**Finops Assessment CFO report**

**Highlights sheet:**

https://cloudenablersinc.sharepoint.com/:x:/r/sites/ProductManagement-Technology/\_layouts/15/guestaccess.aspx?guestaccesstoken=244A4%2BvGTVTD4wx98LyL5hfrRzot9UPoY0DA9Q1I1dg%3D&docid=2\_0940256bfc5e842439381d001437dfbf2&rev=1&e=ZKlYqD&wdOrigin=TEAMS-ELECTRON.p2p.bim&wdExp=TEAMS-CONTROL&wdhostclicktime=1640766751092

**To get service account id:**

select \* from report.serviceaccount where ServiceAccount ='iLABS'

**To get Assessment Run Id:**

select \* from report.AssessmentRuns where ServiceAccountID ='5704' order by AssessmentRunID desc

Score Calculation:

**Score calculation:**

Score = ((100 -% of Potential Cost Savings)\*0.7) + ((100-% of Violated Resources)\*0.1) + ((100 - % of Budget Violations) \* 0.1) + ((100 –% of Tag Violations) \* 0.1)

* 1. % Of Violated Resources = (Total Violated Resources / Total Resources Assessed) \* 100
  2. % Of Potential Cost Savings = ((Potential Cost Savings) / Average Monthly Cost) \* 100)
  3. % Of Budget Violations = (Total Violated Budget Scenarios / Total Budget Scenarios Assessed) \* 100
  4. % Of Tag Violations = (Total Violated Tag Definition Scenarios / Total Tag Definition Scenarios Assessed) \* 100 – not

**% of potential savings:**

SELECT ((PotentialCostSavings/AverageMonthlyCost) \* 100)

FROM report.AssessmentCostSnapshotV2 SN

WHERE SN.AssessmentRunID = 3043

**% Of Violated Resources:**

SELECT ((SUM(CAST(ViolatedResourceCount AS FLOAT))/CAST(COALESCE(NULLIF(SUM(CAST(TotalResourceCount AS INT)),'0'),1) AS FLOAT)) \* 100)

FROM report.Assessment A

WHERE A.AssessmentRunID = 3043

**% of Budget Violations:**

SELECT

(SUM(CASE WHEN A.ViolatedResourceCount > 1 THEN 1 ELSE 0 END)/CAST(COALESCE(NULLIF(COUNT(\*),0),1) AS FLOAT)) \* 100

FROM report.AssessmentCostSnapshotV2 SN

INNER JOIN report.Assessment A

ON SN.AssessmentRunID = A.AssessmentRunID

INNER JOIN report.AssessmentScenarios S

ON S.AssessmentScenarioID = A.AssessmentScenarioID

INNER JOIN report.AssessmentSubCategory SC

ON SC.AssessmentSubCategoryID = S.AssessmentSubCategoryID

WHERE SN.AssessmentRunID = 3043

AND SC.AssessmentSubCategoryName = 'Budget'

**Average monthly cost:**

Get last 2 months cost and currenct month forecast cost from below query

select \* from report.accountsummaryv3 where ServiceAccountID = 5704

Formula to calculate Average monthly cost: (Cost of last 2 months) / 2

If we have last 3 months cost , average should show based on last 3 months. i.e (cost of last 3 months )/3

SELECT

AverageMonthlyCost, PotentialCostSavings

,AverageMonthlyCost - PotentialCostSavings CostAfterSavings

,floor((AverageMonthlyCost + 99) / 100) \* 100 MAxRange

FROM [report].[AssessmentCostSnapshotV2]

WHERE AssessmentRunID = 3521

**Potential Optimization Savings:**

select SUM(A.SavingPerMonth) from report.AssessmentResources A

INNER JOIN report.Assessment B

ON A.AssessmentID = B.AssessmentID

where B.AssessmentRunID = '3121'

**Forecasted Spend for Dec-2021(current month should show):**

select \* from report.accountsummaryv3 where ServiceAccountID = 5704

**Top Spending Product Category (completed month should show):**

Last month cost should show and percentage should show by comparing with previous month

