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| **Teacher\Department** |  | **Content area** | 4: Operations Management |
| **Guided Learning Hours (GLH)** | 15 GLH | **Lessons** | 15 x 1 hour lesson |

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| **Teaching content** |
| **4.1 Operations management**  4.1.1 Outsourcing  4.1.2 Lean production  4.1.3 Maintaining and improving quality  4.1.4 Production methods  4.1.5 Customer service |
| **Opportunities to embed English and maths** |
| English: Vocabulary development is included in such lessons as lesson 9, 10, 11, and 12 with new definitions.  Maths: Problem-solving maths in various aspects of production in business, such as in lessons 9, 10, 11, and 12. |
| **Opportunities to embed equality and diversity** |
| Equality and diversity are embedded throughout, using names from diverse backgrounds in the case studies. Stereotypes are challenged in all lessons, and all groups are offered an even playing field and a range of opportunities throughout the resources. |
| **Opportunities to embed Prevent duty and British values** |
| Values of tolerance and respect are all times promoted during lessons, listening to others and their opinions. Democracy is endorsed during each lesson where findings and opinions are consistently presented to the class. Rule of law is endorsed at the beginning of each lesson through embedding health and safety requirements. |

| **Lesson** | **Learning activities**  Implementation | **Resources**  Support | **Assessment method**  Impact | **Mapping**  Teaching content |
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| 1 | **Introduction - Outsourcing: cost and quality**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Outsourcing in business**  In groups exploring what outsourcing is in business.  Answers may include a business contracting work to be completed by another company.    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Describe** outsourcing. * **Identify** examples of quality and cost factors that influence the decision to outsource.     Learners might also be able to:   * **Explain** the factors that influence the decision to outsource in relation to quality and cost. * **Evaluate** the advantages and disadvantages of outsourcing in relation to quality and cost.   **Teacher-led discussion on outsourcing: cost and quality**.  **Activity 1** – **Nicky’s Textiles**  Learners to work in pairs. Nicky runs a textile business, employing 20 employees. She has gained a new contract to produce a product none of her staff have manufactured before. She is considering outsourcing this work instead of employing more workers herself. Describe to Nicky what outsourcing is and the benefits outsourcing can bring to the quality and cost of her products.  Answers should define “outsourcing” as stated in the Starter Activity, then begin to explain how outsourcing can reduce costs and improve quality of products.  **Stretch and Challenge** – Explain the quality and cost factors that influence Nicky’s decision to outsource, evaluating the advantages and disadvantages of outsourcing.  Answers may include the disadvantages of outsourcing including your own employees not being able to develop their skillset which could prove cost effective in the future, and advantages centring on the lower cost to produce the items. However, opinions will differ in learner answers.  **Activity 2** – **Which companies outsource?**  Working individually, learners to research a company that outsources some of their work. Explain the quality and cost factors that persuade the company to do this.  For example, Nissan outsources work to reduce operating costs because of the Covid-19 pandemic, aiming to increase their volume whilst lowering costs.  **Stretch and Challenge** – Whilst considering the company you have researched in Activity 2, evaluate the advantages and disadvantages of outsourcing in relation to quality and cost.  For example, if considering Nissan, answers should focus on the need to reduce costs to help the business stay afloat whilst still ensuring quality and standards remain high.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. Define outsourcing.   Outsourcing is assigning work to a third party, sometimes to lower costs or to attain a skillset and quality that you do not have in your business.   1. How can costs influence a business’ decision to outsource?   A business may need to lower their costs and can only do this through outsourcing.   1. How can quality influence a business’ decision to outsource?   A business may need to improve the quality of their products by using a third party to outsource to.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study - Further outsourcing benefits**  1. How can speed and flexibility influence a business’ decision to outsource?  Answer: If a business needs an order completing quickly, or if additional hours are required to be worked that need to be outsources outside the standard work force.  2.What is offshoring? Research the definition.  Answer: Offshoring is when a business outsources to a third party overseas or moves part of the business overseas. | Internet access | Group work  Class discussion  Research  Questions and answers | 4.1.1 |
| 2 | **Introduction - Outsourcing: speed and flexibility**  **Starter Activity** – **Offshoring**  Mind map activity in groups exploring what offshoring is in business.  Answers may include that offshoring is when a business outsources to a third party overseas or moves part of the business overseas.    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Describe** offshoring. * **Identify** examples of speed and flexibility factors that influence the decision to outsource.     Learners might also be able to:   * **Explain** the factors that influence the decision to outsource in relation to speed and flexibility. * **Evaluate** the advantages and disadvantages of outsourcing in relation to speed and flexibility.   **Teacher-led discussion on outsourcing: speed and flexibility**.  **Activity 1** – **Nicky’s Textiles**  Nicky is still considering her options in relation to outsourcing work. Explain how speed and flexibility may influence Nicky’s decision to outsource, evaluating their advantages and disadvantages for Nicky’s business.  Answers may include the advantage that outsourcing brings in relation to speed, getting the work completed faster and meeting deadlines, whilst flexibility means that her regular employees can work on a different contract at the same time.  **Stretch and Challenge** – Nicky is considering offshoring the additional work she has been asked to complete in her textile business. Describe offshoring to Nicky and the advantages and disadvantages it may bring her.  Answers include the definition of offshoring explored in the Starter Activity, and how offshoring work to another country may drive down costs and provide her with a financial benefit. However, she may find that her regular employees lose out on further work in the future.  **Activity 2** **– Complete the table**  Working in groups, learners to complete the table to bring together everything they have learnt about outsourcing in the last two lessons.  