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## List of Abbreviations

Application Programming Interface (API).....	13	General Data Protection Regulation (GDPR).....	5
Care Quality Commission (CQC).....	5	Information Systems (IS).....	4
Control Objectives for Information and Related Technologies (COBIT) .....	12	Information Technology (IT) .....	4
Coronavirus Disease (COVID).....	6	Unique Quality Care Ltd. (UQC).....	4

## 1 Introduction

Unique Quality Care Ltd. (UQC) is committed to providing high-quality home care services. To enhance care activities, communication, and support for care workers, UQC has integrated Birdie and BrightHR mobile applications, developed by Birdie Care Services Ltd. and Peninsula Group respectively into its operations. These applications are crucial to UQC's Information Systems (IS) framework, ensuring real-time data capture, data integrity, and regulatory compliance.

This report evaluates UQC's IS Governance framework, focusing on its effectiveness, alignment with the business strategy, ability to manage risks, values, and opportunities. By examining the integration of Birdie and BrightHR, the report highlights areas for improvement and explores opportunities to optimize operations while maintaining compliance. BrightHR is vital for managing workforce processes like scheduling, attendance tracking, and employee records, ensuring operational efficiency and compliance with employment laws. Its integration addresses HR-specific needs and employee management while creating a holistic system that supports client care duties carried out on Birdie.

## 2 IS Governance System at Unique Quality Care

IS Governance, is a structured approach to managing IT resources to meet organizational goals effectively and securely (Peterson, 2004). At UQC, this framework comprises IT systems (computers, printers, etc.), BrightHR, and the Birdie app, which facilitate secure data management, ensure compliance, and enhance operational efficiency. By supporting real-time care documentation and fostering accountability, UQC's IS Governance framework underpins its commitment to delivering exceptional home care services. Additionally, computers and printers at the office support documentation for potential and existing clients and other home care duties.

### 2.1 Key Components of UQC's IS Governance System

UQC leverages digital tools and office systems to boost efficiency and service quality (Ghaffari Heshajin *et al.*, 2024). The Birdie app allows real-time documentation of care tasks, ensuring compliance and enabling remote monitoring. The BrightHR app streamlines employee management with rota planning, attendance tracking, and a self-service portal for employees. Additionally, desktop computers and printers support administrative tasks like document storage, client contracts, and payroll processing, complementing the digital tools for an efficient operational environment.

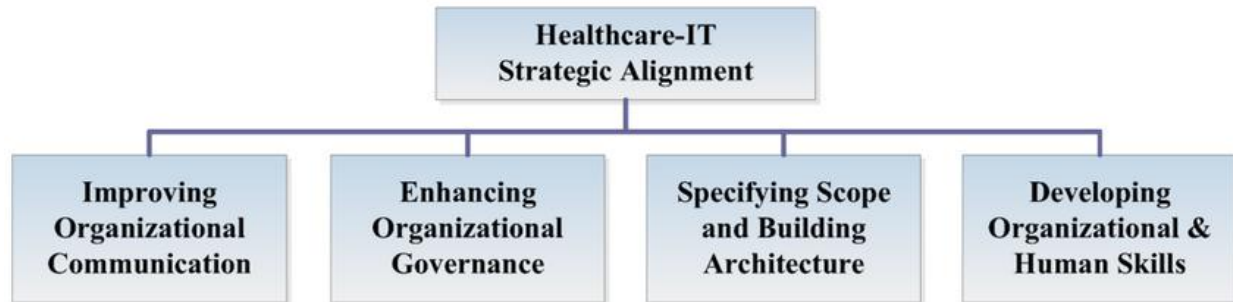
**Table 1 Comparison of Birdie and BrightHR: Features, Benefits, and Improvement Insights**

Feature	Birdie	BrightHR	Areas for Improvement
Real-time data capture	Yes	No	Improve HR-data integration
Compliance support	GDPR, Care Quality Commission (CQC) standards, The Care Act 2014, and the likes	GDPR, Employment Rights Act 1996, and the likes	Enhanced encryption
User Interface	Accessible for care workers	Accessible for HR staff	Add multilingual support
Training and updates	Regular updates by Birdie Care	Tutorial and guides by BrightHR	Ensure comprehensive training for all applications

