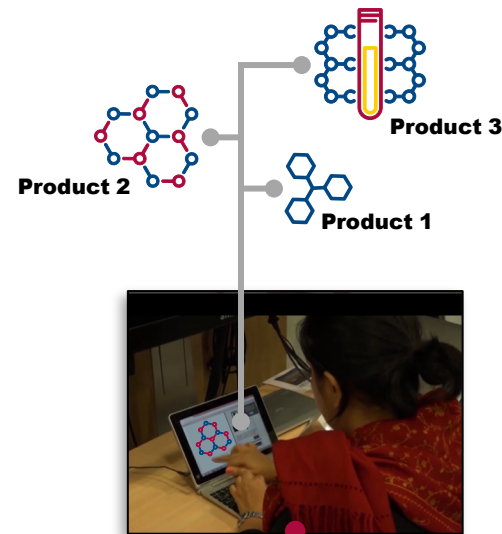


# Quality Management

In this simulation, participants undertake a **digital activity** where the level of revenue and **profit** is a function of the **quality of output** from the production process. Users can select to produce one of three different products each with varying levels of process **complexity**. More complex products require more resource with lower tolerance for deviation from customer specification but generate higher margins for the completed defect-free product. Users have to **balance** process complexity and the **cost** of defect-free production against the **price** that the customer is prepared to pay for each product. In order to be successful users must develop appropriate process plans and controls using **quality management tools** and techniques. Self-contained in an online web app, the simulation is full of media rich features such as videos and interactive interfaces. The simulation can be run as a standalone activity or as part of a facilitated session, delivered either in-person or virtually.

Briefing films and on-screen instructions familiarise users with the requirements of the Quality Management digital activity

- Users are introduced to three products and production processes each with varying levels of complexity
- Cost and revenue information is provided for each product and process
- Users are required to select one of the three products based on their assessment of likely profitability
- Users balance process cost and the cost of defects against the revenue generated from the customer
- The customer will not pay for any product with a defect so users need to design and plan their process to avoid any defects occurring



**Quality control** - before the products are shipped to the customer, participants inspect their work from phase 2, rejecting any products with defects

- Any products identified that do not meet the quality standards should not be shipped to the customer - revenue cannot be earned from these products
- If any products are shipped to the customer with quality issues, not only is the revenue lost for that product but the customer is lost for all future orders
- **Quality** - a complete suite of products manufactured to the right quality standards will earn bonuses
- **Time** - products delivered ahead of schedule also earn bonuses
- The activity emphasises quality over time in commercial success

## Phase 1



## Phase 2

Participants digitally manufacture their products (Product Line 1, 2 or 3) which they are contracted to deliver to a customer

- Each product produced that meets the required quality standards earns revenue and potentially a bonus
- If a complete suite of products are manufactured to the required standard within the set time frame, participants can also earn efficiency bonuses from the customer

## Phase 3

## Phase 4

Results are generated for users to review

- Users reflect on how they performed and identify where quality procedures and operational processes could be improved
- **Quality assurance** - users have the opportunity to run their production process again implementing these quality and process enhancements
- The cost of poor quality is measured before and after the changes