Answers:   |  |  | | --- | --- | | How can outsourcing help your business costs? | A business can reduce their operating costs and expenses, ploughing money into other areas or saving money overall. | | How can outsourcing help your product quality? | A business can get more done in the time frame, ensuring that product quality is high. The third party outsourced to may possess different skills and provide a better-quality product. | | How can outsourcing help your manufacturing speed? | Processing times may be faster when using outsourcing, improving efficiency across the business and meeting deadlines faster. | | How can outsourcing help your business’ flexibility? | Operations can be adjusted, relating effectively to changing needs and making sure all contracts are given the upmost attention. |   **Stretch and Challenge** – Do you think outsourcing is a valuable method for a business to use? Explain your answer, drawing together all information you have learnt across the last two lessons.  Answers should define outsourcing, explain the advantages and disadvantages of outsourcing, identify their own examples, and consider the factors that influence a business’ decision to outsource.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. Define offshoring.   Offshoring is outsourcing work to a third party overseas.   1. How can speed influence a business’ decision to outsource?   A business may need to meet tight deadlines or increase production in the business at short notice.   1. How can flexibility influence a business’ decision to outsource?   A business may need to address changing needs and adjust operations appropriately.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Lean production**  Research lean production.  Answer: Lean production aims to provide high quality whilst reducing waste. |  | Group work  Class discussion  Questions and answers | 4.1.1 |
| 3 | **Introduction** – **Lean production: JIT, warehouse costs, and employee costs**  **Starter Activity** – **Lean production**  Describe the three methods of lean production.  Answers include JIT (Just in Time), cell production, and Kaizen.    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Identify** the JIT method of lean production. * **Identify** how JIT can impact on business and enterprise.     Learners might also be able to:   * **Assess** how JIT impacts warehouse costs and employee costs. * **Evaluate** how JIT impacts warehouse costs and employee costs.     **Teacher-led discussion on JIT.**  **Activity 1** – **Raj’s Manufacturing Company**  Raj runs a manufacturing company. He wants to increase product quality whilst cutting waste and is considering JIT as a lean production method. Identify what is meant by JIT and how JIT can impact on Raj’s business. Learners to work in pairs.  Answers should explain that JIT ensures that goods are made to order, ensuring that stock levels are low, and that waste is kept to a minimum.  **Stretch and Challenge -** What are the benefits and limitations of JIT to Raj’s business?  Answers may state that Raj never has obsolete stock or waste in the business, saving money. However, if a big order arrives, he may not be able to produce a vast number of products at short notice.  **Activity 2** – **Warehouse costs and employee costs**  How can JIT impact Raj’s warehouse costs and employee costs? Learners to work individually.  Answers may state that Raj can lower his warehouse costs as he never needs to store a vast volume of stock at once. Raj can possess lower employee costs when order numbers are low, although may struggle to employ enough workers at short notice when a large order arrives.  **Stretch and Challenge** – Could outsourcing help Raj, if he decides to use the JIT method of lean production?  Answers may state that outsourcing will help Raj when using JIT as he can outsource a large production order to a third party at short notice.  **Progress Check**   1. What is meant by a lean method of production? 2. Cutting quality whilst increasing waste. 3. Cutting waste whilst improving quality 4. Increasing speed and cutting waste.   Answer: b   1. What is meant by JIT? 2. Jagged Information Technology. 3. Jaded Intra Time. 4. Just In Time   Answer: c   1. Explain what a JIT method of lean production involves.   Goods are made to order, always ensuring low stock to prevent waste.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study - The impact of JIT**  Aside from warehouse costs and employee costs, how else can JIT impact business and enterprise?  Answers may state that JIT affects the ability to meet demand, prevent product obsolescence, and impacts cash flow. |  | Group work  Class discussion  Questions and answers | 4.1.2 |
| 4 | **Introduction** – **Lean production: JIT, cash flow, demand, and product obsolescence**  **Housekeeping** - Complete the register and Health & Safety requirements.    **Starter Activity** **– Benefits of JIT**  What are the benefits of the JIT lean production method? Learners can work in pairs.  Answers include the lower warehouse costs, lower employee costs, the reduction in waste due to low stock, and improvements to cash flow overall.    **Introduce the learning outcomes of the lesson**.    Learners must be able to:   * **Identify** the benefits of the JIT lean production method. * **Identify** the impact of JIT on business and enterprise.     Learners might also be able to:   * **Assess** how JIT impacts cash flow, the ability to meet demand, and the ability to prevent product obsolescence. * **Evaluate** how JIT impacts cash flow, the ability to meet demand, and the ability to prevent product obsolescence.   **Teacher-led discussion on the impact of JI**T.  **Activity 1** – **Raj’s Manufacturing Company**  Raj is still unsure how JIT may impact his manufacturing business. Explain the full benefits of JIT to Raj, remembering to draw together everything you have learnt from the last two lessons. Learners to work individually.  Answers should include the benefit of JIT in relation to warehouse costs, employee costs, meeting demand, preventing product obsolescence, and cash flow impact.  **Stretch and Challenge -** Evaluate in further depth how JIT impacts cash flow, the ability to meet demand, and the ability to prevent product obsolescence.  Answers may state that JIT ensures demand is met when an order is placed, and that stock is used when required. If a high volume of stock is kept in the business, it may be never sold. The business has spent money making the stock and will lose this money if the stock is left unsold. JIT also impacts cash flow as money only leaves the business when there is a predicted inflow due to arrive.  **Activity 2** – **JIT in practice**  Research a company that practices JIT. How is JIT used effectively in their company and why would they choose JIT as a method of production?  For example, McDonalds uses a JIT method of lean production, making food orders when an order has been made. McDonalds does this to ensure that customer satisfaction is achieved by receiving made to order, fresh products. Apple use JIT with one central US warehouse and 150 worldwide suppliers, placing most inventory in stores.  **Stretch and Challenge** – Using the company researched in Activity 2, assess and evaluate how JIT impacts the business as a whole.  For example, Apple reduces warehouse costs with their inventory method detailed above, reducing employee costs. Overstocking is reduced and prevented whilst stores stock sufficient products to meet demand.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. How does JIT impact warehouse costs?   Less warehouse space is required as goods are made to order.   1. How does JIT impact the ability to meet demand?   A business keeps stock levels low to reduce waste but must be prepared and able to meet demand when required.   1. How does JIT impact the prevention of product obsolescence?   There is less chance of stock waste as goods are made to order, saving the business money.    **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Cell production**  Research cell production.  Cell production is when employees are split into teams who complete a certain process of manufacturing or complete a specific product. | Internet access | Group work    Class discussion  Questions and answers  Research | 4.1.2 |