## 2.2 IS Governance Integration

### Alignment

The integration of Birdie into UQC's operations highlights a well-aligned IS Governance framework (Alsharif *et al.*, 2018). The app's primary function is to ensure real-time data capture for various care activities, which is essential for maintaining data integrity and complying with regulatory requirements. Care workers at UQC document tasks such as medication administration, personal care activities, companionship, and COVID-19 testing using the app. This precise documentation helps create an accurate and comprehensive record of the care provided to each client, supporting UQC's goal of delivering high-quality care services.



**Figure 1** UQC’s healthcare-IT strategic alignment structure (Alsharif *et al.*, 2018)

BrightHR on the other hand aligns with UQC’s organizational goals by streamlining HR processes such as shift scheduling, absence or leave management, and staff performance tracking. Its integration ensures that workforce management is cohesive, supporting the efficient allocation of resources to meet client care needs (Kiron *et al.*, 2018). By automating HR tasks, BrightHR complements Birdie’s care documentation system, creating a unified IS Governance framework.

IT systems, including office computers and printers, align with the organization’s objectives by supporting essential documentation tasks for potential and existing clients (Gasser, 1986). These systems facilitate administrative functions such as creating care plans, managing compliance reports, and maintaining staff records. Their access to Birdie and BrightHR’s website interface ensures a seamless workflow across operational and HR processes.

