

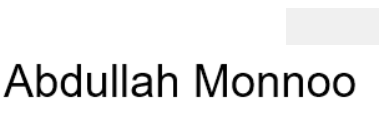


Document number:	EM-0005	Issue no:	-06	Issue date:	30/04/24																					
Document title:	Risk Register																									
Executive summary: <p>This document outlines all risks to be considered during the execution of the LocaVision project. There is a total of 40 risks, presented in the order the date that they were raised. The risks are divided into 7 categories: project, technical, financial, quality, security, legal and supply chain risks.</p> <p>For each risk raised, a corresponding unmitigated consequence is stated, as well as likelihood and severity ratings on a scale of 1-5. These ratings are multiplied to give a risk factor. All risks have a corresponding mitigation strategy which is outlined in the penultimate column. The register includes a record of when the risks were raised, who raised them, and who is responsible for executing the mitigation strategy.</p> <p>The top risks identified include:</p> <ul style="list-style-type: none"> • Lack of market for the product. • Designs and technology being stolen before obtaining IP protection. • Suppliers breach the contract in terms of quality or delivery schedule. • Finished goods are damaged in storage or transit. 																										
Document Changes Log: <table border="1"> <thead> <tr> <th>Issue</th> <th>Reason/Main changes</th> <th>Date issued</th> </tr> </thead> <tbody> <tr> <td>-01</td> <td>First issue</td> <td>02/02/24</td> </tr> <tr> <td>-02</td> <td>Addition of various legal risks</td> <td>12/02/24</td> </tr> <tr> <td>-03</td> <td>Addition of various supply chain risks</td> <td>13/02/24</td> </tr> <tr> <td>-04</td> <td>Addition of various product quality risks</td> <td>04/03/24</td> </tr> <tr> <td>-05</td> <td>General revision of risks, consequences and mitigation strategies</td> <td>08/04/24</td> </tr> <tr> <td>-06</td> <td>Final revision</td> <td>15/04/24</td> </tr> </tbody> </table>						Issue	Reason/Main changes	Date issued	-01	First issue	02/02/24	-02	Addition of various legal risks	12/02/24	-03	Addition of various supply chain risks	13/02/24	-04	Addition of various product quality risks	04/03/24	-05	General revision of risks, consequences and mitigation strategies	08/04/24	-06	Final revision	15/04/24
Issue	Reason/Main changes	Date issued																								
-01	First issue	02/02/24																								
-02	Addition of various legal risks	12/02/24																								
-03	Addition of various supply chain risks	13/02/24																								
-04	Addition of various product quality risks	04/03/24																								
-05	General revision of risks, consequences and mitigation strategies	08/04/24																								
-06	Final revision	15/04/24																								
Lead Author		Principal Reviewer		Approver																						
 <div>Author</div> <div>Author Job Title</div> <div>Aung Zaw Myat</div> <div>Chairperson</div>		 <div>Reviewer</div> <div>Reviewer Job Title</div> <div>Daniel Lee</div> <div>Marketing Director</div>		 <div>Approver</div> <div>Author Job Title</div> <div>Abdullah Monnoo</div> <div>CEO, STP Ltd.</div>																						
Distribution: Entire project team																										

ID.	Status	Date Raised	Raised by	There is a risk that...	Risk Type (Category)	Unmitigated Consequence(s)	Likelihood (1-5)	Severity (1-5)	Risk Factor (L*S)	Avoid/Mitigate/Accept	Mitigation/Action(s)	Risk/Action Owner
1	Open	2/2/2024	Aung	The project is not completed by the deadline due to unexpected setbacks.	Project	The loss of a market opportunity. Financial losses in the company.	2	5	10	Mitigate	Set buffer times at various stages, detailed in the project Gantt chart.	Aung
2	Open	2/2/2024	Aung	The product's purpose is under-defined or it is misaligned with stakeholder objectives.	Project	Failing to meet the needs of stakeholders.	3	4	12	Mitigate	Clearly define the purpose of the product through relevant documentation.	Daniel
3	Open	2/2/2024	Daniel	There are late changes in design of the product.	Technical	Exceeding budget due to wasted resources, employees having to work overtime. Issues with quality of final product too.	3	4	12	Mitigate	Use effective innovation management techniques to reduce the likelihood of this.	Vic
