RISK MANAGEMENT FRAMEWORK FOR MEDICAL COURIER SERVICES

***Submitted by***

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MEDICAL COURIER SERVICES

BUSINESS GOALS:

|  |  |  |
| --- | --- | --- |
| RANK | BUSINESS GOALS | DESCRIPTION |
| M | Specimens | Medical couriers often transport biological specimens such as blood samples, tissue samples, urine, and other bodily fluids. |
| H | Medical  Supplies | They can transport medical supplies like medications, vaccines, medical devices, equipment to different healthcare facilities. |
| H | Lab Results | Couriers may deliver test results and reports between medical facilities and laboratories. |
| L | Documents | Medical records, patient files, legal documents, and other sensitive paperwork may also be transported by medical courier services. |
| M | Pharmaceuticals | Couriers may deliver prescription medications from pharmacies to patients' homes, healthcare facilities, or other designated locations. |
| H | Organ and Tissue Transportation | In cases of organ transplantation, medical couriers play a critical role in transporting organs and tissues. |

BUSINESS RISKS:

|  |  |
| --- | --- |
| BUSINESS RISKS | DESCRIPTION |
| Market Competition | Increased competition from existing and new players |
| Regulatory Changes | Changes in healthcare regulations affecting operations. |
| PRODUCT RISKS | DESCRIPTION |
| Specimen  Integrity | Risk of specimen contamination or damage during transit |
| Temperature Control | Inadequate temperature control for sensitive specimens |
| PROJECT RISKS | DESCRIPTION |
| Technology Failure | System or vehicle breakdowns disrupting operations |
| Security Breaches | Data breaches or theft of sensitive patient info. |

SYNTHESIZE AND PRIORITIZE THE RISKS:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| BUSINESS RISKS | RISK  INDICATORS | LIKELIHOOD | IMPACT | ESTIMATED LOSS | IMPACT | SEVERITY |
| Market Competion | High Investments on Advertising. | M | Unable to reach more no of people | Revenue Loss- 10Lakhs Market Share- 15% | M | M |
| Data Breaches | Unauthorized Access Attempts. | H | Customer Data needs to be protected | Revenue Loss- 50Lakhs Market Share- 10% | H | H |
| Delivery Delays | Timely deliveries are critical. | M | Medicines need to delivered on time | Revenue Loss- 5Lakhs Market Share-10% | M | M |
| Unexpec-ted Demand Surges | Challenging your resources and capacity to deliver.. | L | During Pandemic there will be sudden rise in need. | Revenue Loss- 20Lakhs Market Share-5% | M | M |
| Quality Control | Ensuring the accuracy and quality of deliveries is crucial | H | Mistakes can lead to misdiagnoses, delayed treatments. | Revenue Loss- 15Lakhs Market Share- 5% | H | H |
| Loss or Theft | Losing important medical cargo due to theft | M | They can disrupt healthcare operations and result in financial losses. | Revenue Loss- 25Lakhs Market Share- 10% | M | M |

BUSINESS GOAL - TECHNICAL RISKS RELATIONSHIP:

|  |  |  |
| --- | --- | --- |
| BUSINESS GOALS | BUSINESS RISKS | TECHNICAL RISKS |
| Ensure Reliability and Timeliness of Deliveries | Supply Chain Disruptions: Interruptions in the supply chain may lead to delays in medication deliveries, impacting goal achievement. | Technology Failure: Technical failures in order processing or tracking systems can result in delivery delays. |
| Maintain Regulatory Compliance | Regulatory Compliance Risk: Failure to comply with pharmaceutical transportation regulations can result in legal penalties | Data Security and Privacy: Ensuring patient data privacy and security is crucial for regulatory compliance. |
| Enhance Customer Satisfaction | Data Security and Privacy: Breaches of sensitive patient information can damage the company's reputation and customer trust | Communication Systems: Ensuring reliable communication for addressing customer inquiries and providing updates is vital for satisfaction. |
| Achieve Cost Efficiency | Economic Conditions: Economic downturns may impact customer demand and, consequently, the company's cost-efficiency goals. | Technology Failure: Technical failures can lead to increased operational costs. |

TECHNICAL RISKS SEVERITY BY BUSINESS GOALS:

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| BUSINESS GOALS | | | | | | |
| ID | TECHNICAL RISKS | Specimens | Medical  Supplies | Documents | Pharmaceuticals | Organ and Tissue Transportation |
| 1 | Network Connectivity Issues | High | Medium | Medium | Low | Medium |
| 2 | Vehicle Breakdowns | High | Low | Low | Medium | Medium |
| 3 | Software Integration Issues | Medium | Low | Low | High | Medium |
| 4 | Data Security Breaches | Low | Low | Low | Low | Medium |
| 5 | Inadequate Route Planning | High | Low | Low | High | Medium |
| 6 | Staffing Shortages | Medium | Medium | Low | Low | High |

IMPLEMENTATION:

Here are mitigation strategies for each of the identified risks:

Market Competion:

* Implementation: Regularly monitor the competitive landscape and stay informed about new entrants and existing competitors.
* Management: Develop a strong value proposition, emphasize quality service, and build long-term relationships with clients. Focus on innovation and differentiation to stay competitive.

Regulatory Changes

* Implementation: Stay updated with healthcare regulations and maintain compliance with relevant laws and standards.
* Management: Establish a compliance team, conduct regular training for staff, and adapt operations to align with changing regulations.

Specimen Integrity:

* Implementation: Implement strict specimen handling protocols, including proper packaging, labeling, and tracking.
* Management: Provide specialized training for couriers, use specialized containers (e.g., biohazard bags), and implement quality control measures.

Temperature Control:

* Implementation: Invest in temperature-controlled vehicles and storage solutions for transporting sensitive specimens and medications.
* Management: Regularly calibrate temperature control systems, conduct temperature monitoring, and have contingency plans in case of temperature deviations.

Technology Failure:

* Implementation: Invest in reliable and redundant technology systems, including GPS tracking, communication devices, and vehicle maintenance tracking.
* Management: Implement a proactive maintenance schedule, offer staff training on technology use, and have backup communication methods in case of failures.

Security Breaches:

* Implementation: Implement robust data security measures, including encryption, access controls, and regular security audits.
* Management: Train employees in data security best practices, have an incident response plan in place, and regularly update security protocols to address emerging threats.

**RESULT:**

Hence we completed the risk management frameworks for medical courier service and given explanation for implementing it.