| 5 | **Introduction** – **Lean Production: Cell Production**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** - **Complete the sentence**  Learners should work together to complete the sentence.  Cell production splits the production (line) into several (units) which is each responsible for part of the (manufacturing process).    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Describe** cell production as a lean production method. * **Identify** the motivation, productivity, and flexibility impacts of cell production.     Learners might also be able to:   * **Assess** the motivation, productivity, and flexibility impacts of cell production. * **Evaluate** the motivation, productivity, and flexibility impacts of cell production.   **Teacher-led discussion on cell production, using examples.**  **Activity 1** – **Cell production**  Research a company that utilises cell production as a lean production method. Learners to work individually.  For example, Toyota uses cell production to assign a process to each unit of the production line.  **Stretch and Challenge** – Evaluate how motivation, productivity, and flexibility are impacted by cell production.  Answers may include that separating employees into units or teams promotes a competitive and camaraderie to increase motivation that ultimately increases production. Ensuring teams or units are skilled in a field enhances flexibility in the business and employee base.  **Activity 2** – **Lean production**  Which method of lean production is better: JIT or cell production? Compare the strengths and limitations of each method of lean production. Learners to work in group. They can even have a debate with one group advocating for JIT and the other for cell production.  Answers should refer to the “order on demand” nature of JIT and the ability to save money on warehouse and employee costs as well as preventing obsolete or excess stock, whilst cell production motivates teams to specialise in a field and create their own unique aspect of the production process.  **Stretch and Challenge** – Choose one method of lean production and find as many different companies as possible that uses that method of lean production. Answers will vary.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.  1.Describe the cell production method of lean production.  Splitting a production line into units/teams to provide each unit/team with responsibility for a particular aspect of the production process.  2.How can cell production motivate workers?  Teams feel united and competitive to achieve and succeed in their field.  3. How can cell production improve productivity?  Each unit/team possesses ownership for their task and quality improves as a result.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study - Kaizen**  What is the Kaizen method of lean production?  Answer: Kaizen refers to continuous improvement, ensuring employees carry out their task as well as recommending ways that the task can be improved. | Internet access | Group work  Class discussion  Questions and answers  Research | 4.1.2 |
| 6 | **Introduction** – **Lean Production: Kaizen**  **Housekeeping** - Complete the register and Health & Safety requirements.    **Starter Activity** – **Kaizen elements**  In pairs, learners to identify the features and advantages of the different elements of Kaizen.  Answers could include identifying elements such as the use of teamwork, personal discipline, improved morale, quality circles, improvement suggestions and continuous improvements. The advantages of employing such methods could include less waste, higher quality products and services delivered to customers, more motivated staff, improved profit margins and improved business reputation.    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Describe** the Kaizen method of lean production. * **Identify** the elements of the Kaizen method of lean production.     Learners might also be able to:   * **Assess** the advantages and disadvantages of the Kaizen method of lean production, referring to waste, efficiency, and continuous improvement. * **Evaluate** the advantages and disadvantages of the Kaizen method of lean production, referring to waste, efficiency, and continuous improvement.   **Teacher-led discussion on the Kaizen method and its key features.**    **Activity 1** – **Kaizen method**  Complete the table, explaining how each element of the Kaizen method impacts production. Teacher can split the learners into five groups and assign an element to each. Each group then present their findings to the class.  Answers:   |  |  | | --- | --- | | Teamwork | Employees work as a team, aiming to achieve a common goal and make improvements for the benefit of all team members. | | Personal discipline | Quality and time management self-discipline helps the Kaizen method succeed. | | Improved morale | Teams are empowered and want to succeed for themselves as well as for each other. | | Quality circles | A group of several employees will meet regularly to discuss quality and any issues arising, suggestion improvements. | | Improvement suggestions | Employees need to be able to identify waste in the business, suggesting improvements to processes and other aspects of the business. |   **Stretch and Challenge** - How can the Kaizen method of lean production help a business?  Answers may refer to the need for employees to complete their task and make suggestions for improvements, helping the business involve employees explicitly, empowering them and making them feel part of a team.  **Teacher-led discussion on the aims of the Kaizen method.**  **Activity 2** – **Kaizen approach**  Research a company that uses the Kaizen approach. Learners to work individually.  For example, Toyota use the Kaizen approach and aim to always implement continuous improvement in the company.  **Stretch and Challenge** – Assess and evaluate the advantages and disadvantages of the Kaizen method of lean production, referring to waste, efficiency, and continuous improvement.  Answers may include Kaizen aims to reduce waste by encouraging and training employees to be able to spot waste and improve efficiency across the company. Continuous improvement is at the heart of Kaizen, exploring innovative ideas, breaking down objectives, identifying opportunities and monitoring progress. This will lead to success for a business by not wasting money on materials that are discarded through waste and therefore improving profit margins and ensuring that employees are delivering high quality for the business resulting in excellent quality goods or services for customers which could lead to an increase in sales. However, Kaizen needs buy-in from employees to be able to work successfully.    **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. Define the Kaizen method of lean production.   The Kaizen approach provides a continuous improvement tool for a company, aiming to implement progressive change.   1. How does the Kaizen approach prevent waste?   Employees are trained and encouraged to identify waste in the business.   1. How does the Kaizen approach improve efficiency?   Employees aim to continuously improve the way they do things, setting up new habits, reducing stress, and motivating employees.    **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Quality control**  What is quality control?  A business will aim to ensure, or improve, the quality of a product or service. | Internet access | Group presentation  Class discussion  Research | 4.1.2 |