4	Open	2/2/2024	Daniel	The product fails to adapt to the changing needs of the customers.	Technical	Sales decline much sooner than initially projected by the Bass diffusion model, forcing an executive decision on whether to retire the product prematurely/accelerate development of other products.	3	3	9	Mitigate	Continuous communication with marketing team and external stakeholders to better understand customer needs.	Daniel
5	Open	2/2/2024	Kabeer	There is a lack of cash in the introduction or growth phase of product innovation.	Financial	Project has to be terminated prematurely, eliminating a source of income, pushing the company closer to bankruptcy or administration.	2	5	10	Mitigate	Carefully allocation of budget and cost estimation in the early stages. Tracking the actual costs throughout the project using documents such as timesheets, to inform budget reallocation if necessary.	Abdullah
6	Open	2/2/2024	Vic	The product lacks innovation novelty.	Project	Less market share and less sales than expected.	3	3	9	Mitigate	Combine market research and effective innovation management processes to ensure the product is novel.	Vic
7	Open	2/2/2024	Daniel	The product struggles to enter the market due to competitors.	Project	Failure to meet capture the target market share.	3	3	9	Mitigate	Conduct detailed analysis of the market and competitors prior to design stages .	Vic
8	Open	2/2/2024	Daniel	There is a lack of a market for the product.	Project	Lowered sales and profitability and decline in company reputation due to high profile failure.	3	4	12	Mitigate	Research the market thoroughly to ensure there is strong customer demand for the product.	Vic
9	Open	2/2/2024	Kabeer	The product is unable to adapt to a variable economic climate.	Quality	Vulnerable to a drastic fall in sales during economic recession, severely decreasing revenue and leading to potential early retirement.	2	3	6	Mitigate	Continuously monitor the market even after launch, and prepare to adapt the product accordingly.	Abdullah
10	Open	2/2/2024	Ein	Designs or technology are stolen before acquiring IP protection.	Security	Loss of potential competitive advantage and inability to secure patents/design rights if exposed to the open domain.	3	4	12	Mitigate	Maintain a high level of secrecy, requiring project team to sign NDAs.	Ein
11	Open	2/2/2024	Abdullah	Intellectual property not protected when the product is launched.	Security	Loss of potential competitive advantage and inability to secure patents/design rights.	3	4	12	Mitigate	Start the patent or registered design right application before full scale production.	Ein
12	Open	12/2/2024	Ein	Accidental disclosure of commercially sensitive information with a competitor.	Legal	Liable of civil offense due to breakage of competition law.	4	3	12	Mitigate	Training provided to employees to prevent the occurrence of such a disclosure, as well as requirement to sign NDAs.	Ein
13	Open	12/2/2024	Vic	The collection of user data through the product is unethical/lacks transparency.	Legal	Liable of civil offense due to breakage of data protection act 2018, and decline in perceived company trustworthiness.	3	3	9	Mitigate	Always ask for permission/consent before collecting data, and provide transparent communication with users regarding data privacy.	Ein
14	Open	12/2/2024	Ein	Employees misuse data of partners and consumers.	Legal	Liable of civil offense due to breakage of data protection act 2018, and decline in perceived company trustworthiness.	2	3	6	Mitigate	Training provided to employees so that they use data for right reasons, fairly and transparently. Strong consequences enforced for failure to adhere to this.	Ein
15	Open	12/2/2024	Ein	User data is accidentally stored longer than necessary.	Legal	Liable of civil offense due to breakage of data protection act 2018, and decline in perceived company trustworthiness.	4	2	8	Mitigate	Implementation of an automated data retention and deletion system to reduce human error.	Ein
16	Open	12/2/2024	Ein	Consumers do not perceive our products to be as described, fit for purpose or of satisory quality.	Legal	Liable for refund or replacement of the product due to consumer rights act 2015, which will increase costs.	3	3	9	Mitigate	Use robust product quality management processes and ensure description accurately matches the actual product.	Aung