SELECT ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC) ROWNUM

,BC.ProductCategory

,SUM(Cost) Cost

FROM report.ResourceCostMonthlyV3 C WITH (NOLOCK)

INNER JOIN report.BillingProductCategory BC WITH (NOLOCK)

ON BC.BillingProductCategoryID = C.BillingProductCategoryID

WHERE ServiceAccountID = 5704

AND BillDateKey = 20211101

AND isDeleted = 0

GROUP BY BC.ProductCategory

**Percentage calculation** –Current Month– Previous month / previous month \* 100

select \* from report.accountsummaryv3 where ServiceAccountID = 5704

**What is my cloud spend trend for last 5 months? Are there any anomalies?**

select \* from report.accountsummaryv3 where ServiceAccountID = 5704

Anomalies will show if cost percentage >15% and <15% shows as anomalies.

**Cloud spend was highest in (\*region) and indicate an increase of (%percentage compared to previous month)**

SELECT ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC) ROWNUM

,s.region

,SUM(Cost) Cost

FROM report.ResourceCostMonthlyV3 C WITH (NOLOCK)

INNER JOIN report.BillingProductCategory BC WITH (NOLOCK)

ON BC.BillingProductCategoryID = C.BillingProductCategoryID

Inner join report.ServiceRegion s WITH (NOLOCK)

ON C.ServiceRegionID =s.ServiceRegionID

WHERE ServiceAccountID = 5704

AND BillDateKey = 20211101

AND isDeleted = 0

GROUP BY s.region

Top 2 region with potential savings:

SELECT TOP 2

R.Region

,SUM(R.SavingPerMonth) SavingPerMonth

FROM report.Assessment A

INNER JOIN report.AssessmentResources R

ON A.AssessmentID = R.AssessmentID

WHERE A.AssessmentRunID = 3521

GROUP BY R.Region

HAVING SUM(R.SavingPerMonth) > 0

ORDER BY SavingPerMonth DESC

**Which two services cost the most in the top two regions?**

SELECT ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC) ROWNUM

,BC.ProductCategory

,SUM(Cost) Cost

FROM report.ResourceCostMonthlyV3 C WITH (NOLOCK)

INNER JOIN report.BillingProductCategory BC WITH (NOLOCK)

ON BC.BillingProductCategoryID = C.BillingProductCategoryID

WHERE ServiceAccountID = 5704

AND BillDateKey = 20211101

AND isDeleted = 0 and c.ServiceRegionID = 107

GROUP BY BC.ProductCategory

select top 10 \* from report.ServiceRegion where Region ='us-east-1'\

**Page 05 – Top 10 tag key with cost:**

SELECT TOP 10

ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC)SNo

,T.TagKey TagName

--,T.TagValue TagValue

,SUM(Cost) Cost

FROM report.CostTagMappingmonthly C WITH (NOLOCK)

INNER JOIN report.ResourceCostMonthlyV3 TM WITH (NOLOCK)

ON TM.ResourceCostMonthlyID = C.ResourceCostMonthlyID

INNER JOIN report.CostTagDaily T

ON T.CostTagID = C.CostTagID

WHERE ServiceAccountID = 5704

AND BillDateKey = 20211201

AND isDeleted = 0

GROUP BY

T.TagKey

ORDER BY Cost DESC

**Top 10 tag key with values:**

SELECT TOP 10

ROW\_NUMBER() OVER (ORDER BY SUM(Cost) DESC)SNo

,T.TagKey TagName,

TagValue TagValue

,SUM(Cost) Cost

FROM report.CostTagMappingmonthly C WITH (NOLOCK)

INNER JOIN report.ResourceCostMonthlyV3 TM WITH (NOLOCK)

ON TM.ResourceCostMonthlyID = C.ResourceCostMonthlyID

INNER JOIN report.CostTagDaily T

ON T.CostTagID = C.CostTagID

WHERE ServiceAccountID = 5704

AND BillDateKey = 20211201

AND isDeleted = 0

GROUP BY

T.TagKey,

T.TagValue

ORDER BY Cost DESC

Highlight and Key Resources

Tagged resource and cost:

