Three Rivers District Council

MIGRATION TO THE CLOUD

PROJECT INITIATION DOCUMENT (P.I.D. Lite)

Project Sponsor	Andrew Cox
Project Manager	Emma Tiernan
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Author	Emma Tiernan

Document Control

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0.1	Draft	05.10.18	Updates following consultation with Andrew cox
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Distribution

Name	Position	Organisation/ Service
Andrew Cox	Head of Service Transformation	Watford Borough Council
Joanne Wagstaffe	Director of Finance, Section 151 Officer	Three Rivers and Watford Borough Councils

Approval

Name	Position	Date approved
Andrew Cox	Head of Service Transformation	08.10.18

Contents

1 Introduction

1.1 Purpose of the document

The Project Initiation Document (Lite) consolidates information required regarding the fundamental aspects of the project and is the basis against which the project is evaluated and prioritised.

- Why is this project important
- What will the project do, what outcomes will be delivered, what are the success factors and risks
- How much will it cost, what resources are required

*** This document is a "lite" version of the full Project Initiation Document (PID) required when initiating the project fully. The full PID contains additional information.*

- *How will the project be implemented, how will it be managed*
- *When will the project be implemented*
- *Who will be involved and who will be impacted*

NOTE: When a PID is recommended to Council and approved as part of the budget setting process, the relevant Chief Officer will be deemed to have the necessary Delegated Authority to enter into any contract in respect of the project and within the budget agreed.

1.2 Executive Summary

This should outline the recommendations made in the body of section 2, the Business Case.

1.2.1
Three Rivers District (TRDC) and Watford Borough (WBC) currently share a large SQL database estate. SQL is a Microsoft database platform. Line of business applications, for example Firmstep, require database platforms as part of the application architecture. Any on site (on premise), or a hybrid application architecture requires the Councils to licence appropriately.

For example: Firmstep, which is the TRDC Customer Service Centre, Content Management system, is considered a hybrid. This is partly hosted by the vendor, but partly hosted by the Councils within the TRDC. This requires a SQL server licence in order to make the application work.

The large SQL licence volume can be reduced through the creation of a shared SQL cluster. This enables not only a reduction in licence volume, but increased resilience through a failover environment.

1.2.2
The 2017-2020 ICT Strategy approved by both Councils in 2017, agreed that a key initiative for both Councils was to investigate the viability of transferring on site infrastructure to a cloud based solution. This PID Lite requests the resources to enable this investigation to take place.

1.2.3

The Councils currently have two separate Microsoft Enterprise Agreements. All Microsoft licences are purchased via these agreements. The Councils current agreements run from September 2017 through to September 2020. These current agreements mean that pricing is fixed for all existing products until September 2020. Any new products purchased are subject to Microsoft price fluctuations. Microsoft announced 10% price increases on all on premise licences, Office365 licences have not increased, giving some indication of the Microsoft longer term strategy of pushing customers to cloud based versions of products. Locally Councils are already seeing larger price increases, Welwyn Hatfield are looking at price increases of 30% for the next three years.

1.2.4
This proposal requests agreement the growth CAP request for SQL database cluster and the Cloud viability study.

1.3 Project Objectives

These should be short statements which express the desired outcome of the project

1.3.1
To design and build a SQL database cluster with the aim of reducing Microsoft SQL licences volumes across both WBC and TRDC.

1.3.2
Investigate and write a business case to understand the viability of migration of both WBC and TRDC data centres to a cloud environment. Included within this is the investigation and migration planning from on premise Microsoft licenced products to cloud based Microsoft products e.g. Office 365.

1.3.3
Microsoft on premise licences are increasing nationally from October 2018. Therefore annual Microsoft licence costs for WBC and TRDC will increase when our current EAs run out. This project will help to mitigate the potential impact of the Microsoft on premise price rises on 2020/21 budgets.

