



2018 Partner of the Year Winner Dynamics 365 for Field Service Award 2018/2019
INNER CIRCLE
for Microsoft Dynamics & AI



Gold Data Analytics Gold Customer Relationship Management Gold Data Platform Gold Collaboration and Content Gold Cloud Platform

Velrada Proposal – Azure Data Foundations

<Customer>

Prepared for <Stakeholder Name> | <Stakeholder title>

1 May 2020







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Notice of confidentiality

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1. Summary

We would like to sincerely thank <Customer> for the opportunity to submit this proposal to implement the Azure Data Foundations required that mitigate future risk and provide both the tools and the skills for <Customer> to continue to leverage all the capability in Azure, safe in the knowledge that they will do so securely and cost effectively.

1.1 Background

Velrada recognise that the ease with which the cloud can be purchased and leveraged brings with it inherent risks in terms of data security, ongoing management and governance, run-away costs and scalability. Velrada are fortunate enough to have delivered global architectures and solutions to companies spanning multiple territories and we have combined this experience and knowledge into this foundation package to help you accelerate. We know that using Azure Data Services out of the box is an appealing option for many, but we also recognise that doing so avoids the foundation activities required around security, networking and governance that can lead to significant re-work and risk further down the line, as well as very substantial bill.

1.2 Our understanding of your requirements

We recognise that the services available in Azure are of real interest to <Customer> and multiple teams in the organisation. However, we understand that there is a hesitancy to continue without addressing a number of factors. These can be broken down into three core areas and these are organised in strategic priority:

- Infrastructure Setting up Azure correctly for <Customer> so that it can be managed by IT in the
 most secure and costs effective manner possible that still enables agile provision of Azure Services but
 without the risk.
- 2. **Data Services** How decide which data services are correct for each scenario and how you can migrate on-premise workloads to that Infrastructure or manage a hybrid architecture.
- 3. **Demonstrating value and validating understanding** Prioritising and moving a data services workload into your new Azure environment using all the knowledge and skills learned/documented from the previous activities.

On completion of this work and to call this a success, <Customer> will have the following:

- An architecture diagram for Azure usage in <Customer>
- Documentation detailing patterns for different data services usage with strengths and weaknesses for each approach.
- Training of IT staff for how to manage Azure costs, security and user management.
- A workload previously running only on-premise is running in Azure or across both Azure and on-premise.

1.3 Why Velrada?

Recently named as a 2018 Microsoft Global Partner of the Year, Velrada has extensive experience working with Microsoft, and configuring Microsoft solutions for a wide range of clients from around the globe. In addition to this, Velrada is also a Microsoft Gold Partner in Data Analytics and Data Platforms and recognised as being in the top 1% of Microsoft partners globally by being awarded a membership to the Microsoft Al Inner Circle. Velrada have multiple Microsoft Certified Solution Experts (MCSE) in Azure, Data Management and Analytics



and have had the pleasure of delivering complex, multi-tenanted solutions that cover some of the toughest hybrid architecture situations imaginable, all over the world.

We believe that Velrada is uniquely positioned as a global leader, blending our advisory experience with technical excellence to make sure our approach the outcomes for you are in the context of your business, not just pure technology implementations.

All of our customer solutions are built with scale, security and innovation in mind and use approaches that meet both current and future needs. This allows you to maximise existing investments whilst bringing the flexibility offered by the cloud into your business as a new, agile capability.

1.4 Summary

We believe that partnering with Velrada offers <Customer> an excellent opportunity to:

- Set in place the foundations that allow you to scale with confidence;
- Demonstrate how those foundations can be utilised by moving your first workload in just two weeks; and
- Ensuring your business has the skills to move forward and provide an ongoing capability that forever gets more valuable.

Partnering with Velrada also ensures you will be able to benefit from our experience, intellectual property, technical and business expertise and our sound track record of successfully delivering similar projects in the past

We look forward to assisting <Customer> with this engagement and helping you start your Azure Data Services journey.

If you have any questions about any of the information in this document, then please do not hesitate to get in touch for further clarification.

