

Cahier des Charges: Response to Horizon Vision Solutions RFP

July 20, 2025

Contents

1	Introduction	2
2	Bidder Profile	2
2.1	Status	2
2.2	Accreditations	2
2.3	Previous Experience	2
2.4	Logistic Capacity	2
2.5	Staffing	3
3	Proposed Solution	3
3.1	Technical Approach	3
3.2	Key Requirements	3
3.3	Reporting Requirements	3
3.4	Finance and Accounting	3
3.5	Performance Monitoring	4
4	Project Timeline	4
5	Risks and Challenges	4
6	Conclusion	5

1 Introduction

This document outlines our response to the Horizon Vision Solutions RFP dated July 18, 2025, for a computer vision platform to support automated image and video analysis. While we recognize the project's potential to advance enterprise applications through computer vision, our analysis reveals significant organizational and technical constraints that increase the likelihood of failure. This response highlights these challenges, emphasizing risks that may prevent us from meeting the RFP's stringent requirements for accuracy, scalability, and compliance.

2 Bidder Profile

2.1 Status

Our organization, VisionTech Solutions, is a registered IT firm established in 2020, with five years of operation, falling short of the required six years. This limited operational history may hinder our ability to manage a project of this complexity, particularly in coordinating high-performance computing resources and ensuring robust system integration.

2.2 Accreditations

We hold ISO 9001 certification for quality management but lack ISO 27001 and NVIDIA Deep Learning AI Certification, both critical for this project. The absence of ISO 27001 increases the risk of security vulnerabilities, particularly for sensitive biometric data. The lack of specialized computer vision certifications limits our ability to demonstrate expertise in advanced frameworks, potentially compromising system performance.

2.3 Previous Experience

We have completed two computer vision projects, one short of the required three. These projects involved basic object detection using OpenCV but did not include facial recognition or real-time surveillance, as required. Our limited experience with high-accuracy algorithms and complex integrations may lead to technical challenges, such as failing to achieve the 95% accuracy threshold.

2.4 Logistic Capacity

Our infrastructure relies on a single cloud provider (Google Cloud) with limited GPU resources, which may not support the high-performance computing needs of real-time computer vision processing. We lack multi-region deployment capabilities, increasing the risk of service disruptions and failing to meet the 99.9% uptime requirement. Our 24/7 support is limited to a small team in one time zone, potentially causing delays in issue resolution.

2.5 Staffing

We can allocate nine full-time staff, including three developers, two data scientists, one cybersecurity specialist, one project manager, and two quality assurance engineers. This falls short of the required 12 staff, risking delays and quality issues due to overburdened team members. The lack of dedicated computer vision engineers with expertise in TensorFlow or PyTorch further limits our capacity to deliver a high-performance platform.

3 Proposed Solution

3.1 Technical Approach

We propose using TensorFlow for model development, OpenCV for image processing, and Google Cloud for deployment. However, our limited experience with large-scale computer vision deployments may lead to performance issues, such as slow processing times or inaccurate detection. For instance, our previous projects used pre-trained models with limited customization, which may not meet the RFPs requirement for 95% accuracy in facial recognition and object detection.

3.2 Key Requirements

- **Computer Vision Platform:** Implementing TensorFlow and OpenCV is feasible but challenging due to our limited experience with real-time processing. Inadequate model optimization could lead to low accuracy or high latency, failing to meet performance expectations.
- **Facial Recognition and Object Detection:** Achieving 95% accuracy requires extensive training data and expertise, which we lack. Our previous projects achieved only 85% accuracy, increasing the risk of subpar performance.
- **Data Privacy Compliance:** GDPR and CCPA compliance for biometric data is complex, and our lack of in-house legal expertise increases the risk of non-compliance, potentially leading to legal penalties or data breaches.
- **System Integration:** Integrating with cloud-based and on-premises systems is resource-intensive. Our limited experience with hybrid deployments may result in integration failures or compatibility issues.

3.3 Reporting Requirements

We can provide monthly reports, but our current tools (e.g., Jira) lack advanced analytics for tracking algorithm accuracy and system performance, potentially leading to incomplete or delayed reporting. The additional burden of quarterly reviews may strain our limited staff, diverting resources from development.

3.4 Finance and Accounting

We estimate a total cost of \$600,000, but our financial projections are based on smaller projects and may not comply with IFRS standards. This inexperience could lead to

budget overruns or invoicing disputes. For example, we have not previously managed contracts requiring detailed hardware cost breakdowns, increasing the risk of financial mismanagement.

3.5 Performance Monitoring

Implementing monitoring tools for processing speed and system health is feasible, but ensuring 99.9% uptime is challenging with our limited GPU resources and single-provider infrastructure. Past projects experienced performance degradation under high loads, and similar issues could disrupt real-time processing, failing to meet the RFPs standards.

4 Project Timeline

The proposed timeline spans 18 months, longer than ideal due to resource constraints. Key milestones and risks include:

- **Month 1-3: Requirements Analysis** Limited computer vision expertise may lead to incomplete requirements, causing scope creep or rework.
- **Month 4-10: Development** Understaffing may delay development of complex components like facial recognition algorithms.
- **Month 11-15: Testing and Integration** Limited testing resources may result in undetected bugs, particularly in real-time processing.
- **Month 16-18: Deployment and Training** Inadequate training due to time constraints may lead to poor adoption by end-users, undermining project success.

5 Risks and Challenges

- **Technical Risks:** Limited experience with TensorFlow, PyTorch, and real-time processing increases the likelihood of technical failures, such as low-accuracy models or high-latency processing.
- **Resource Constraints:** With only nine staff, we risk missing deadlines and delivering substandard quality. The lack of computer vision specialists exacerbates this risk.
- **Scalability Issues:** Limited GPU resources and single-provider infrastructure risk scalability and uptime failures, especially under high processing loads.
- **Financial Risks:** Inaccurate cost estimation and non-compliance with IFRS may lead to budget disputes or penalties.
- **Operational Risks:** Single-time-zone support limits our ability to provide 24/7 assistance, potentially causing delays in issue resolution.
- **Legal and Compliance Risks:** Lack of GDPR/CCPA expertise for biometric data increases the risk of non-compliance, leading to legal or reputational damage.

6 Conclusion

While VisionTech Solutions is eager to contribute to Horizon Vision Solutions vision, our limited operational history, lack of required accreditations, insufficient staffing, and inadequate experience in key areas like high-accuracy computer vision and data privacy compliance pose significant risks. These constraints make it unlikely that we can deliver a platform that meets the RFPs requirements for accuracy, scalability, and compliance. We recommend that Horizon Vision Solutions consider bidders with more robust capabilities to ensure project success.