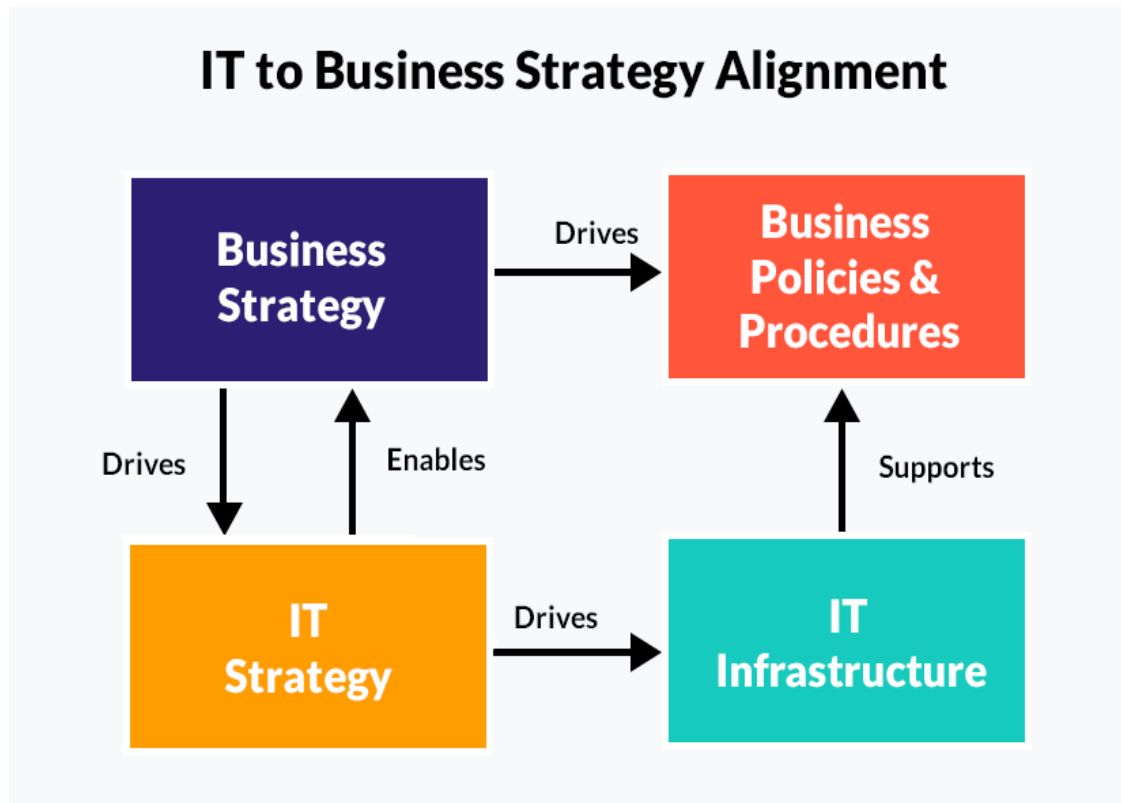


Figure 2 UQC's IT to Business Strategy Alignment (Simplesolve, 2024)

## Inclusivity

Birdie features a user-friendly interface that prioritizes accessibility, ensuring care workers with varying technical skills can document their tasks efficiently. While the app supports only English, its intuitive design allows for effective use by all care workers, maintaining consistent and accurate documentation across the organization (Straatman *et al.*, 2023).

BrightHR's user-friendly interface is designed to accommodate employees with varying levels of technical expertise, ensuring that staff can easily access and update their personal records. The self-service portal allows all staff to view their schedules, request time off, and report absences without reliance on administrative support.



The IT systems at UQC are designed to ensure inclusivity by providing staff members with equitable access to tools such as printers for printing out clients' documents requested by client families, and computers used by office staff to work on tasks given by the CQC, other third-party organizations, and other administrative tasks. With user-friendly interfaces and shared resources, employees with varying technical proficiency can efficiently use these systems, ensuring consistent support across the organization.

### **Education and Engagement**

Birdie Care Services Ltd. provides regular updates, keeping care workers informed about the latest features and best practices. This education ensures that care workers are engaged and proficient in using the service, enhancing the overall quality of data captured and the care provided (De Leeuw, 2017).

BrightHR offers tutorials and guides that keep employees informed about its features, ensuring staff engagement with the platform. Regular updates and training sessions provided by BrightHR empower employees to leverage the system fully, contributing to their professional growth and operational efficiency.

There is not enough regular training and system updates to keep UQC staff informed and engaged in the effective use of IT systems across the organization. Employees are not given extra training regarding the use of essential tools such as Microsoft Office to type work-related reports for client families but rather rely solely on Birdie and BrightHR, which may not be enough although it enhances their proficiency and ensures that systems are utilized to their potential.





## **Connectedness**

The Birdie app enhances connection within UQC by facilitating activities for care workers, management, and office staff. It allows office monitoring of client activities, especially when care workers are late for a call or make documentation errors. The app enables real-time documentation accessible to supervisors and family members, ensuring all stakeholders are informed about care provided and any changes in the client's condition, leading to better coordination and timely interventions (Martin *et al.*, 2022).