Yours Faithfully,				
<business development="" name="" person=""></business>				
	1/05/2020			
Signature	Date			
Microsoft Partner	2018 Partner of the Year Winner Dynamics 365 for Field Service Award			



2. Approach

2.1 Overview

The focus of this engagement is to move you from your current position to one whereby you can confidently start to utilise your Azure environment. Whilst this focus of this engagement is on enabling you to use Azure Data Services, the approach taken is to ensure you are set up correctly from an Azure perspective so you can also use non-data services in your Azure environment.

Maximising the usage of your time and budget is a primary focus so we have broken the engagement down into a number of stages:



This is a pre-engagement activity to better understand your environment before we even place a foot inside your office.

In the first days of arriving, we work with you to validate any points about your current environment that were unclear from the assessment work.

The focus moves to working out future use cases to determine how you might use the platform and what you want to do that you can't currently do.

Using all the information available a target architecture is delivered and shared with you to get your feedback and approval.

Following your approval on the architecture, a workload is prioritised to run in Azure and we work with you to move that workload, showing you how it's done.

The architecture the options, the workload that is moved and everything that has been done is summarised and documented for you to manage ongoing.

To achieve this, the timeline on the engagement is split into three areas:

Getting Ready:We run two two-hour workshops with your infrastructure and data

teams (separately).

Defining the target: Validating your environment, defining the uses cases, defining a

target architecture and prioritising a workload.

First workloads: Delivering the agreed architecture and the agreed workload within

that architecture. Handing this over with all documentation.

This approach ensures that we get the most from your time, recognising that every client is time poor and therefore any approach that is more time efficient is a good approach.

The diagram below shows how the timing works and is then followed by the detailed activities, showing a what, a why and an outcome.



2.2 Getting ready

To ensure we bring the most value to you and can make the most of our time with you, we opt for some information gathering before the engagement commences. In the week leading up to us coming on-site we run two workshops with two groups. This then allows us to help you ensure the right stakeholders are available at the right times and you are able to communicate the value of doing the work.

Expected duration for roughly two days, two weeks prior to the engagement.

Stage Name	Description	Reason for stage	Who's involved
Data Landscape and challenges Initial 2-hour workshop	Executed remotely, this is covering all the common questions around the data services landscape, the usage patterns and major challenges.	Spending time understanding current state is not a good use of time, so we cover this off early with a predefined set of questions. This then allows us to tailor week 1 when considering target state.	 Customer data team and primary stakeholder. Velrada consultants.
Infrastructure landscape and challenges Initial 2-hour workshop	Executed remotely, this is covering all the common questions around the infrastructure landscape, the usage patterns and major challenges.	Spending time understanding current state is not a good use of time, so we cover this off early with a predefined set of questions. This then allows us to tailor week 1 when considering target state.	Customer IT teams and security teams.Velrada consultants.
Data Landscape and challenges 1-hour Review workshop	A one-hour review workshop that presents back our understanding and draws out any gaps.	Not everything comes to mind in the initial workshops, so reviewing our understanding tends to reveal other important factors.	 Customer data team and primary stakeholder. Velrada consultants
Infrastructure landscape and challenges 1-hour Review workshop	A one-hour review workshop that presents back our understanding and draws out any gaps.	Not everything comes to mind in the initial workshops, so reviewing our understanding tends to reveal other important factors.	Customer IT teams and security teams.Velrada consultants

Outputs:



 Velrada is provide a list of the stakeholders that will be required for Defining the target and provide a schedule for their time and a reason for them to spend the time (an email template you can send to them).

2.3 Defining the target

To ensure we bring the most value to you and can make the most of our time with you, we opt for some information gathering before the engagement commences. In the week leading up to us coming on-site we run two workshops with two groups.

Duration of this activity is one week.