17	Open	12/2/2024	Kabeer	Consumers submit false claims on Consumer Rights Act 2015 or Consumer Protection Act 1987.	Legal	Unfair company liability is imposed.	2	4	8	Mitigate	Provide clear information on what can be claimed. Implement team that verifies the validity of claims.	Aung
18	Open	12/2/2024	Aung	The product fails to pass the safety regulations including but not limited to General Product Safety Regulations (GPSR) 2005 and CE.	Legal	The product cannot be put onto the market legally, resulting in a severe waste of resources.	2	5	10	Mitigate	Ensure the product meets all relevant safety regulations from the early stages.	Ein
19	Open	12/2/2024	Ein	There is a lack of spare parts stocked.	Legal	Non-compliance with right to repair legislation 2021.	2	3	6	Mitigate	Enter a contract with a third party company to stock and manage spare parts for this product. Produce an overhead of product components.	Vic
20	Open	13/2/2024	Ein	Cybercriminals breach into project systems or databases.	Security	Software and confidential/sensitive project data may be stolen and/or released to the public domain.	4	3	12	Mitigate	Always use secure network servers, multi-factor authentication and provide employee cyber-security training.	Ein
21	Open	13/2/2024	Aung	Suppliers breach the contract in terms of quality or delivery schedule.	Supply Chain	Quality and delivery schedule of supplied materials/components is suboptimal, causing delays later in the supply chain.	4	3	12	Mitigate	Have financial compensation (known as liquidated damage) if the components/materials arrive late or faulty by the supplier. Do not accept early deliveries as they can take up storage space.	Daniel
22	Open	13/2/2024	Abdullah	Natural disasters, political unrest and other external factors disrupt the routes of supply chain.	Supply Chain	Materials/components arrive significantly later, causing delays later in the supply chain.	3	3	9	Mitigate	Keep clear terms and conditions in all contracts which takes liability away from the company if product delivery to retailers are affected by natural disasters or political unrest.	Kabeer

23	Open	13/2/2024	Aung	Excessive stock of finished goods accumulates during off season.	Supply Chain	Insufficient facilities to store inbound finished goods.	2	3	6	Mitigate	Offer off season discounts and carry out seasonal marketing campaign to stimulate additional demand where necessary. Adjust production schedule according to demand forecast, to decrease output in off-seasons.	Aung
24	Open	13/2/2024	Daniel	Work in progress (WIP) stock is kept waiting in queues at any point in the production line.	Supply Chain	Increased lead time, high inventory costs, bottlenecks in production lines and wasted storage space.	3	4	12	Mitigate	Appropriate scheduling and management of supply chain and manufacturing processes.	Aung
25	Open	13/2/2024	Aung	Finished goods are lost in storage or transit.	Supply Chain	Delays in delivery to retailers/customers, which can cause financial and reputational damages to the company.	2	4	8	Mitigate	Use barcode readers, radio-frequency identification (RFID) trackers and information technology systems to track products during distribution and outbound. Predict frequency of damages and adapt production accordingly.	Ein
26	Open	13/2/2024	Vic	Finished products are damaged in storage or transit.	Supply Chain	Financial losses and reputation damage to the company.	3	4	12	Mitigate	Set clear terms and conditions on damage with retailers and third-party distributors. Ensure that finished goods are packed preservedly and ready for transportation. Predict frequency of damages and adapt production accordingly.	Vic
27	Open	13/2/2024	Aung	Suppliers and distribution partners cause unnecessary damage to the environments and do not comply with local sustainability goals.	Supply Chain	Lowered sales and a decline in company reputation.	2	3	6	Mitigate	Seek suppliers and partners which have transparency surrounding environmental impacts of their operations and have a good reputation on sustainability.	Daniel
28	Open	13/2/2024	Vic	Trading in a foreign currency can cause uncertainty in finances due to exchange rate volatility.	Supply Chain	Incur unnecessary losses or decrease in profit.	3	3	9	Mitigate	Ensure all trading contracts clearly state that costs are to be paid in GBP.	Kabeer