| 7 | **Introduction** – **Quality Control**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Maintaining and improving quality**  Learners to work in pairs and complete a mind map detailing how a business might be able to maintain and improve quality.  Answers may include testing products, sampling products, surveying improved products, assess the competition, listen to customers, listen to employees, implement a new quality management system.    **Introduce the learning outcomes of the lesson:**    Learners must be able to:   * **Describe** quality control. * **Identify** quality control methods in business and enterprise.     Learners might also be able to:   * **Assess** the advantages and disadvantages ofmaintaining and improving quality through quality control, referring to costs and sampling. * **Evaluate** the advantages and disadvantages ofmaintaining and improving quality through quality control, referring to costs and sampling.   **Teacher-led discussion on quality control, using examples.**    **Activity 1** – **Quality control**  What is the purpose of quality control in business and enterprise? Why impact could this have for the business? What impact could this have on the customer?  Learners should work in groups.  Answers may state that quality control is when finished products or services are inspected to assess whether they meet the intended standards of quality. A business will set their own standards and need to assess whether those standards are being met.  **Stretch and Challenge** – How could a business assess quality? Identify relevant quality control methods in business and enterprise.  Examples could include posing as mystery customer in a restaurant to experience the level of customer service and to check the quality of food and drinks or sampling a cake from a batch of cupcakes to check the taste of the cakes while visually checking the presentation and decoration of the entire batch.  **Teacher-led discussion on the impact of quality control.**  **Activity 2** – **Quality control processes**  Research a company and identify their quality control process. Learners should work individually.  For example, at KFC, a member of staff from Head Office will secretly visit the restaurant as a customer and sample a meal.  **Stretch and Challenge** – Assess and evaluate the advantages and disadvantages ofmaintaining and improving quality, referring to costs and sampling.  Answers may include the need to sample random products to spot and prevent faults and low-quality. Trained inspectors may carry out this task although the cost to employ inspectors will be significant. It will identify the root cause of faults, however, saving the business money in the long run as customer satisfaction will be high and product returns and poor reviews will be low.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.  1. What is quality control in business?  a. Checking the quality of a product or service to assess whether the business is meetings its own standards  b. Checking the output of a product or service to assess whether the business is producing enough.  c.Checking the pricing of a product or service to assess whether the business is charging a standard price.  Answer: a  2. Describe sampling in quality control.  A trained employee will use a random product and assess the quality of the product and its production.  3. How does quality control impact on costs?  Whilst quality control procedures cost the business money to complete, they save money in the long run as customer satisfaction is higher with higher product quality, poor customer reviews are lower, and there is a reduction in products returned or refunded.    **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study -** **Quality assurance**  Explain quality assurance in business and enterprise.  Quality assurance is the built-in quality processes in the production of a product. A common method of quality assurance is when employees check the quality of a product at each stage of the production. | Internet access | Group presentation  Class discussion  Questions and answers  Research | 4.1.3 |
| 8 | **Introduction** – **Quality Assurance**  **Housekeeping** - Complete the register and Health & Safety requirements.    **Starter Activity** – **Quality assurance benefits**  What are the benefits of a good quality assurance process? Learners can work in pairs.  Answers should refer to zero waste, zero defects, a product being right first time, and a positive impact on costs.    **Introduce the learning outcomes of the lesson**:  Learners must be able to:   * **Describe** quality assurance. * **Identify** quality assurance methods in business and enterprise.     Learners might also be able to:   * **Assess** the advantages and disadvantages ofmaintaining and improving quality through quality assurance. * **Evaluate** the advantages and disadvantages ofmaintaining and improving quality through quality assurance.   **Teacher-led discussion on quality assurance and ways a business can develop quality assurance.**  **Activity 1** – **Quality assurance processes**  Learners can work in groups and complete the table, detailing how a good quality assurance process can reduce costs, ensure zero waste, zero defects, and ensure a product is right first time.  Answers:   |  |  | | --- | --- | | How can quality assurance reduce costs? | If problems are prevented before the production process begins, costs spent on materials and labour on faulty products have been prevented. Higher quality products improve customer satisfaction and increases customer retention and encourages new customers. Fewer poor customer reviews improve the business’ reputation. Higher quality will also mean fewer returns and refunds. | | How can quality assurance ensure zero waste? | Quality assurance processes at various stages of production will prevent faults before a product has been fully produced. This will result in fewer completed products being wasted at the end of production. | | How can quality assurance ensure zero defects? | Preventing problems in the production process will ensure products are high quality and free form defects. | | How can quality assurance ensure a product is right first time? | Using quality assurance to ensure quality and prevent faults during the production process increases the chance that the finished product is right first time. |   **Stretch and Challenge** – Compare and contrast quality control and quality assurance. Which process is more effective?  Answer can include quality control assesses the quality of a finished product whereas quality assurance checks the quality of a product after each stage of production. Quality control may be a better process to use for some products, such as food, whereas quality assurance may be a better process to use for products manufactured on a production line.  **Activity 2 - Case Study**  Discuss the following case study in pairs and answer the question “Why is it so important that products such as baby food is manufactured with high level of quality assurance and quality control processes?  