Stage Name	Description	Reason for stage	Who's involved
Kick-off: Art of the possible and what's relevant 3-hour workshop	Case studies from around the world, the Data and Al reference model and an overview of what we think is relevant to <customer>. Defining who's going to do what. Confirming the importance of good Azure Foundations. Possible target Architectures</customer>	It's important to reiterate the outcomes and to start everyone thinking about what should be considered and why. Bringing the context of the initial findings make this all more 'real'. This also provides a view of potential architecture that will inform use cases.	 Data Stakeholder's IT stakeholders Security teams Velrada Consultants
Security and Networking target state 4-hour workshop and 1-hour follow-up workshop	Workshop covering: - Security overview - Options for securing data in motion, at rest and in-use - Data Services and storage - Networking considerations - KeyVault	Security and networking are the difference between having a secure environment in which to run Data Service and one that potentially put your organisation at risk.	 IT staff who cover security, and networking. Velrada Consultants
Disaster Recovery target state 4-hour workshop and a 1-hour follow-up workshop	Workshop covering: - Disaster recovery (Single / Multi Geo) - Automatic Failover, Step-by-Step guide - High Availability - Back up	DR still exists in the cloud but takes on another form. Knowing how to deal with varying situations and what is necessary or unnecessary for your business can save both financially and from a	IT staff who cover DR.Velrada Consultants

		business performance basis.	
Monitoring and Serviceability target state 4-hour workshop and a 1-hour follow-up workshop	Workshop covering: - Exception handling - Service health monitoring - Debugging - Fault Tolerance - Vulnerability Assessment - Threat Detection	Tracking the performance of your environment, using automated techniques allow you to be proactive about protecting your assets.	 IT staff who monitor your cloud infrastructure. Velrada Consultants
Identity Management target state 2-hour workshop and a 1-hour follow-up workshop	Workshop covering: - Active Directory linkage patterns - Access Credentials Management - App registration vs service accounts	Understanding Identity Management is key to protecting the actions of your people as well as that of your cloud. Different people operate in different locations, on different devices, protecting them is key.	Security teams.Velrada Consultants
Data Landscape target state 4-hour workshop and a 1-hour follow-up workshop	Workshop covering: - Right-Fit technology recommendations - Optimal migration paths - EOS considerations - Cost optimisation (AHB + RI) - Data Lineage - Data Catalog - Data Discovery and Classification - MDM	Now we have ensured your Azure environment will be secure, sustainable and monitored, we now start to understand which services do what, how you govern data in Azure, how you leverage the cloud and on-prem assets and how you cost out the approach.	Data teamsIT teamsVelrada consultants
Workload prioritisation 4-hour workshop	Define and agree the use cases, finalising which use case should be the first to go into the environment. This is done in the context of: - Prioritisation - DevOps - Iterations/Sprints	The focus here is to understand how you can Prioritise work, run iterations and sprints, link this back to DevOps tools in Azure and utilise this for continuous	Data teamsIT teamsVelrada consultants



	Resource PlanningProject Planning	improvement and testing.	
Target state presentations and review with final workload. 1.5-hour presentation	1.5-hour presentation with that runs through all the proposed architecture and outcomes and sets out the next 2 weeks.	This is the wrap up session that outlines your architecture, documents the services that will be used and the first workloads that will be run in Azure.	Data teamsIT teamsVelrada consultants

2.4 First workloads

Once the Architecture, workloads and services are selected, it's time for implementation. This phase takes a workload and moves it into the desired environment.

If your first use case is one that is BI focussed, the services used will be specific to that workload. If you want to set up a Unified Analytics Platform, the services are different. This is also the case if you want to set up an Operational Data stream for something such as IoT. The best way to think about this is that to service a use case requires parts of a puzzle, but eventually, as you service your use cases, you will use all the puzzle parts and get the entire picture.

Expected duration for this is 8 days.