29	Open	4/3/2024	Aung	Defects are not discovered until they have reached the customer.	Quality	Financial losses due to warranty, decrease in reliability means that retailers may be inclined to offer concessions or deals on the product, reducing company revenue. This also reduces product and company reputation.	2	5	10	Mitigate	Implement a robust final quality check and testing phase before the item is sent to retailers.	Aung
30	Open	4/3/2024	Aung	There is a high number of defective components or defective finished products.	Quality	Delays in delivery and economic consequences in replacing defective stock.	3	3	9	Mitigate	Strategically place quality checkpoints before significant (expensive, lengthy or irreversible) processes in the production line, to minimise wasted budget and time.	Aung
31	Open	4/3/2024	Daniel	Suppliers produce a significant number of defective components.	Quality	Will take additional funds and time to replace defective components.	2	3	6	Mitigate	Employ our own quality management team who will visit supply chain partners on frequent rotations. Implement total quality management system that focuses on getting things right at the first time, rather than detecting defects and fixing them.	Aung
32	Open	4/3/2024	Aung	The quality management processes are inefficient or lengthy.	Quality	Delays in production which will push back distribution.	5	2	10	Mitigate	Use pareto charts to prioritize different causes of defects and corresponding preventive actions.	Aung
33	Open	4/3/2024	Kabeer	The customer support team is not able to solve issues or inquiries in a timely manner.	Quality	Customer disappointment and a failure to meet target customer support satisfaction and response rates, leading to negative product and company reputation.	3	4	12	Mitigate	Train the customer support team. Provide an efficient issue and inquiry management system. Allocate sufficient resources to the customer support department, and continuously review this.	Aung
34	Open	8/4/2024	Daniel	The product is not functional, robust or user-friendly.	Technical	Low customer satisfaction and increased workload for customer service team.	2	4	8	Mitigate	Develop a high-performing and robust design and test the product thoroughly prior to release, as well as conducting a beta test to find previously unknown sources of issues.	Daniel
35	Open	8/4/2024	Ein	There is high waste and lead times in manufacturing processes.	Quality	Unnecessary costs incurred in disposal and recovery, as well as wasted time.	4	2	8	Mitigate	Implement Lean Production processes.	Aung
36	Open	8/4/2024	Aung	The product and its components do not comply with relevant standards and guidelines.	Technical	The product receives low reputation by external organisations and customers, lowering perceived quality.	2	3	6	Mitigate	Ensure that all relevant standards and guidelines are adhered to through a robust process.	Daniel
37	Open	8/4/2024	Aung	There is inefficient management and resolution of defects or customer reported issues.	Quality	Delays in production and decrease in customer satisfaction.	2	4	8	Mitigate	Use a commercial software that manage defects and issues centrally. Assign configuration identity, serial number and production batch number to all components, materials and code.	Aung
38	Open	8/4/2024	Vic	Parts of the development process of the new product are not ethical.	Project	Negative reputation and protests or boycott from non-profit organisations and societies.	3	2	6	Mitigate	Follow the statement of ethical principles by the Engineering Council and use ethical decision making tools.	Kabeer
39	Open	8/4/2024	Ein	The design of the product is not inclusive, resulting in some customers feeling they are excluded from the product.	Quality	Inability to capture desired market share, and lower sales made.	5	1	5	Mitigate	Design with inclusive requirements, acknowledging customers can come in different sizes, races, genders and disabilities (including situational impairments).	Ein
40	Open	15/04/2024	Aung	The product cannot be sustainability disposed, inducing negative environmental impacts.	Technical	The product has negative reputation for sustainability, decreasing sales and not appealing to sustainability-aware consumers.	3	2	6	Mitigate	Design with circular economic model in mind, considering the end-of-life disposal. Ensure design adheres to BS-8887 guidelines.	Vic