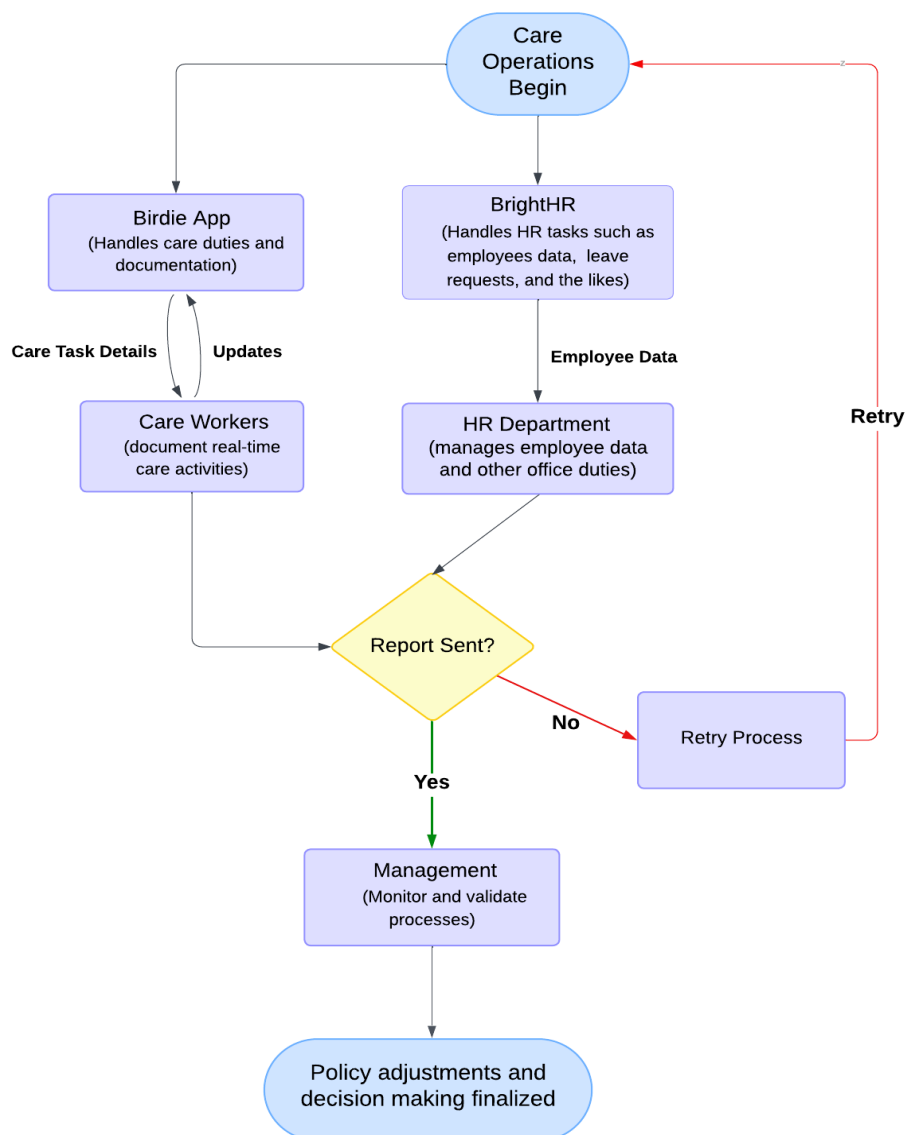
BrightHR enhances connectedness by providing real-time access to HR data, such as rotas and attendance records, for both management and employees. Notifications and alerts keep care workers updated on scheduling changes or important announcements. The platform integrates with payroll systems, ensuring seamless communication between HR and financial departments.

IT systems enhance collaboration at UQC by bridging digital platforms and physical documentation processes. They facilitate seamless communication among care workers, management, and administrative staff, enabling the sharing of updated client information, care plans, and reports for better coordination and service delivery.

## **Informed Decision Making**

Real-time data from the Birdie app supports informed decision-making at UQC. Supervisors can monitor care activities, ensuring adherence to standards and protocols. The app's comprehensive documentation allows for detailed analysis, helping identify trends, address issues promptly, and make data-driven decisions to improve care quality and compliance.

## UQC's IS Governance Framework



**Figure 3 Flowchart illustrating the Integration of UQC's IS Governance Framework (personal collection)**

BrightHR provides managers with insights into attendance patterns, absenteeism rates, and staff performance, enabling data-driven decisions. The analytics feature helps identify staffing shortages and optimize resource allocation, maintaining high standards of client care. Combining insights from BrightHR and Birdie allows UQC to evaluate both employee efficiency and client outcomes holistically, ensuring informed decisions that benefit the organization (Houngbo *et al.*, 2017).

By organizing and maintaining up-to-date client records, compliance documents, and HR data, UQC's IT systems support informed decision-making. Management can analyse trends in care delivery and staff performance through integrated tools, aiding strategic planning and ensuring regulatory compliance.

### 2.3 Effectiveness of IS Governance Policies, Plans, Projects, and Priorities

**Data Integrity and Compliance:** UQC's IS Governance framework emphasizes data integrity and compliance. The Birdie app ensures accurate and prompt documentation of care activities, which is crucial for maintaining data integrity (Van Huy, 2023). Birdie's real-time data capture feature supports compliance with CQC standards for Health and Social Care by providing a reliable record of care, essential for audits and inspections. BrightHR supports compliance with employment regulations, minimizing legal risks related to workforce management.

