1. *Identify two key industry* ***problems*** *and/or* ***challenges*** *for Kiwi Campus to achieve and sustain competitive advantage. For each problem/challenge, (1) provide a one sentence summary, (2) describe it, and (3) justify why it is a key problem/challenge.*

* 1 Navigation difficulties when using KiwiBots. 2 The KiwiBots uses a GPS system to deliver food to their customers, however the GPS is currently imprecise, thus causing delays in time taken to deliver food. When a KiwiBot goes off course from it’s determined destination, KiwiBot courier employees and customers are required to hunt down the robot’s location to retrieve their food, which can be in odd places or behind bushes. 3 This is a key problem for Kiwi Campus as a lack of precision for their bots GPS causes inconveniences for both employees and especially customers using the service. This causes disruption within the efficiency of the process and this will cause a loss of competitive advantage as competitors might have a more accurate GPS system, thus customers might move services from KiwiBot. KiwiBot want to retain their reputation so they must improve this GPS system to reach fully autonomous KiwiBots.
* 1 Social acceptance with the usage of KiwiBots. 2 KiwiBots are not humans, thus people have a split opinion on the existence of robots roaming the streets we walk. According to Kiwi Campus, there are reports of bot abuse by those that can’t accept the robots such as people kicking the robots and others displaying aggressive behavior towards them by slamming into the robots. 3 This damages the robots which costs around $3,500 to create, therefore maintenance is constantly costing Kiwi Campus. Robots need to be accepted within society to operate in the way it’s intended to because people and robots must co-exist to succeed. Certain people feel too disconnected because it’s a robot, therefore they don’t realize the discrimination being projected towards them.

1. *State a vision for Kiwi Campus that would (1) enable the company to focus on their key strengths and (2) to overcome the problems/challenges you have identified in Task 1.*

* 1“To deliver people products worldwide effectively at the lowest cost possible, close to none”. Kiwi Campus strive for cost effective deliveries of products to customers, in a quick and efficient manner. 2 This vision is a reality achievable within the company, and it relates to the challenges of society as they strive to be acceptable whilst provided a fantastic service that people can benefit from. The vision also reminds Kiwi Campus that to reach their efficiency desired, they must continue to innovate their robots.

1. *Identify two key strategies that would enable Kiwi Campus to achieve the vision that you have identified in your answer to Task 2 as well as to achieve and/or retain sustained competitive advantage. For each strategy, (1) provide an appropriate name, (2) describe it, and (3) justify why the strategy is essential for enabling Kiwi Campus to achieve and/or retain sustained advantage over their competitors.*

* 1 Total Delivery Cost Reduction. 2 Kiwi Campus must innovate their current KiwiBot to reduce the cost of delivery of products to customers by potentially 10% or more, as their main vision is to continuously strive for lower delivery prices, even to a potential zero-dollar margin. The attempt to possibly refine the KiwiBot and remove unnecessary costs of production of them or finding a cheaper supplier whilst retaining the same high-quality standards. 3 It’s important that Kiwi Campus achieves these strategies because the other companies competing in the same market are constantly trying to refine and develop a particular niche to their identity, therefore it’d be crucial for Kiwi Campus to follow their vision and continuously attempt to lower their delivery costs as that is one their strength as a company, which in turn would lead to the gain in competitive advantage. Lower delivery prices are always an attractive factor to a consumer and therefore is a high priority.

1. *Identify one critical success factor (CSF) for each of the key strategies identified in Task 3 (that is two CSFs in total, see Figure 1 above). For each CSF, (1) provide an appropriate name and (2) justify why the CSF is critical to the success of the related strategy.*

* 1 Establish new production supplier for KiwiBots parts. 2 Establishing a new production supplier for Kiwi Campus would ensure that the company is able to outsource the materials and production of their KiwiBots at a much lower total cost. This is a CSF Kiwi Campus must directly address if they’re wanting to accomplish their strategy of reducing total costs of delivery and achieve that close to zero price vision. Kiwi Campus needs to consult with several different suppliers that can produce the parts needed to assemble a KiwiBot, whilst having a lower production cost than their current supplier and being cautious that quality could be affected. Cheaper cost of production allows the reduced cost to go into producing lower delivery costs for customers using the service, and thus achieving competitive advantage from attractive prices to customers therefore, succeeding their strategies implemented.
* 1 Refine and develop improved software of GPS system within KiwiBots. 2 Kiwi Campus are required to consult with either their inhouse development team or company they outsourced for developing their GPS navigation technology and improving the accuracy of the KiwiBots when travelling to customers destinations. If Kiwi Campus are able to further refine their current GPS system, then the KiwiBots would be operating in a more efficient matter, not in terms of speed but rather on the reduction of unpredicted occurrences that could disturb the flow of operations for KiwiBots, such as getting lost behind bushes, or falling into unescapable locations. Operating more efficiently relates to the vision that Kiwi Campus established, therefore it’s critical for success to their strategy of improving the total efficiency of the autonomous robots.