Stage Name	Description	Reason for stage	Who's involved
Azure configuration	Linking Azure to your AD in the agreed way, ensuring the relevant accounts are in place, setting up the agreed tenant and subscription, resource groups, setting up the networking components and gateways to on-prem as required.	This is the basis of all future activity in Azure.	- Velrada - IT teams (optional)
Service Configuration	Configure and connect the relevant services with Azure and ensure those not required immediately are dormant on the lowest service tiers and those required for the use cases are at the correct levels. If running DevOps, set up the relevant tools to run DevOPs and the connections to VSTS.	Configuring the data services in your azure environment allows for the scalable and secure generation of capability regardless of use case.	VelradaIT teams (optional)Data teams (optional)



Ingest the data	Bring the data from outside	This is the initial stage	_	Velrada
ingest the data	Azure into azure. This may be streaming data, IOT devices, files or connectivity to other platforms.	of moving data through your data pipeline to serve it to the users of the data. Doing this step is the right way enables the same data to be used for multiple use cases.	-	IT teams (optional) Data teams (optional)
Schematise the data	Schematising the data is essentially storing or readying the data for usage. This can include loading into a database, Data Warehouse, or reshaping the data on the fly so that it can be used for operational reporting. If your use case covers a Unified Analytics Platform for Data Scientists, Schematisation may not be necessary.	This layer is the backbone of BI data architectures and is recommended when streaming data live through to visuals to enable the streaming data to be usable. This level is one where Data Quality and Master Data principles can play heavily.	-	Velrada IT teams (optional) Data teams (optional)
Model the Data	Modelling the data is not necessarily required for streaming data, but for BI it allows for enrichment, aggregation and the application of terminology used by report users rather than system names. For Data Scientist this is the point at which data is prepared and cleaned by Data Engineers for the application of algorithms or statistical models.	The opportunity at this level to provide governance, a clear data dictionary for each measure, and reference data piece is key to e great and manageable BI estate. For Unified Analytics Platforms, this is the area in which analysis can be performed, and models (with data) can be created and stored for future comparison.	-	Velrada IT teams (optional) Data teams (optional)
Serve the data	This is the data after all transformations, being surfaced in a way that can be consumed. This may be real-time visuals of streaming/operational data, it can be the outcomes of statistical models or algorithms surfaced as APIs called by line	This is the layer that is required for anyone outside of technology to get value from the data in the estate. Inserting data outcomes back into business processes	-	Velrada IT teams (optional) Data teams (optional)

of business systems or it can	releases the highest	
be paginated reports that are	benefits.	
printed and shared.		

2.5 Closure

Given that you will now have a working solution in your Azure environment, the remaining focus is to ensure that you can manage and update it yourself by having a clear understanding of what has been done as well as how it was done.

Expected duration for this is 2 days.

Stage Name	Description	Reason for stage	Who's involved
As-built architecture paper	Word document with Visio diagram outlining what has been built and why. This includes services chosen (and why), naming conventions, security put in place, identity selections etc.	Ensure there is a documented understanding of how everything works and why each service was chosen.	- Velrada
2-hour wrap up session with the teams	A workshop running through what was done and why.	To give you a clear, contextual, understanding of the decisions made and why they were made.	Data and IT teamsVelrada
Next steps paper	A document detailing out next steps to move forward and which workloads you may want		- Velrada



3. Scope and Assumptions

3.1 Measures of success

To be considered a success, this engagement will provide the customer with three clear outcomes:

- A documented understanding of the completed and proposed architecture for <customer> in the context of all findings to-date. This includes an understanding of which services to use in each scenario and why certain choices are made over others.
- Implementation of the Azure infrastructure proposed, with Dev, Test and Prod instances of the services required to fulfil the first workload being moved to the environment.
- Next step guide on which workloads might be moved next with rough order of magnitude estimates.

3.2 What is in scope?

- Definition of target requirements across the following topics:
 - Data Landscape services required
 - Security
 - Networking
 - Disaster Recovery
 - Monitoring and Serviceability
 - Azure Environment Governance
 - Data Governance
- Definition of a target architecture and implementation of the foundational azure components and the services relevant to the initial workload.
- Provision of documentation that explains the proposed Azure Services and Architecture in the
 context of the findings in the workshops. This documentation will include which services to choose in
 each scenario.
- Movement of a workload into the Azure environment.

3.3 What is out of scope?

- Movement of workloads that exceed the allocated time available.
- Implementation of all services unless explicitly asked for by the customer.

3.4 Constraints

• Active Directory Configuration



4. Fees and Timelines

4.1 Fees

Based on the information provided to date, Velrada estimate the total implementation services fees to be \$35k + GST, paid on a milestone basis.