**Precision Care Monitoring:** Birdie's automation feature reduces manual tasks and streamlines data access, enabling staff to focus more on client care. For instance, Birdie's geolocation-based check-in and check-out system ensures carers can only log their work activities within 100 metres of the client's residence, enhancing accountability and flagging false checkouts for management review. Additionally, its comprehensive care documentation for activities such as medication administration and companionship support continuity and personalized care.

**Continuous Improvement:** UQC's IS Governance framework prioritizes continuous improvement through regular updates and training sessions provided by the digital applications. These updates ensure the applications stay current with technological advancements and industry best practices. Continuous improvement is also driven by feedback from care workers, leading to ongoing enhancements in the app's functionality and usability.

**Training and Support:** UQC does not conduct frequent training sessions to ensure that staff members are proficient in using Birdie and BrightHR, which does not help in adequate usage. For improvement of service on both software applications, technical teams offer technical support to mitigate challenges related to system updates or user errors when the need arises.

### 2.3.1 Areas for Improvement

Control Objectives for Information and Related Technologies (COBIT) is a globally accepted framework designed to enhance IT governance and management (Bernroider and Ivanov, 2011). It aims to align IT initiatives with business goals while ensuring optimal resource utilization, effective risk management, and value delivery.

For UQC, COBIT can address existing IS Governance challenges by:

1. Clearly defining roles and responsibilities for IT governance.
2. Strengthening data security and regulatory compliance.
3. Enhancing the integration of Birdie, BrightHR, and office IT systems.

**Table 2 COBIT as an Area for Improvement for UQC**

Improvement Area	Implementation	Benefit to UQC
Governance Framework	Align IT objectives with business needs using COBIT controls like accountability and resource optimization.	Better decision-making and IT-business alignment.
Risk Management	Identify risks, apply COBIT controls like access management and incident response, and conduct regular audits.	Improved risk mitigation and business continuity.

- Advanced Analytics and Reporting:** While both applications provide basic reporting features, they lack advanced analytics that could offer deeper insights into client care trends and workforce performance. This would enable UQC to make data-driven decisions and further improve care quality. Advanced analytics could help identify trends, measure intervention effectiveness, and optimise resource allocation. Adding predictive analytics could also help anticipate client needs, optimise staff schedules, and improve resource allocation.
- Data Security Measures:** Enhancing data security measures to protect sensitive client information from potential cyber threats is crucial. This could involve implementing stronger encryption methods, conducting regular security audits, and training care workers on data security best practices (Kruk *et al.*, 2018).

- **Integration of Systems:** The lack of seamless connectivity between Birdie, BrightHR, and office systems requires manual data transfers, increasing the potential for errors and inefficiencies. Developing middleware or Application Programming Interface (APIs) to bridge these systems would enhance overall productivity.
- **Communication Tools:** Despite Birdie's broadcast messaging feature, many employees still rely on external platforms like WhatsApp for communication. Encouraging the use of built-in features could enhance data security and reduce fragmentation in communication.
- **Enhanced Training Programs:** UQC currently offers limited training sessions for Birdie and BrightHR, leading to inadequate usage. To improve service delivery, UQC should implement more frequent and comprehensive training programs, ensuring staff are proficient in using both applications.

### 3 Link Between IS Governance and Business Strategy

**Strategic Goals:** Integrating Birdie and BrightHR aligns with UQC’s goals of maintaining data integrity, ensuring regulatory compliance, and improving care quality. The apps' real-time data capture and comprehensive documentation provide reliable records of care activities and employee history, essential for compliance and high-quality care (Klettner, Clarke, and Boersma, 2014)

**Connected Environment:** Birdie and BrightHR support UQC’s strategy of fostering a connected and informed care environment. By facilitating seamless communication between care workers, supervisors, and clients' families, the apps ensure all stakeholders are informed about care provided and any changes in the client’s condition, enhancing coordination and timely interventions (De Haes, 2009.)