1.4 Current issues and priorities

In this section highlight what issue/s the project is designed to address and which Strategic Themes or Aims it will meet. A good format is to:

- *Describe the relevant Strategic Theme or Aim*
- *Identify what the objectives of the project are and how these link to the strategic theme / aim*
- *Identify what needs to be delivered / undertaken to specifically help achieve those priorities*

1.4.1
- To reduce SQL licence numbers overall for WBC and TRDC. Currently TRDC funds 40% of SQL licence products, costing £29,400 per annum. WBC funds 60% of the SQL products, costing £44,100. The current SQL environment is shared across both Councils.
- With the implementation of a SQL cluster, ICT hope to achieve a 15% reduction in SQL costs giving the Councils a saving of £4,410 for TRDC and £6,615 for WBC per year.

1.4.2
It is currently unclear whether there is a business case to migrate our on-site data centres to a Cloud based environment. The Councils currently operate a hybrid environment with some line of business applications already hosted within a private cloud environment, as part of a hosted and managed service with application vendors. This detailed investigation into all options will enable the business to make a decision of the viability of a Cloud based infrastructure for the future for both current on premise applications and those already hosted in the cloud.

1.4.3
The Microsoft on premise licences will increase from October 2018. In order to attempt to mitigate the price rises forecasted for all on premise Microsoft licences, ICT require both the SQL cluster and the Cloud Viability investigation to be completed.

1.5 Implications of project not being complete

Please highlight what the implication for the council will be if the project is not carried out/completed.

1.5.1
If the SQL cluster is not completed, there are limited options to reduce the current Microsoft licence volumes and therefore there would be no cost savings in this area.

1.5.2
The on premise Microsoft licences will rise. The Council's licence costs are currently guaranteed until the end of our current Enterprise Agreement (EA) which runs from September 2017 to September 2020. This agreement secures pricing for all our existing products. This does not secure pricing for any new products that we need to purchase through the Enterprise Agreement term.

1.5.3
The Microsoft strategy is to force customers away from the on premise licencing model and to the cloud. Currently the price rises over the next 2 to 3 years are anticipated to be between 50% and 100% annually. The price increase publicised for October 2018 officially is 10% for non-cloud based licences. Locally, however, Councils are already seeing larger price increase. Welwyn Hatfield, for example are looking at price increases of 30% for the next three years, as they renew their own Enterprise Agreement.

The current Council spend per year on Microsoft licences, based on current prices is:

Council	**Total Microsoft Licence costs 18-19**	**Current SQL 18-19 Cost. (shared 60/40)**	**15% (approx.) Saving based on SQL Cluster implementation**	**Price increase, based on 30% increase on all on premise products from 2020/21**	**Mitigation of 30% Microsoft price increase, through creation of SQL Cluster implementation from 2020/21**
TRDC	£84,966.51 (£254,898 over 3 year term)	£29,400	£4,410 per year	£110,455 (£331,365 over 3 year term)	£106,045 (£318,135 over 3 year term)

WBC	£89,587.41 (£268,762 over 3 year term)	£44,100	£6,615 per year	£116,463 (£349,389 over 3 year term)	£109,848 (£329,144 over 3 year term)

1.5.4
Without the resources to conduct the Cloud Viability study ICT will be unable to meet the 2017/20 IT Strategy initiatives as agreed by both Councils in relation to Cloud based infrastructure.

2 Business Case

The business case for the project is about supporting strategic objectives relating to organisational efficiency and effectiveness and use of resources.

2.1 Project Definition

Why should this project be undertaken?

2.1.1:
SQL Cluster:

- Reduce current SQL database licence costs for Watford Borough and Three Rivers Council.
- There is currently no resilience with SQL databases. If the backend of a line of business applications with an SQL database fails, the line of business system is therefore unavailable to users.
- The creation of the SQL cluster is also preparatory work for migration to any Cloud services should the Cloud Viability study and business case be approved.

