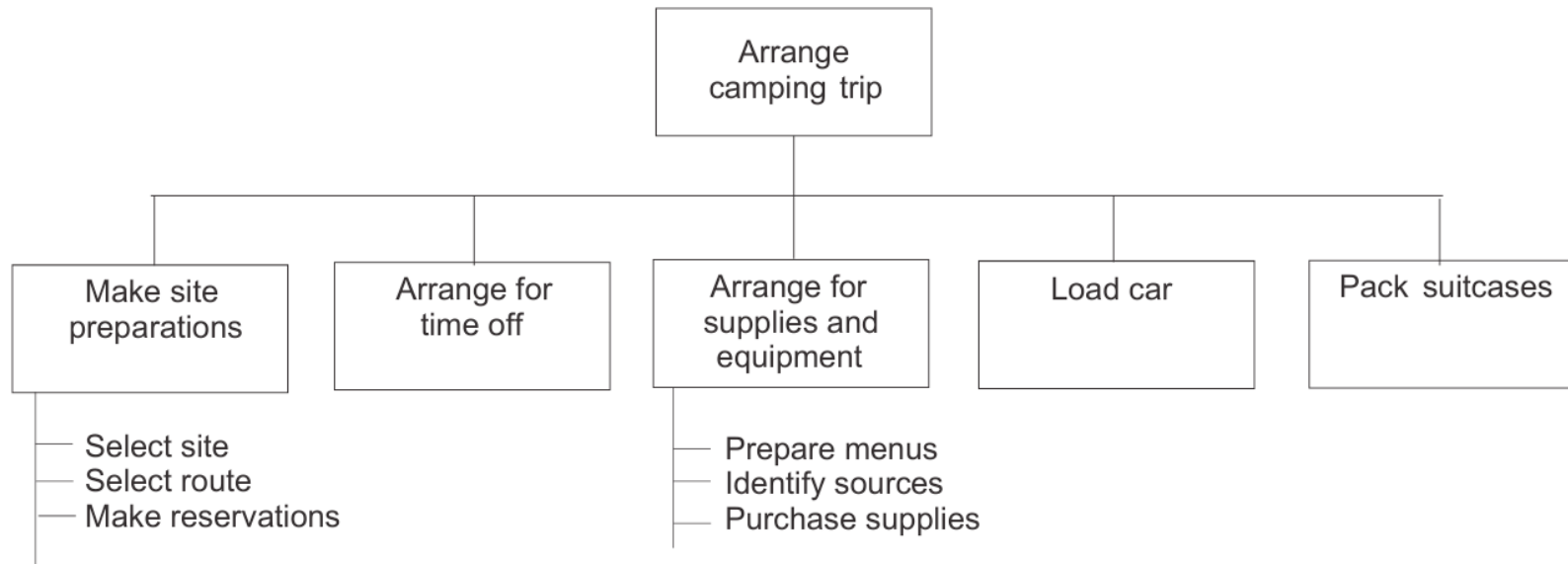
When do you stop breaking down the work?

- ▶ If you want to schedule to the nearest day then you stop when the amount of work in the tasks will take a day
- ▶ You don't need to breakdown all the tasks to the same level
- ▶ The people who will do the work should be involved in estimating how long the work will take
- ▶ The WBS should be developed before the schedule