Possible answers could include:   * The potential risks should something being dangerous in the food that could lead to injury or loss of life. This could lead to this being reported in the news and would be very damaging to the brand. * Injury or loss of life could also lead to the businesses being sued or fined heavily. * Injury or loss of life would certainly mean parents would stop buying from this business out of fear that these products injure their own children. Customers would go to competitor businesses. * Potential that mediocre quality products reaching customers. This could encourage customers to go to competitor brands.   **Activity 3** **– TQM**  Research Total Quality Management online, its aim, how this is achieved, and its impact on a business. Learners should work individually.  Answer: TQM is a process which involves the managers of a business aiming to change the culture of the business, encouraging employees to care and be involved in the process and possess ownership so that standards are achieved.  **Stretch and Challenge** – Do you think TQM important and achievable?  Answers will vary but would expect TQM can strengthen a business’ position amongst the competition and increase productivity. Waste and defects can be reduced, providing a higher profitability, and reducing costs. However, TQM needs a change in culture and requires planning and time as well as resources. Results may take a long time to appear and is not an easy, quick-fix solution.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.  1.Define quality assurance.  Quality assurance checks the quality of a product at individual stages, not once the product has been completed.  2. How can quality assurance reduce waste?  Checking the quality of a product after a specific stage will rectify any problem at that stage instead of waiting until the end of production and realising a whole batch is faulty.  3. How can quality assurance reduce costs?  Spotting quality issues early in production prevents further costs being spent on faulty products.    **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study - Methods of production**  Answer the questions:   1. Research different methods of production available to business and enterprise. 2. What is job production?   Answers may include job production, batch production, flow production, and mass customisation. | Internet access | Group work  Class discussion  Questions and answers  Research | 4.1.3 |
| 9 | **Introduction** – **Job Production**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – What is job production?  In groups, learners to list as many facts about job production as possible.  Answers may include that job production is a process where a product is made individually, ensuring that one product is complete before another product has started.    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Describe** job production. * **Identify** examples of products made in the job production process.   Learners might also be able to:   * **Explain** the impact of job production in relation to start-up costs, unit costs, level of demand, time, and volume of output. * **Evaluate** the impact of job production in relation to start-up costs, unit costs, level of demand, time, and volume of output.   **Teacher-led discussion on job production, using examples.**  **Activity 1** – **Job production**  What are some examples of tasks or products produced using the job production method? Learners can work in pairs and list as many examples as they can think of.  Answers may include making a dress, decorating a house, or building a property.  **Stretch and Challenge** – Do you think that job production is a good method of production to use? What are the advantages and disadvantages of using this method of production?  Answers may include that job production creates a high-quality product that is customisable, and employees focus on the product from start to finish, although costs may be high, the job may take a long time, and specialist equipment may be required which increases investment further.  **Teacher discusses feedback to activity and the features, the advantages, and disadvantages of job production**.  **Activity 2** – **The impact of job production**  Learners to work in groups and complete the table, explaining the impact of job production in relation to start-up costs, unit costs, level of demand, time, and volume of output.  Answers:   |  |  | | --- | --- | | Start-up costs | Producing a specialist product will require specialist equipment. Start-up costs may be high as a result. | | Unit costs | A high quality, customisable product may come with a high unit cost, requiring a great deal of labour. | | Level of demand | If the product offered is niche or expensive, level of demand may be low at times. Alternatively, f the product is popular, there may not be enough capacity to accept all orders. | | Time | Focusing on one job/product from start to finish will take a long time and high labour costs. | | Volume of output | Focusing on one job/product from start to finish may result in a low volume of output, impacting revenue. |   **Stretch and Challenge** – Evaluate the impact of job production in relation to start-up costs, unit costs, level of demand, time, and volume of output.  Answers may include that job production is worthwhile for specialist, one-off items, such as a customised wedding dress. However, it is not very practical for mass produced products.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. Define job production.   Job production focuses on producing one product from start to finish.   1. Sort the following into advantages and disadvantages of using ‘job production’ as a method of production.   Advantages include perfect for customised or niche products, creates a high-quality product.  Disadvantages include high labour costs, high start-up costs.    **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Batch production**  Research batch production as a method of production.  Batch production creates a large volume of products at once, for example many loaves of bread. |  | Group work  Class discussion  Questions and answers | 4.1.4 |
| 10 | **Introduction - Batch Production**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Batch Production**  What is batch production? List as many features about batch production as possible. Learners can work in pairs or in groups.  Answers may include that batch production produces many identical items at once, a method of production typically used when making food.    **Introduce the learning outcomes of the lesson:**    Learners must be able to:   * **Describe** batch production. * **Identify** examples of products made in the batch production process.   Learners might also be able to:   * **Explain** the impact of batch production in relation to start-up costs, unit costs, level of demand, time, and volume of output. * **Evaluate** the impact of batch production in relation to start-up costs, unit costs, level of demand, time, and volume of output.   **Teacher-led discussion on batch production.**  **Activity 1** – **Batch production**  What are some examples of tasks or products produced using the batch production method? Learners can work in pairs.  Answers may include making loaves of bread, doughnuts, bread rolls, and croissants.  **Stretch and Challenge** – Do you thank that batch production is a good method of production to use? What are the advantages and disadvantages of using this method of production?  Answers may include that batch production is a flexible production method and can be used to create finished or part-finished products, although smaller batches cost a lot to produce, equipment costs and maintenance are high, and if there is a fault with a batch, a great deal of waste will be suffered.  **Activity 2** – **Impact of batch production**  Complete the table, explaining the impact of batch production in relation to start-up costs, unit costs, level of demand, time, and volume of output. Learners to work individually.  Answers:   |  |  | | --- | --- | | Start-up costs | Equipment used in batch production is usually expensive and large, requiring high initial costs. | | Unit costs | A large batch will cost a lot to produce due to the volume, although high revenue is attainable from large batches | | Level of demand | Most products that are produced in batch production are mass market products that most people purchase regular. | | Time | The time it takes to create a batch of products is not particularly high, keeping labour costs low per batch. | | Volume of output | Vast volume of output is attainable using batch production |   **Stretch and Challenge** – Evaluate the impact of batch production in relation to start-up costs, unit costs, level of demand, time, and volume of output.  Answers may include that batch production is worthwhile mass produced, common products such as doughnuts, although not suitable for more expensive items such as tailored suits.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.  1. Define batch production.  Batch production focuses on producing a vast number of identical products.  2. Sort the following into advantages and disadvantages of using ‘batch production’ as a method of production.  Advantages:   * Perfect for creating identical, common products. * Produced in large numbers.   Disadvantages:   * High volume of waste replacing the faulty batch. * High costs replacing the faulty batch.   **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Flow production**  Research flow production as a method of production.  Flow production is also known as an assembly line or continuous production. |  | Group work  Class discussion  Questions and answers | 4.1.4 |
| 11 | **Introduction** – **Flow Production**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Flow production**  What is flow production? List as many features about flow production as possible. Learners to work in pairs.  Answers may include flow production utilises the movement of products on a production line, with every product experiencing the same stage one after another.    **Introduce the learning outcomes of the lesson:**    Learners must be able to:   * **Describe** flow production. * **Identify** examples of products made in the flow production process.   Learners might also be able to:   * **Explain** the impact of flow production in relation to start-up costs, unit costs, level of demand, time, and volume of output. * **Evaluate** the impact of flow production in relation to start-up costs, unit costs, level of demand, time, and volume of output.   **Teacher-led discussion on flow production.**  **Activity 1** – **Flow production**  What are some examples of tasks or products produced using the flow production method? Learners to work in pairs.  Answers may include a car part assembly line, a bottling plant, or an electronics production line.  **Stretch and Challenge** – Do you think that flow production a good method of production to use? What are the advantages and disadvantages of using this method of production?  Answers may include that flow production keeps the cost of each product low, achieving economy of scale, saving costs and time using a production line and being able to implement a quality assurance process after each stage of production.  Flow production only produce one product in each production line, with employees sometimes lacking motivation due to the repetitive task. There will be high initial costs to set-up a production line.  **Activity 2** – **Impact of low production**  Complete the table, explaining the impact of flow production in relation to start-up costs, unit costs, level of demand, time, and volume of output. Learners can work in groups or individually.  Answers:   |  |  | | --- | --- | | Start-up costs | High initial costs to set-up a production line | | Unit costs | Unit production costs will be quite low, although this depends on the product. | | Level of demand | Products produced on a production line are typically high demand products. | | Time | A high volume of products is produced in a brief period of time when using flow production. | | Volume of output | A large volume of output is achieved. |   **Stretch and Challenge** – Evaluate the impact of flow production in relation to start-up costs, unit costs, level of demand, time, and volume of output.  Answers may include that flow production is a good method of production for mass produced products on an assembly line, being able to implement quality assurance processes after each stage, although different production lines will be required for each product.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.  1. Define flow production.  Flow production creates a high volume of identical products on a production line.  2. What is an advantage of using flow production as a method of production?  Perfect for identical products and implementing quality assurance processes.  3. What is a disadvantage of using flow production as a method of production?  You can only produce one types of products on each production line, and the initial costs are high.    **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study -** **Mass customisation**  Research mass customisation as a method of production.  Mass customisation is the process of allowing a customer to customise a mass market product. |  | Group work  Class discussion  Questions and answers | 4.1.4 |
| 12 | **Introduction** – **Mass Customisation**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Mass customisation**  What is mass customisation? List as many features about mass customisation as possible. Learners to work in pairs.  Answers may include mass customisation is a mass market product combined with unique customisation that appeals to the customer    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Describe** mass customisation. * **Identify** examples of products made in the mass customisation process.   Learners might also be able to:   * **Explain** the impact of mass customisation in relation to start-up costs, unit costs, level of demand, time, and volume of output. * **Evaluate** the impact of mass customisation in relation to start-up costs, unit costs, level of demand, time, and volume of output.   **Activity 1** – **Mass customisation**  What are some examples of tasks or products produced using the mass customisation method? Learners to work individually.  Answers may include customised Nike trainers, a customised laptop from Dell, or customised Curve ID jeans from Levi Strauss.  **Stretch and Challenge** – Is mass customisation a good method of production to use? What are the advantages and disadvantages of using this method of production?  Answers may include that mass customisation combines the benefits of the mass market and the common need of a product which demands low economies of scale with the customisation that appeals to the customer and makes your mass market product more attractive. However, not all mass market products are suited to mass customisation.  **Activity 2** – **Impact of mass customisation**  Complete the table, explaining the impact of mass customisation in relation to start-up costs, unit costs, level of demand, time, and volume of output. Learners to work in groups.  