Data Management Framework

As the new Chief Data Officer of the Texas Rangers, our organization will use the strategic alignment model for our data management framework. The strategic alignment model appeals to us because it focuses on the integration of the relationships between the different components of the model: business strategy, information technology strategy, organizational infrastructure and processes, and information technology infrastructure and processes. The relationship between data and information is at the forefront of this particular model, prioritizing the alignment between business and information technology. The usage of technology allows the business to propel itself to new heights in this information age. Due to the combination of information technology with business, the strategic alignment model seems like a proper fit for this company. The Rangers sought to improve their overall business in 2020 with the opening of their new stadium, particularly highlighting the utilization of information technology during this time, which ultimately assisted the company in significantly improving their stadium operations, fan experience at the ballpark, and their information communication turnaround time with their shareholders. Implementing this data management framework will allow the Texas Rangers to continue to stay ahead of the artificial intelligence curve despite the introduction of new AI tools. This strategic alignment model will help the company survive and excel in a modern business landscape as a result of using data to communicate information at the business level. The company's strategic alignment model will be designed to revolve around risk management when working with data, using its information technology governance processes and emphasis on security to protect their users' data. While using and consuming data, the Rangers must be aware of the potential risks at stake. The company will align its data usage and consumption goals with its risk management intentions in order to find a successful balance between the utilization of data and the management of risk.

Data Governance Operating Model

As the new Chief Data Officer for the Texas Rangers, I plan to implement a solid data governance program to mitigate the risks associated with the usage of data. The first matter of business is selecting a data governance operating model for our organization, which I believe a

federated data governance operating model will be an adequate fit for our business. A federated data governance operating model allows our organization to coordinate among multiple business units, maintaining clear and consistent data standards and terminology which aids in transparent communication throughout the company. Our company has several different business units and departments, so I find a federated data governance approach to suit our business operations because each unit needs a data governance policy that works for them while working to meet business goals.

Not all policies should be applied to every unit, as implementing a policy in one department might prohibit the unit from maximizing its potential. For example, the concession stand data could be handled in a way where we can improve our sales or adjust our prices, whereas our quality control data could be analyzed to maintain or improve the quality of the park with aspects like our seating. It wouldn't make sense to apply all of the same data governance policies to both; it would make more sense to just select the applicable policies to each business area, as there is no need to interfere with an unrelated department with the implementation of a department-specific policy. Therefore managers should implement select data governance policies on an as-needed basis, tailoring their policies based on certain department/business goals and needs.

Our data governance program will include an online presence, where each department, employee, and consumer can access our data governance policies/standards on our website. We want to emphasize transparency not only within our company but with our consumers. Our organization will strongly utilize a business glossary to understand and communicate about data throughout our company, as all of the business and data terminology has been established and it is every employee's responsibility to understand and adopt the terms when communicating

internally. Our data governance team will also utilize document management tools to manage company procedures, documents, and policies. Finally, a data governance scorecard will be important in monitoring all data governance activities, ensuring consistency, transparency, and compliance across all activities. In order for our data governance policies to be implemented effectively, a cultural shift within our company is required to welcome the future state of data and ensure the utilization of data in a compliant manner.

Data Architecture and Integration

In data architecture, roles like data architect, enterprise architect, and data steward are all essential. The stewards must define the data models and standards. The data architects must ensure the sustainability, security, reliability, and scalability of the data infrastructure. The enterprise architects must design a plan for the flow of data and the management of data throughout systems. In data integration, roles like integration architect, data admin, and data integration architect are important. The integration architect is responsible for managing the integration of data from different sources. The data admin focuses on optimizing the data integration process(es). The data integration architect prioritizes the flow of data throughout different processes and applications.

For data architecture, policies surrounding data security, modeling, management, and storage, are all important standards to enforce. Data must be clear and consistent. Guidelines surrounding retaining data need to be established. Data also needs to be protected and up-to-date with privacy regulations and expectations. For data integration, the important areas for policy are data quality management, security, consistency, and integration standards. Data needs to match across systems. Data should also be protected and secured through encryption. It is important for

the quality of data to be monitored and validated. All of these policy areas will be vital to enforce in order to ensure our company's success.

In order to keep up with the evolution of modern technology, our data architecture and integration must be strong enough to adapt to it. The first step in adapting to technology changes is by being informed about new technology and trends and continuing to learn more about them. This is important for everyone on the team to participate in, as everyone will be trained similarly and be on the same page. Our company can also begin using tools and applications that will allow for the integration of these newer technologies, increasing scalability in the process. It's important to be open to change and adapt quickly to emerging technologies, as it gives our company an edge over competitors and the overall market if we are early adopters.

Every business has its own data landscape and challenges. Our organization must first assess our data landscape, determining any weaknesses to potentially improve on. Since every business is unique, we are responsible for creating and developing a tailored approach to data architecture and integration for the Texas Rangers, that supports our needs and helps us overcome our company's challenges. Including feedback from our stakeholders and being transparent with them can help ensure that our organization is on the right path in aligning with addressing key business needs. I think it will be important to prioritize and maintain a high level of consistency throughout the data landscape as we work towards our business goals. It will also be important as a business, to prioritize consistent improvement; we must work towards improving our functionality and efficiency every day while attempting to achieve our organization's key needs.