Please note that this is a Fixed price agreement and all prices above are quoted exclusive of GST and are expressed in Australian Dollars.

Milestones

Milestone Name	Total Cost (excl GST)
Initiation	\$10,000
Target State Defined	\$10,000
First Workload done	\$10,000
Closure	\$5,000
Total	\$35,000

Sign-off criteria:

Initiation Engagement commenced, first four workshops in 'Getting Ready' completed, and schedule

and stakeholder list sent to customer.

Target State Agreed workshops completed, architecture documented, first workload prioritised.

First workload Agreed prioritised workload moved to Azure and running.

Closure Training workshops and documentation handed over.

Out-of-pocket expenses including flights, mileage, hotels, meals, etc. will be billed at the actual amounts incurred. Invoices are due and payable upon presentation.

If during the course of our work, a need for ancillary specialist services not specified in this proposal is identified, agreement to their use and related charges will be obtained before any expenditure is incurred.

Any changes in the scope of our Services to you or in fees must be agreed in writing signed by both parties and neither party shall be obliged to implement any such change until such agreement is signed by both parties.

4.2 Resources

Velrada will provide Azure Architects, and Azure Data Architects for this work. Velrada may also provide other ancillary resources to support the work depending on use cases.



4.3 Timelines

This work will be completed over a 5-week period, with the Initiation Sessions running two weeks prior to the first major workshops to enable you to organise the required stakeholders.

4.4 Assumptions that we have made

Should the following assumptions be proved invalid and inhibit Velrada's ability to complete the work, Velrada will work with <customer> to consider different approaches or changes in scope and/or cost.

- Velrada will be able to use its own computers for the analysis or <customer> will provide computers to Velrada with the required software installed.
- <customer> will provide access to the data sources required to perform the data extracts.
- All prices quoted exclude GST (ex GST); All work is completed on a fixed price basis.
- <customer> will provide building access, workstations, information, reports and access to systems as required by the Velrada consultant to complete the work assigned;
- Velrada has assumed the work will be completed alongside <customer> SME's & D&V team members to ensure knowledge transfer.
- The work will be completed onsite at <customer>Office or from Velrada premises.
- All services will be provided under the agreed services terms already in place between Velrada and <customer>.



Acceptance of Proposal

Our objective is to provide you with a high-quality service to meet your needs. If at any time you would like to discuss with us how our service to you could be improved or if you are in any way dissatisfied with the service you are receiving, please let us know by contacting the Director responsible for that aspect of our service to you. In this case the responsible Director is Dan Hookham (+61 435 421 170 or email: Dan.Hookham@velrada.com.)

We appreciate the opportunity to be of service to you and look forward to working with you on this engagement. You can be assured that it will receive our close attention. We will be grateful if, having considered the provisions of this letter and concluded that they are reasonable in the context of all the factors relating to the project and our proposed engagement, you will indicate your agreement to these arrangements by signing and returning to us the enclosed copy of this letter

Yours faithfully,			
Dan Hookham Director of Data and AI - Velrada			
<customer> agrees to Velrada's approved and accepted by:</customer>	pointment on and subje	ct to the contents of this letter	which are hereby
Authorised signatory for and on beh	alf of <customer>.</customer>		
Signature	Name	Date	



6. Appendix

6.1 Key stakeholders' skills typically involved and why

Data:

- Data Analysts;
- Data Scientists;
- Data Engineers;
- DBAs;
- Portfolio Managers;
- Architects

IT:

- IT Managers
- Enterprise Architects
- Security Specialists
- Networking specialists
- Service Desk owners

6.2Example email templates

Dear XXXX,

In order to securely accelerate our business, we are starting our cloud journey with Azure. To ensure we do this in a sustainable way, we have engaged a third party called Velrada.

Velrada will be conducting a number of workshops during which they will understand the current state of our IT world (as it relates to data) and of our data estate. They will then use that information and our desired target state (this will be derived from workshops) to formulate a target architecture that meets our needs. The emphasis of this process is to ensure we move into the cloud in the most secure, scalable and cost-effective way.