1. *Identify one key performance indicator (KPI) for each of the CSF you have identified in Task 4 (that is two KPIs in total, see Figure 1 above).*

*For each KPI, (1) provide an appropriate name, (2) justify why the KPI is effective in measuring the related CSF, and (3) indicate if an increase in the measured value of the KPI would be beneficial or detrimental for the related CSF.*

* 1 Total Cost KPI. 2 A KPI used to measure the benefits of the CSF of establishing a new production supplier would be to compare and contrast the current versus the new supplier, by factoring the total amount it would cost to produce and deliver the parts required to assemble a KiwiBot, the time taken for each supplier to produce the parts required and the overall quality of the parts being manufactured from each supplier. When using a comparison of the parts created by the two suppliers, Kiwi Campus can conclude whether the new supplier provides the necessities for Kiwi Campus to reach their vision, as a lower production cost for KiwiBots contributes into potentially lower the delivery prices of their service. Kiwi Campus’s goal is to reduce the total cost of production for KiwiBots by 10% or more and using this measurable KPI, an increase in KPI would indicate that Kiwi Campus are reducing the total cost of production for KiwiBots.
* 1 Efficiency of Navigation KPI. 2 Efficiency KPI would measure the total number of incidents occurring and the total time taken from the KiwiBot when navigating the GPS once the new and improved GPS software is developed and implemented into KiwiBots. The KPI must be recorded between deliveries that the KiwiBots make based on a tested environment and in real world situations involving legitimate customers. By measuring the total number of incidents occurring within the navigation from KiwiBots, incidents such as incorrect destinations, getting stuck at locations and more. This KPI will help Kiwi Campus to distinguish whether the new GPS software is an improvement. 3 Increase in KPI would indicate that the efficiency has improved from an indication of reduced time taken or decreased incidents happening, and the use of KiwiBot couriers.

1. *Identify one key business process for each of the KPIs you have identified in Task 5 that could help improve it (that is two business processes in total, see Figure 1 on p.3). For each business process, (1) provide an appropriate name and (2) justify why efficiencies in the business process are strongly related to the respective KPI.*

* 1 Finance Management. 2 Finance management means for Kiwi Campus to report and analyse the current financial standing of the company with relation to Total Cost KPI, this would mean that Kiwi Campus’s finance sector would process the total cost of production for a single KiwiBot with comparison of their current supplier and their potential candidates in accordance to the CSF of establishing new production suppliers. Efficiency in Finance Management process would mean that the data results obtained from researching and analysing production costs of Kiwi Campus’s suppliers are produced quicker than an expected timeframe, in turn resulting in the increased efficiency in returning results from their Total Cost KPI as the two interrelated. When this business process is working efficiently, Kiwi Campus is able to gather data to work towards minimising the delivery prices of their services which leads to increasing customer satisfaction and creating a competitive advantage.
* 1 Analysing & Reporting data collected. 2 Kiwi Campus researchers would proceed with processing the data returned from the daily orders of their KiwiBots, and would begin to analyse the data and form a report to identify changes within the level of navigational errors the KiwiBots might make whilst operating. Kiwi Campus will gather samples from several KiwiBots running the new GPS system; if analysis of the information gathered returns a decrease in the number of incidents such as being stuck at destinations, lost in bushes and the decrease in the number of KiwiBot courier’s required to rescue the KiwiBots, then we can identify that this will relate to the increase in Efficiency of Navigation KPI. Returning data containing the decrease in incidents occurring from the new GPS system relates to the increase in Efficiency of Navigation KPI as increasing this KPI would indicate to Kiwi Campus that their GPS software is running efficiently and has improved their overall performance of the KiwiBot in the reliability of delivery times.

1. *Business process reengineering (BPR) is not only known as a highly effective technique to bring about organisational change, but also as being considerably expensive. Prepare the following TWO modelling and reengineering examples to persuade Kiwi Campus management of ESSolution’s expertise in this area as well as of the merits of BPR in general. The senior consultant in your team has had a long chat with Kiwi Campus’s Chief Technology Officer (CTO). Given Kiwi Campus constant Research and Development efforts in Kiwibots, he is focused on significantly improving the ‘Quality Assurance Process’. Your manager thinks it is crucial for the success of ESSolution’s proposal to outline how you could help to improve the ‘Quality Assurance Process’ for Kiwi Campus.*
2. *Create a number of connected Event-Driven Process Chains (EPC) to represent Kiwi Campus’s ‘Quality Assurance Process’. The EPC must align with the information provided in the box below. Place an image of your EPC model in your report that is well-readable at 100% zoom. Also save your answer in your ARIS database under the AS-IS folder.*

Diagram

Description automatically generated

Diagram

Description automatically generated

1. *Conduct a business process reengineering exercise on Kiwi Campus’s ‘Quality Assurance Process’ (as modelled by you in part 7a.) that addresses ONE problem/challenge (answer to Task 1) and supports your vision (answer to Task 2) for Kiwi Campus. Consider the same modelling constraints as in part 7a. (1) State an objective for your reengineering, (2) Justify how this objective relates to your identified problems/vision, and (3) Describe the changes you have made to your original EPC. Place a well-readable image of your reengineered process model into your report and document your changes, as needed, with partial screenshots throughout your written change proposal. All images of your process model must be well-readable at 100% zoom.*