Data Quality and Metadata

In data quality, roles like data quality manager/analyst, data steward, IT team, and data owner. Data quality managers/analysts monitor and address any data issues that arise, while data stewards ensure the completeness and accuracy of data. IT teams are responsible for implementing rules for the validation of data, and data owners define key data quality metrics.

In metadata management, roles like data governance officer, metadata steward, business analyst, and database admin are important. A metadata steward is responsible for maintaining both technical and business metadata. A business analyst will ensure that terms for data are clearly defined (business glossary), while a database admin manages the technical metadata primarily. A data governance officer is responsible for overseeing both data quality and metadata management to ensure policies are followed throughout the organization.

As the Chief Data Officer of the Texas Rangers, I plan to utilize a combination of all the roles previously mentioned, along with an arrangement of policies and standards to ensure proper data quality and metadata management. For data quality standards, I will begin by defining and implementing a set of rules to prioritize accuracy, consistency, timeliness, and completeness in our fan data, making sure it's up-to-date as the game is ongoing. Focusing on these aspects will work to prevent invalid/inaccurate fan data from being entered into our systems, which could have altered our results incorrectly. Through our metadata management standards, we will prioritize standardization across all of our systems to ensure our data like our ticket sales, concession purchases, and fan satisfaction are all well-documented and easily accessible throughout our organization. Doing so will allow our organization to act in a timely manner, implementing changes within the span of the same game to drive improved results if needed.

Additionally, I would implement access control policies to make sure the right people are managing and utilizing relevant data on our business and technical teams.

To adapt to evolving modern technology, we must use both scalable and flexible tools as they are implemented across our cloud systems, in an attempt to automate our data quality monitoring and metadata management processes. As an organization, in order to keep up with a fast-paced stadium environment where things are quickly changing we must be flexible as a team. It's vital that we utilize our resources in a way where we can ensure our team is constantly being trained and staying up-to-date on new emerging technologies that can ultimately improve our processes. These processes might include the automation of ticketing systems or utilizing A.I. to analyze our fan data and help us move our stadium operations accordingly.

In order to address the Texas Rangers' unique landscape as the CDO it's my responsibility to design a data governance framework that is customized to meet our needs, which are focusing on the data collected about our fans and every aspect of our stadium operations. Our framework will prioritize accuracy and timeliness to allow stakeholders to make timely decisions based on the results of our data for a given game. All of our teams (IT, operations, marketing, data, sales) must collaborate and communicate with one another to ensure that our data is managed efficiently and in alignment with our organizational goals. As an organization, the Texas Rangers will utilize modern data integration tools and stakeholders will play a key role in ensuring our processes and results are meeting our goals and expectations in the most efficient manner possible.

Data Ethics and Compliance

As part of the Texas Rangers, we mainly use data surrounding our fans and consumers' experiences (including ticket and concession sales, stadium preferences, payment info, etc.), as

well as data regarding our business operations (including employee and vendor information, and game time analytics that provide us with real-time feedback from consumers). This would include PII such as the names, credit card information, addresses, and e-mail addresses of the fans/consumers. This sensitive data must be managed carefully to prevent unauthorized access and breaches.

When it comes to regulations, if the Rangers have international fans (primarily European) we must consider the General Data Protection Regulation to protect fans' data and ensure they have consented to provide us with their information/data to use. If we have fans who live in California, we must be wary of the California Consumer Privacy Act. This act demands transparency surrounding collecting consumer data and how the data is being used by our company while ensuring a secure blanket around their data. To adhere to all regulations, our organization must maintain a high level of transparency with our consumers, and ensure that our consumers have consented to allow us to utilize their data while prioritizing security around their most sensitive information. We must implement appropriate privacy policies, regular compliance checks, and data retention rules (how long we hold onto our fan's data). Additionally, we must offer our fans the ability to opt in or out of sharing their data with us, granting them user control.

In the handling of data and enforcing privacy policies, the organization will face the challenge of managing multiple systems, as the data we collect is in different places due to different information being collected about various aspects of the company. For example, data about ticketing is kept in one platform, and information about our consumers is kept in a separate system. This can make it difficult to maintain consistency since we have several systems to manage. Another challenge is informing the fans about their data rights and the control they possess over their data, particularly in providing us with their consent to use the data they have given us. The majority of consumers are not aware that they can choose to opt in or out of our organization's data collection/utilization processes. Our company must standardize the utilization of various data governance tools and train employees regularly about our privacy and data handling practices. The organization can attempt to increase consumer awareness by informing fans about their data rights using ticket purchases and email promotions.

To stay current with new and emerging data protection regulations, the Texas Rangers will focus on establishing a compliance team who monitors new state and federal data protection regulations. In addition, the organization will regularly monitor changes to current regulations,

working closely with a data privacy-focused legal team to ensure compliance. Members of our compliance team can attend informative data privacy conferences/conventions surrounding our industry to ensure our company is compliant with current and new data protection practices. Through an increased sense of compliance and transparency for the organization, our fans/consumers will trust us more as we maintain the security of their sensitive information, and prioritize being up-to-date with the industry, adjusting our policies accordingly.