2.1.2:
Cloud Viability Study:

- Enables a business case and therefore clear decision to migrate on site infrastructure from WBC and TRDC data centres to a cloud based solution in line with the agreed ICT Strategy.

2.1.3:
Microsoft Price Increase:

- Microsoft prices will increase, therefore we should prepare to mitigate these prior to September 2020.

How will project success be measured?

2.1.4:
SQL Cluster:

- Reduction in volume of Microsoft SQL licences
- Direct Microsoft licence reductions and/or mitigation of Microsoft licence price increases.
- Increased resilience for SQL databases.

2.1.5:
Cloud Viability study:

- Development of a business case to migrate infrastructure services to the cloud, or be clear about the cost benefits of remaining with an on-site infrastructure and data centres
- Establishing business application cloud readiness
- Establishing business application Office 365 readiness
- Establishing Outlook, Exchange (email) readiness for migration to the Microsoft cloud
- Assessment and recommendation of the future of any existing hosted and managed service arrangements for line of business applications (e.g. IDOX Uniform)

2.1.6:

Microsoft Price Increase:

- Mitigation where possible of the Microsoft price increase

2.2 Outputs and Outcomes

2.2.1 Outputs:

SQL Cluster:

- Implementation of a resilient SQL cluster for Watford and Three Rivers Councils

Cloud Viability study:

- Business case for migration to the Cloud for review by Watford and Three Rivers Councils

2.2.2 Outcomes:

SQL Cluster:

- Initial reduction in licence count and therefore cost as a result of designing and building the SQL cluster

Cloud Viability study:

- Enables a decision on cloud viability for the future

Microsoft Price Increase:

- Mitigation where possible of the Microsoft price increase

2.3 Benefits

This section should set out the expected benefits to be realised by doing the project. Include in this section an indication of how benefits arising from the project are to be assessed, giving clear measures for each benefit identified.

This should outline how the project plans to manage the delivery and realisation of benefits.

2.3.1

SQL Cluster:

- Cost savings and/or mitigation of Microsoft licence price rises
- These savings will only be realised once the migration of all databases to the new cluster has been completed

2.3.2

Cloud Viability study:

- Production of a business case to enable a decision as to the benefits of migration to the cloud for WBC and TRDC infrastructure.

2.3.3

Microsoft Price Increase:

- Mitigation where possible of the Microsoft price increase.

3 Project Costs

This section should include a high level breakdown of all expected project costs, including all costs for project management. Identify any budget-sharing arrangements with third parties, including key stakeholders.

3.1 One off project costs

Include summary of all expected project costs – total project budget required to complete all activities.

- Include expected costs for:
- Project management
- All other staffing/resourcing costs (inc ICT resources required)
- External contractors; fees; consultancy
- Overheads; buildings
- Equipment (inc hardware & software)
- Any other attributable costs

3.1.0
Resource (staffing and hardware) costs are approximate, but are required in order to enable investigation, design and delivery preparation for both projects.

TRDC contribution: £104,000
WBC contribution: £156,000

3.1.1
Staffing with the appropriate skills are required to complete all work. The skills required are not within the current ICT team and are specialist skills. The resources required include; SQL, Oracle, database platform design skills, Senior Network engineer skills, IT consultants, Applications engineers.

The proposed approach is similar to the core infrastructure programme, where the Councils bring in specific resource to deliver a task rather than outsource the entire project. This approach both reduces costs and provides flexibility and agility in delivery.

The resource day rate is based on current market contract figures, for a variety technical roles, with day rates ranging from £380 to £570.

The SQL cluster is estimated to take between 7 and 9 months.

The Cloud viability study is estimated to take 6 to 8 months.

As a comparison a key partner also supplied database related skills at approx. £800 per day.

3.1.2
The hardware to house the new, shared SQL cluster, based on current estimates would be £20K. However this would be procured by an appropriate procurement exercise.