Answers:   |  |  | | --- | --- | | Start-up costs | High initial costs to set-up a mass market mass customisation process. | | Unit costs | Unit production costs will be quite low, although customisation adds to costs. | | Level of demand | Mass customisation products are popular although the level of demand will not be as high as the standard mass market version of the same product. | | Time | A short amount of time is needed to customise a product, on top of the standard amount of time needed to create the mass market product. | | Volume of output | A smaller volume of output is typical for mass customisation products when compared to their mass market counterpart. |   **Stretch and Challenge** – Evaluate the impact of mass customisation in relation to start-up costs, unit costs, level of demand, time, and volume of output.  Answers may include that mass customisation simply adds another layer on top of a mass market product which typically possesses lower production costs, attracting customers with customisation options, although not as many customers will purchase a customised option in contrast to the standard mass market version of the product.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.  1. Define mass customisation.  Mass customisation is the customisation of a mass market product.  2. What is an advantage of using mass customisation as a method of production?  Attracts a customer to purchase a tailored product.  3. What is a disadvantage of using mass customisation as a method of production?  More customers will always buy the standard mass market version of the product, and not all products are suited to mass customisation.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study - Customer satisfaction scores**  Research customer satisfaction scores as a method of customer service.  Answer: Customer satisfaction scores measure how happy a customer is with a product. |  | Group work  Class discussion  Questions and answers | 4.1.4 |
| 13 | **Introduction** – **Customer Satisfaction Scores**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Customer satisfaction scores**  Discuss in groups: Why are customer satisfaction scores important?  Answers include customer satisfaction scores are a benchmark nationally of customer satisfaction across several sectors, assessing how well a product meets the expectations of the customer.    **Introduce the learning outcomes of the lesson:**    Learners must be able to:   * **Identify** customer satisfaction scores. * **Describe** the purpose of customer surveys.     Learners might also be able to:   * **Assess** the importance of customer satisfaction scores. * **Evaluate** the advantages and disadvantages of customer surveys.   **Teacher-led discussion of customer satisfaction scores, using examples.**  **Activity 1** – **Customer satisfaction scores**  Identify why a business may need to research and analyse their customer satisfaction and how they might do this. How could a business benefit from this information? Learners can work in pairs.  Possible answers include Customer satisfaction scores allow a business to gain feedback from a vast range of customers, realise the strengths of the product or service, realise the negative points of a product or service, see what changes need to be done, and evaluate the next moves of the business.  **Stretch and Challenge** – Do you think customer satisfaction scores are important? Should a business follow the feedback given in customer satisfaction scores?  Answers will vary but would expect that the aim of a business is to achieve excellent customer service and to give the customer what they want. Listening to the feedback provided from customers through the customer satisfaction scores helps a business to view what changes need to be made to increase their level of customer service.  **Teacher-led discussion on customer surveys**.  **Activity 2** – **Customer surveys**  What is the purpose of customer surveys? How may this help a business to improve?  Answers can include that customer surveys are another method that customers can use to feedback their views to a business. The business can tailor the questions that they want to ask the customers to find out direct feedback about a product or service.With this feedback, a business can make changes to better meet their customers' needs or use this information to identify areas of growth within the business.  **Stretch and Challenge** – What are the advantages and disadvantages of customer surveys?  Customer surveys allow a business to tailor the questions they want to ask, they allow customers to provide their point of view, and they allow businesses the chance to make improvements and make customer service. However, customers may not tell the truth when answering customer surveys, misleading the business, and resulting in inaccurate decision making.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. What is a customer survey? 2. A series of questions that a business creates to ask customers for their opinions 3. A series of questions that a customer creates to ask a business for their opinions. 4. A series of events that a business holds to reward their customers.   Answer: a   1. Is a customer survey important?   Yes, the business can make changes to a service or product, aiming to increase customer satisfaction and improve products.   1. Why should a business aim to improve customer service levels?   Good customer service results in higher sales, more customer retention, and more new customers.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study - Customer complaints and compliments**  What are a customer complaint and a customer compliment?  Customer complaints are negative comments made by a customer, for example if they have received cold food. Customer compliments are positive comments when a customer has enjoyed the product or service purchased. |  | Group work  Class discussion  Questions and answers | 4.1.5 |
| 14 | **Introduction** – **Customer Complaints and Compliments**  **Housekeeping** - Complete the register and Health & Safety requirements.    **Starter Activity** – **Customer complaints and compliments**  Have you ever made a complaint to a business, or given a business a compliment? What happened and why did you feel that you needed to make the complaint? What was the outcome? Learners can work in pairs and interview each other.  Answers will vary, but teacher should ask learners to identify the reasons why they paid the compliment or made the complaint and how this made them feel at the time as we often remember how customer service situations made us feel. Ask leaners to identify the impact this had and what actions this prompted from them as customers. For example, did this experience mean that they became a loyal customer or resulted in them never returning? Did this experience resulted in the learner recommending the business to friends and family or in them giving a negative review on social media?    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Identify** customer complaints. * **Identify** customer compliments.     Learners might also be able to:   * **Explain** the importance of customer complaints and compliments to a business. * **Evaluate** the importance of customer complaints and compliments to a business.   **Teacher-led discussion on customer complaints and compliments**.  **Activity 1** **– Compliments**  Complete the table, considering the pros and cons of a business receiving customer compliments. Teacher can split the learners into two groups, with one discussing the pros and one discussion the cons before coming together and exchanging their answers.  