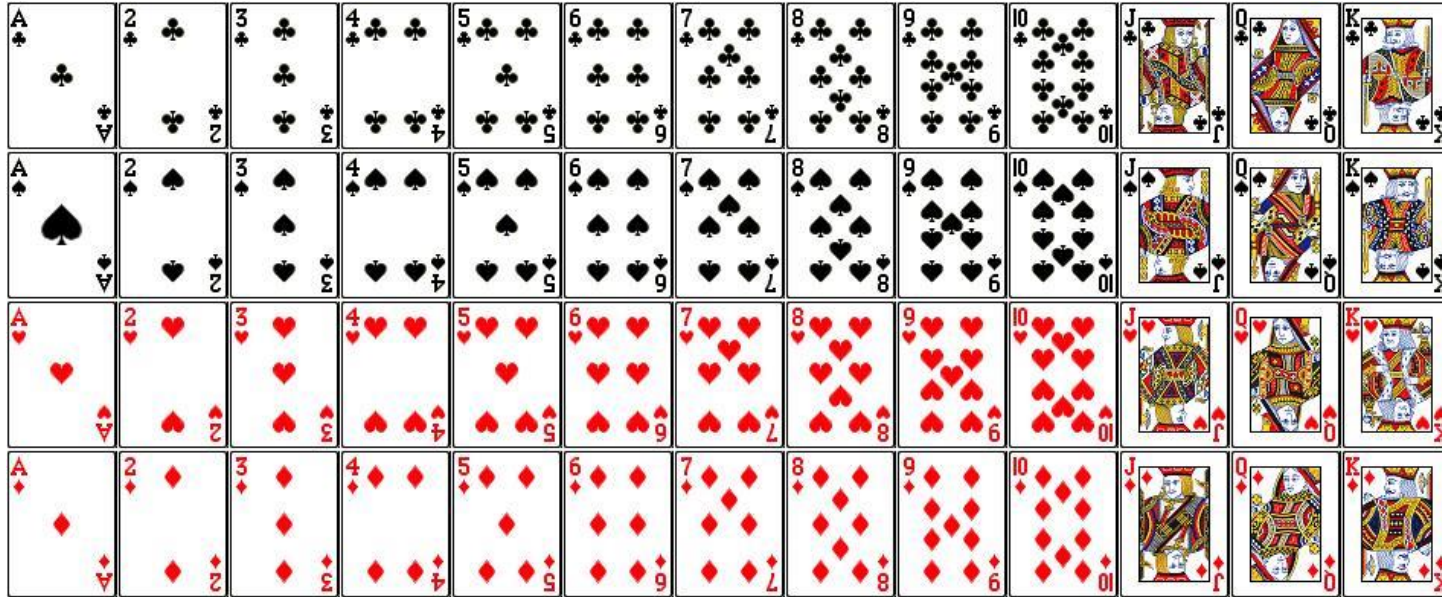
Question-Camping Trip

- ▶ Following is a list of tasks to be performed in preparation for a camping trip.
- ▶ Draw a WBS that places the tasks in their proper relationship to one another.
- ▶ Arrange for supplies and equipment.
- ▶ Select campsite.
- ▶ Make site preparations.
- ▶ Make site reservation.
- ▶ Arrange time off from work
- ▶ Select route to site.
- ▶ Prepare menu for meals.
- ▶ Identify source of supplies and equipment.
- ▶ Load car.
- ▶ Pack suitcases.
- ▶ Purchase supplies.
- ▶ Arrange camping trip (project).

Answer



Estimating Costs and Resources



- ▶ How long would it take to sort a pack of cards into numerical order by suit?

Who is doing it?

- ▶ A 5 year old child would take longer than a magician.

Best way to estimate?

- ▶ Use an average?
- ▶ Best guess?
- ▶ Historical data?
- ▶ It is an ESTIMATE. An exact estimate is an oxymoron!
- ▶ Some tasks will take longer and some will take less.
- ▶ Hopefully they will average out?
- ▶ Parkinson's Law: Work expands to fill the time allowed.
- ▶ People with more time will refine what they have done.
- ▶ Some people will be afraid to turn it in early in case they are expected to do more/work faster next time.

Accept the Variation

- ▶ Give the estimate with the percentage tolerance that is going to apply
- ▶ Tell how the estimate was made and what assumptions were used
- ▶ Specify any factors that might affect the validity of the estimate - will it be valid in 6 months?
- ▶ Ask three people who know about the task to estimate a time on a bit of paper
- ▶ Discuss the discrepancies and the assumptions the estimates were based on
- ▶ Come to a consensus
- ▶ Inexperienced people can learn to estimate from the more experienced
- ▶ Three people less likely to overlook anything
- ▶ Record the actual task daily and give feedback