**Workforce Optimization:** BrightHR supports strategic workforce planning by ensuring effective scheduling and management of care workers. By tracking attendance and performance, the software helps UQC identify and reward high-performing employees, boosting staff morale and retention.

**Table 3 Alignment of IS Governance Components with Business Strategy**

IS Governance Component	Strategic Alignment	Business Goal Supported
Birdie App	Ensure real-time care documentation, improving service quality and compliance	Maintain high-quality care and regulatory compliance
BrightHR	Streamline HR processes, supporting workforce optimization and compliance with laws	Enhance resource management and employee satisfaction
IT Systems (Office)	Facilities administrative tasks, ensuring seamless integration of digital tools	Support operational efficiency and data management

### 3.1 Potential Discrepancies

While Birdie, BrightHR, and office IT systems align with UQC's strategic goals, some discrepancies need addressing:

- **Expansion and Adaptability:** If UQC plans to expand services to new regions or demographics, the IS Governance framework may need adaptation. This could involve modifying the app to meet different regulatory requirements or adding features to support diverse client needs.
- **Technology Integration:** If the strategy includes advanced technologies like AI or machine learning, Birdie and BrightHR may need upgrades. These technologies could enhance functionalities and provide additional insights into care activities, employees, and office data.
- **Inefficient Use of Technological Resources:** The Birdie app's broadcast messaging tool is underutilized. Management often uses WhatsApp for urgent alerts, leading to missed updates.
- Using Birdie for these alerts would ensure care workers receive critical information promptly. Additionally, BrightHR's attendance and performance tracking is not used efficiently, with reliance on traditional care notes instead.
- **Limited Integration with Office IT Systems:** Office computers and printers are used for documentation, but there is no seamless connection with the Birdie app. This often requires manual data transfer, increasing the risk of errors and inefficiencies in client care documentation and compliance reporting.
- **Inconsistent Usage Among Care Workers:** Some employees do not fully engage with all Birdie app features, such as checking in and out of visits or providing detailed task descriptions. This inconsistency undermines the app's potential to provide comprehensive and accurate data, essential for informed decision-making and maintaining high standards of care.



### 3.1.1 Addressing Discrepancies

To address potential discrepancies, UQC should:

- **Conduct a Thorough Review:** Perform a comprehensive review of the IS Governance framework and business strategy to identify gaps or misalignments. Involve key stakeholders, including care workers, supervisors, and clients, for a complete assessment of needs and priorities.
- **Develop a Plan for Alignment:** Based on the review, update IS Governance policies, plans, and projects to align with the business strategy. This may include investing in new technologies, enhancing data security, and providing additional training and support to care workers. Aligning the IS Governance framework with the business strategy ensures UQC meets its strategic goals and delivers high-quality care services.
- **Improve Monitoring and Evaluation:** Address the lack of a robust system for monitoring performance and ensuring compliance. Introduce automated solutions and conduct regular evaluations to track progress and identify areas for enhancement.

## 4 Values, Risks, and Opportunities of IS Governance Framework at UQC

The IS Governance framework at UQC plays a critical role in aligning technology with organizational objectives, delivering significant value through improved efficiency and compliance (Foster *et al.*, 2018). However, it also involves inherent risks, such as data security challenges, which require careful management. At the same time, this framework opens up opportunities for innovation, enhanced client care, and operational growth. Exploring its values, addressing risks, and leveraging opportunities ensures the framework remains robust and effective.

### 4.1 Values

Integrating the Birdie app into UQC's operations offers several key benefits:

- **Improved Care Quality:** The app ensures accurate and timely documentation of care activities, supporting continuity of care and better coordination of services.
- **Regulatory Compliance:** Data captured and documented by the app complies with CQC's quality standards for Health and Social Care in the UK, essential for audits and maintaining the organization's reputation.
- **Enhanced Communication:** The direct message notification feature helps management communicate updates, such as rota changes or client health issues, ensuring all stakeholders are informed and enabling better coordination and timely interventions.