3.1.3

The ongoing costs for the delivery of the infrastructure to the Cloud environment and the impact to the operating budget are unknown at this time and would be an outcome of the project as stated in section 2.2.1.

3.2 Financial viability

Use this section to compare the costs versus the benefit of the project, taking into account the financial implications. For example, if the project will cost £20k to deliver and implement but the benefits to the community will not be realised for another 10 yrs, is it a viable project to persist with?

3.2.1
See the table below, which gives current costs of the annual Enterprise agreement, compared to an average 30% price increase, and the proposed mitigation of a proposed 15% licence reduction based on implementing the SQL cluster by 31 March 2020.

3.2.2
The Councils will continue to use Microsoft licences moving forward. There are no other viable options to consider moving away from Microsoft.

Council	Total Microsoft Licence costs 18-19	Current SQL 18-19 Cost. (shared 60/40)	15% (approx.) Saving based on SQL Cluster implementation	Price increase, based on 30% increase on all on premise products from 2020/21	Mitigation of 30% Microsoft price increase, through creation of SQL Cluster implementation from 2020/21
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3.2.2

The Microsoft price increases are unknown, however the strategy to push customers to a cloud based licence model is clear.

3.3 Resources and skills

Identify all of the resources and skills required to deliver the project.
Consider if these resources and skills are available in-house or will they need to be bought in?
Consider if these resources will be free and available for the project

3.3.1:
The skills to deliver these projects are not within the current ICT team. However skills and resources with the local team in order to apply local estate knowledge will be required in addition to the proposed resources for these projects. I propose that the additional resources with the local knowledge can support these projects, without any requirement for additional backfill.

3.3.2:
As outline in section 3. Additional resources to deliver are required. This is due to the absence of these specialist skills within the ICT team.

Has the project been agreed by the Head of ICT?

Yes	X
No	

3.4 Equalities

Is this project responding to an Equality Impact Assessment?

Yes	
No	X

If yes, please provide brief details of the EIA…

_____

_____

Has an Equality Impact Assessment been undertaken for this project?

Yes	
No	X

If yes, what are the outcomes and how do these link to the project?

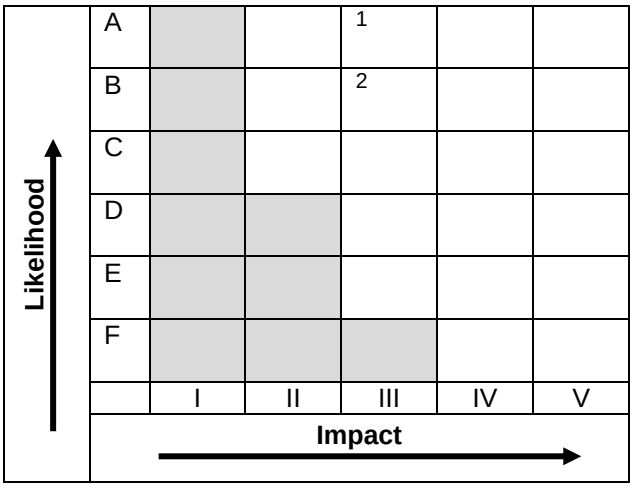
_____

_____

3.5 Risks

Initial Risk Log

Likelihood and Probability Key



Impact	Likelihood
V = Catastrophic	**A = ≥98%**
IV = Critical	**B = 75% - 97%**
III = Significant	**C = 50% - 74%**
II = Marginal	**D = 25% - 49%**
I = Negligible	**E = 3% - 24%**
	F = ≤2%

Risk	Level of Risk		Required actions	Owner
	Impact	Likeli-hood		
(1) Price increases from Microsoft	III	A	Implementation of SQL cluster to reduce SQL licence volumes	ET
(2) Microsoft strategy to move customers to Cloud, from on premise licences	III	B	Investigation into the viability of hosting infrastructure within a Cloud environment, considering impact of Microsoft price changes	ET