Possible answers:   |  |  | | --- | --- | | **Pros of customer compliments** | **Cons of customer compliments** | | A business can see where its strengths lie.  Strengths can be replicated across other areas of the business or other products. | A business can become complacent and not feel the need to make improvements. |   **Stretch and Challenge** – Through what methods can a business receive customer compliments?  Answers include through customer surveys, customer satisfaction scores, customer reviews, or direct verbal or written feedback.  **Activity 2** – **Complaints**  Complete the table, considering the pros and cons of a business receiving customer complaints.  Answers:   |  |  | | --- | --- | | **Pros of customer complaints** | **Cons of customer complaints** | | A business can see where its weaknesses lie.  Developments and improvements can be replicated across other areas of the business or other products. | A business can feel negative or defensive when faced with complaints.  Customers can lie. |   **Stretch and Challenge** – Through what methods can a business receive customer complaints?  Answers include through customer surveys, customer satisfaction scores, customer reviews, or direct verbal or written feedback.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. What is a “customer compliment”?   Answer: Positive feedback from a customer.   1. What is a ‘customer complaint’?   Answer: Negative feedback from a customer.   1. Why is it important for a business to receive both customer compliments and customer complaints?   Answer: So that the business knows its strengths and weaknesses and so that changes can be made to improve customer service.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Mystery shoppers**  What is a mystery shopper?  An employee from Head Office who pretends to be a standard customer to assess the customer service and products that any other customer will experience. |  | Group work  Class discussion  Questions and answers | 4.1.5 |
| 15 | **Introduction** – **Mystery Shoppers and Repeat Business Data**  **Housekeeping** - Complete the register and Health & Safety requirements.  **Starter Activity** – **Mystery shoppers**  What is the purpose of mystery shoppers? Learners can work in pairs.  Answers include to gain a first-hand experience of the customer, to ensure their experience is unbiased and completely realistic, to see what level of customer service and quality of product is attained by customers regularly.    **Introduce the learning outcomes of the lesson**:    Learners must be able to:   * **Identify** mystery shoppers. * **Describe** the purpose of using repeat business data in attaining good customer service.   Learners might also be able to:   * **Explain** the importance of mystery shoppers in business and enterprise. * **Evaluate** the value repeat business data in measuring good customer service.   **Teacher-led discussion of mystery shopper**s.  **Activity 1** – **Irini the mystery shopper**  Irini is a mystery shopper at a pizza restaurant. The employees in the restaurant think Irini is a normal customer. What will Irini be judging as she sits inside the restaurant? Learners to work in groups.  Answer: She is judging the food, the service, and the cleanliness of the restaurant.  **Stretch and Challenge** – Why are mystery shoppers used? Why can’t Irini tell the employees that she is there to assess the customer experience?  Answer: If employees knew about Irini’s role, they would make sure she received excellent service, perfect food, and the cleanest table. Irini needs a realistic experience to experience what customers face on a day-to-day basis.  **Teacher-led discussion on recent business data**.  **Activity 2** – **Recent business data**  How can a business use repeat business data to improve their customer service?  Answer: A business can compare their customer satisfaction score from previous periods to the current periods, assessing whether customer satisfaction has improved or declined.  **Stretch and Challenge** – Evaluate how valuable repeat business data is to a business in improving their customer service.  Answer may include repeating business data is important as it is a measurable benchmark to assess how customer service has improved or declined. It can also be used as an aim when needing to improve customer service.  **Progress Check**  Teacher to lead quiz to reinforce learning and check progression.   1. Define a mystery shopper.   An employee who visits a business pretending to be a standard customer with the aim of assessing the whole customer experience first-hand.   1. Are mystery shoppers important?   Yes, mystery shoppers receive an unbiased view of the business and can see what an ordinary customer experience.   1. Is repeat business data valuable?   Yes, as a business can measure data against previous years to assess customer satisfaction and service.  **Lesson recap**  Revisit the learning outcomes from the beginning of the session, explaining how these learning outcomes have been met.    **Home Study – Research**  Research internal growth. |  | Group work  Class discussion  Questions and answers | 4.1.5 |

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| **Learner Workbook: Knowledge Check Answers** |
| 1. What is the definition of outsourcing?  Answer: It is when a business asks a third party to complete work for them.  2. For what reason could a business choose to outsource?  Possible answers include if a business has a short deadline and their workers cannot meet the deadline alone, or if the business wants to save money and decrease costs, or if a business wants to improve quality for a particular order.  3. Define what is meant by JIT.  Answer: Just in Time.  4. What is the purpose of JIT?  Answers include to reduce waste, reduce warehouse and employee costs, and prevent product obsolescence, whilst improving cash flow.  5. What is the benefit of cell production?  Answers include cell production splits the production line into several units that are each responsible for part of the manufacturing process.  6. How can the Kaizen method of production help a business?  Answer: Kaizen encourages employees to spot problems and look for better ways to complete tasks.  7. What is the difference between quality control and quality assurance?  Answer: Quality control is a quality check once the product has been finished, whereas quality assurance checks quality regularly after each stage of the production process.  8. Complete the table by adding examples of products created during each method of production.   |  |  | | --- | --- | | **Method of production** | **Example of product created during this method of production** | | Job production | Unique wedding dress | | Batch production | Doughnuts made per batch | | Flow production | Car parts on an assembly line | | Mass customisation | High-end customised trainers |   9. Choose a method of production and explain the advantages and disadvantages of that method of production.  For example, an advantage of batch production is the creation of many identical mass market products that are created easily using machinery, although if there is a fault, the whole batch needs to be reproduced, causing mass waste and high cost.  10. Name a method to measure customer service and explain the benefits and limitations of that method.  For example, customer surveys allow a business to ask customers a series of questions so that answers can be analysed, and any issues can be addressed, although they are based on the customer telling the truth. |

# Document information

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