Finally, to demonstrate how they have set up the environment, we will be moving one use case into that cloud as our first engagement.

We have identified you as a key contributor to this process and ask that you make yourself available for the following dates and times:

Initial Workshop: date time Review workshop: date time

Kind regards

xxxx



6.3 Example of the table of contents in the final document

1	Executive Summary	Error! Bookmark not defined.
2	Scope	Error! Bookmark not defined.
	2.1 In Scope	Error! Bookmark not defined.
	2.2 Out of Scope	Error! Bookmark not defined.
3	Azure Enterprise Scaffold	Error! Bookmark not defined.
	3.1 Azure Enrolments	Error! Bookmark not defined.
	3.2 Common Patterns for Azure Enrolments	Error! Bookmark not defined.
	3.3 Azure Enrolment Configuration	Error! Bookmark not defined.
	3.4 Enrolment Structure	Error! Bookmark not defined.
	3.5 Subscriptions and Resource Groups	Error! Bookmark not defined.
4	Naming Standards	Error! Bookmark not defined.
	4.1 Naming Subscriptions	Error! Bookmark not defined.
	4.2 Naming Resources - Descriptive	Error! Bookmark not defined.
	4.3 Naming Resources – Obfuscated	Error! Bookmark not defined.
	4.4 Naming Rules and Restrictions	Error! Bookmark not defined.
	4.5 Naming Recommendations	Error! Bookmark not defined.
5	Policies	Error! Bookmark not defined.
	5.1 Policies	Error! Bookmark not defined.
	5.2 Recommended policies for any Azure deployment	Error! Bookmark not defined.
6	Roles and Security	Error! Bookmark not defined.
	6.1 Azure Enrolment	Error! Bookmark not defined.
	6.2 Role Based Access Control (RBAC)	Error! Bookmark not defined.
	6.3 Recommendations	Error! Bookmark not defined.
7	Management of billing and costs	Error! Bookmark not defined.
	7.1 Azure Cost Management	Error! Bookmark not defined.
	7.2 Resource Tags	Error! Bookmark not defined.
8	Managing and Deploying Resources	Error! Bookmark not defined.
	8.1 Overview	Error! Bookmark not defined.
	8.2 Azure Resource Manager	Error! Bookmark not defined.
	8.3 Recommendations	Error! Bookmark not defined.
9	On-premises to Cloud Connectivity	Error! Bookmark not defined.
10	Monitoring and Auditing	Error! Bookmark not defined.
	10.1 Log Analytics	Error! Bookmark not defined.
	10.2 Management Solutions	Error! Bookmark not defined.



10.3 Log Analytics Queries

10.4 Alerts

10.5 ServiceNow Connector

10.6 Auditing

10.7 Recommendation

11 Resource Geo-Location

11.1 Data Sovereignty Issue

11.2 Azure Storage Replication

11.3 Recommended Resource Location

12 Cloud Security Patterns

12.1 Identity and access management (IAM)

12.2 Network Security

12.3 Storage Security

13 Cloud Design Patterns

13.1 Challenges in cloud development

13.2 Catalogue of patterns

14 APPROVALS

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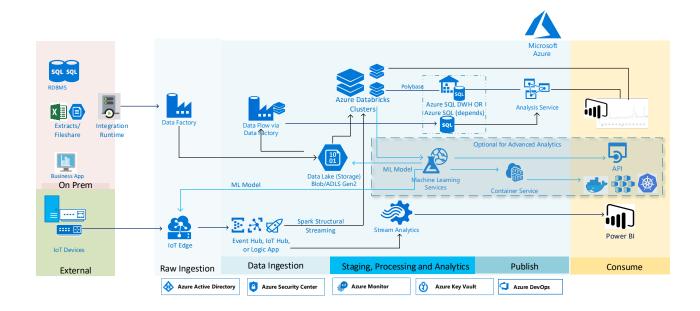
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6.4Example of possible target architecture





Have additional questions, or want to know more?

Contact

<BDM Name>

Business Development Manager

- P. 1300 835 723
- M. +61 <BDM Number>
- E. <BDM Email>