### 4.2 Risks

The integration of the Birdie app also presents several risks that the company may encounter. However, these risks can be eradicated if the right measures are put in place, as shown in Table 3.

**Table 4 Risk Mitigation Measures for IS Governance Framework**

Risk	Potential Impact	Mitigation Measure
Data breaches or cyber-attacks	Compromise of sensitive client information, leading to reputational damage and legal penalties.	Implement strong encryption, regular security audits, and staff training on data security (Young and Jordan, 2002)
Inconsistent use of Birdie and BrightHR	Reduced efficiency and data accuracy, hindering decision-making	Conduct comprehensive training engagement workshops
Manual data transfer errors	Increased workload and potential compliance issues due to inaccuracies	Develop APIs to automate data integration across systems

### 4.3 Opportunities

Despite the risks, Birdie app presents some opportunities for UQC:

- **Advanced Analytics:** Integrating advanced analytics within the Birdie app and BrightHR can provide valuable insights into care patterns and employee duties. Advanced analytics can help identify trends, measure the effectiveness of interventions, and optimize resource allocation. This would enable UQC to make data-driven decisions and further improve care quality.
- **Expansion:** Adapting the IS Governance framework to support expansion into new regions or client demographics, facilitated by the app's scalability, presents a significant opportunity (Alreemy *et al.*, 2016). By customizing the app to meet diverse client needs and regulatory requirements, UQC can extend its services and reach more clients.

## 5 Conclusion

In conclusion, the integration of the Birdie app into UQC's operations has significantly enhanced its IS Governance framework. The app supports real-time data capture, maintains data integrity, and ensures compliance with regulatory requirements. While the IS Governance framework at UQC is well-aligned with its strategic goals, there are areas for improvement, such as advanced analytics and data security measures. By addressing these areas and aligning its IS Governance framework with its business strategy, UQC can continue to deliver high-quality care services and achieve its strategic objectives. The Birdie app presents several values, risks, and opportunities, and by managing these effectively, UQC can further strengthen its IS Governance framework and enhance the quality of care provided to its clients.

## References

- Alreemy, Z., Chang, V., Walters, R. and Wills, G., (2016). Critical success factors (CSFs) for information technology governance (ITG). *International journal of information management* [online], 36(6), pp.907-916.
- Alsharif, S., Benslimane, N., Khalifa, M., and Price, C., (2018). Healthcare IT strategic alignment: Challenges and recommendations. *In: A. Hasman, R.H. Haux, J. Van Der Lei, E. De Clercq, F. Roger-France, and H.-P. Scherrer. eds. Data, informatics and technology: An inspiration for improved healthcare* [Online]. IOS Press, pp. 207-207.
- Bernroider, E.W. and Ivanov, M., (2011). IT project management control and the Control Objectives for IT and related Technology (CobiT) framework. *International Journal of Project Management* [online], 29(3), pp.325-336.
- De Leeuw, E., 2017. Engagement of sectors other than health in integrated health governance, policy, and action. *Annual review of public health* [online], 38(1), pp.329-349.
- De Haes, S., (2009). *The relationship between IT governance and business/IT alignment*. Saarbrücken: Lambert. 211 p.
- Foster, J., McLeod, J., Nolin, J. and Greifeneder, E., (2018). Data work in context: Value, risks, and governance. *Journal of the Association for Information Science and Technology* [online], 69(12), pp.1414-1427.
- Gasser, L., (1986). The integration of computing and routine work. *ACM Transactions on Information Systems (TOIS)*, 4(3), pp.205-225.
- Ghaffari Heshajin, S., Sedghi, S., Panahi, S. and Takian, A., 2024. A framework for health information governance: a scoping review. *Health Research Policy and Systems* [online], 22(1), p.109.
- Houngbo, P. T., Coleman, H. L. S., Zweekhorst, M., De Cock Buning, T., Medenou, D., and Bunders, J. F. G., (2017). A model for good governance of Healthcare Technology Management in the public sector: Learning from evidence-informed policy development and implementation in Benin. *PLoS ONE*, 12(1).