



# Mainframe Application Portfolio Assessment

## Velocity in the Right Direction(s)

### Objective

As an old adage goes - 'Knowing is half the battle', the mainframe application portfolio assessment offering from Google cloud is designed to achieve just that; To help customers build a financial and strategic plan for their mainframe estate. The assessment is meant to help customers understand, in a very short timeframe in a collaboration manner:

- The overall size and complexity of their MF estate
- The potential target state of their MF applications
- The potential value in optimizing the MF for cost, complexity, risk, etc.
- The right-sizing of the mainframe to run the right workload. This is not (necessarily) focused on mainframe decommission, but enabling business initiatives by leveraging available technologies.

### Approach

The Google team achieves this by collecting application specific data involving business and technical characteristics, cost of ownership, inventory and software packages. Cleansed data is processed by model which generates intelligence shown below:

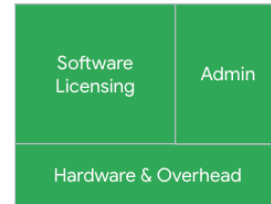
#### Application survey & scoring

- Gather data and statistics about all applications on the mainframe
- Develop scoring model based on key attributes on both business value and technical maturity
- Score and segment applications for initial segmentation

#### Analyse defined segments



#### Determine MF impact



Which applications should likely be rewritten, rehosted, retired, or left on the mainframe?

What is the implication for the mainframe environment?

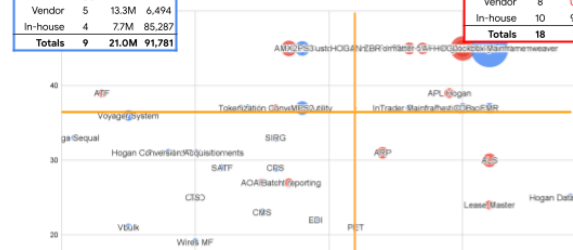
- Application segmentation in 2x2 potential modernization themes [Retire, Emulate, Refactor, Retain/Relmagine] based on relative business and technical value of individual applications. Size of each segment is measured in terms of number of applications, total lines of code and mainframe consumption in MSUs or MIPS.

#### Automated Refactor

	# Apps	LOC	MSU
Vendor	5	13.3M	6,494
In-house	4	7.7M	85,287
<b>Totals</b>	<b>9</b>	<b>21.0M</b>	<b>91,781</b>

#### Rewrite / Retain

	# Apps	LOC	MSU
Vendor	8	UNK	7.4M
In-house	10	9.1M	45.3M
<b>Totals</b>	<b>18</b>	<b>7M</b>	<b>52.7M</b>



#### Retire / Emulate

	# Apps	LOC	MSU
Vendor	6	5.3	1.8M
In-house	13	4	108K
<b>Totals</b>	<b>19</b>	<b>8.8</b>	<b>1.9M</b>

#### Retire / Emulate / Retain

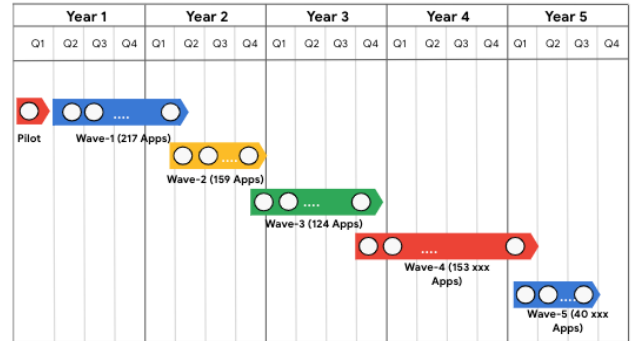
	# Apps	LOC	MSU
Vendor	3	2.0	31K
In-house	4	2.1	438K
<b>Totals</b>	<b>7</b>	<b>4.1</b>	<b>749K</b>



For more information, visit [cloud.google.com/solutions/mainframe-modernization](https://cloud.google.com/solutions/mainframe-modernization)



- Identify applications that would benefit from refactoring to preserve business logic, address skillset availability issues, increase application agility, and embark on digitization of the workload. Identify candidates that would be better suited to be retired or emulated without change.
- Lists high value applications which are fit for Innovation.
- Provide options and recommendations for packages, vendor applications and in-house developed applications.
- Develops a multi-year business and IT transformation journey with value realization and spend profile for each year.



BAU Mainframe spend	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total MIP costs	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
3rd Party SW Costs	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
Admin Costs	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
Data Center Costs	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
<b>Total MF BAU Costs</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>
Benefits Analysis	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total Net MIPS Benefits	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
Total 3rd Party SW Benefits	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
Total Admin Benefits	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
Total Datacenter Benefits	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
<b>Total Migration Benefits</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>
Total Migration Costs	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Total One Time Costs	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
Total GCP Run Costs	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$xx.x	\$XX.X
<b>Total GCP Costs</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>	<b>\$XX.X</b>

### Why Google Cloud?

Inspired by our mission to “Accelerate every organization’s ability to digitally transform and reimagine their business through data-powered innovation”. With the strong belief in leveraging technology to enable business, Google cloud offers customers the ability to modernize their mainframe workloads to be run reliably on highly secure infrastructure while minimizing downtime risk. Multi-cloud choice and flexibility of a fully managed No Ops environment will free up operations budgets and the use of 100% renewable energy and zero net carbon emission will drive sustainability. Google Cloud’s innovations in analytics, ML, and AI allow customers to drive new revenue streams, reduce costs, and surpass customer expectations.

## Google Cloud

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