SELECT

COUNT(DISTINCT B.BillingResourceId)

,SUM(C.Cost)

FROM target.ResourceCostMonthly\_AWS\_V3 C

INNER JOIN report.BillingResource B

ON B.BillingResourceId = C.BillingResourceId

INNER JOIN report.ServiceResource SR

ON SR.ServiceResourceID = C.ServiceResourceID

AND isTagAllowed = 1

LEFT JOIN target.CostTagMonthlyMapping\_AWS\_V3 M

ON M.ResourceCostMonthlyID = C.ResourceCostMonthlyID

AND M.AccountSummaryID = 11670

WHERE C.AccountSummaryID = 11670

AND M.ResourceCostMonthlyID IS NULL

**Untagged cost:**

**%to check tagged resource:**

TaggedResourcePercent is (TaggedResourceCount/(UntaggedResourceCount + TaggedResourceCount))

**Untagged resource cost %:**

Tagged resource cost / Total cost

**Forecasted for 6 months:**

Running month forecast cost.

(Last 3 month cost / last 3 month no of days )\* current month total days

**Potential savings:**

select SUM(A.SavingPerMonth) from report.AssessmentResources A

INNER JOIN report.Assessment B

ON A.AssessmentID = B.AssessmentID

where B.AssessmentRunID = '3774'

**For reference only use this for Tag:**

db.getCollection('resource\_wise\_billing\_monthly').aggregate({$match: { $and: [{

"service\_account\_id" : ObjectId("617c63f5c95cf4a9a572489e")

,"powerbi\_Tags.key":{

"$eq":"Undefined"

}

,"StartDate" : {

$gte:ISODate("2021-12-01T00:00:00Z")

,$lte:ISODate("2021-12-31T00:00:00Z")}}]}}

,{

$group: {

\_id: null,

"TotalAmount": {

$sum: "$ResourceCost"

}

}

} )

**Percentage calculate by modify this query:**

db.getCollection('resource\_wise\_billing\_monthly').distinct("ResourceId",{"service\_account\_id" : ObjectId("617c63f5c95cf4a9a572489e"),

"powerbi\_Tags.key":{

"$ne":"Undefined"

}

,"StartDate" : {

$gte:ISODate("2021-12-01T00:00:00Z")

,$lte:ISODate("2021-12-31T00:00:00Z")}})

db.getCollection('resource\_wise\_billing\_monthly').distinct("ResourceId",{"service\_account\_id" : ObjectId("617c63f5c95cf4a9a572489e"),

"powerbi\_Tags.key":{

"$eq":"Undefined"

}

,"StartDate" : {

$gte:ISODate("2021-12-01T00:00:00Z")

,$lte:ISODate("2021-12-31T00:00:00Z")}})

**Stored procedure used in report:**

ssrs.usp\_FinOps\_Assessment\_Report\_AccountDetailsV2

ssrs.usp\_FinOps\_Assessment\_Report\_Param\_AssessmentDateV2

ssrs.usp\_FinOpsCFO\_Summary

ssrs.usp\_FinOps\_HeadersV2

ssrs.usp\_FinOpsCFO\_Snapshot

ssrs.usp\_FinOpsCFO\_DailyCost

ssrs.usp\_FinOpsCFO\_MonthlyTrend

ssrs.usp\_FinOpsCFO\_TopTags

ssrs.usp\_FinOpsCFO\_TagPoints

ssrs.usp\_FinOpsCFO\_Top2Values

ssrs.usp\_FinOpsCFO\_ProductCategoryPoints

ssrs.usp\_FinOpsCFO\_TopProductCategory

ssrs.usp\_FinOpsCFO\_TopProductCategoryTrend

ssrs.usp\_FinOpsCFO\_Savings

ssrs.usp\_FinOpsCFO\_Savings\_Region

ssrs.usp\_FinOpsCFO\_Savings\_ProductCategory

ssrs.usp\_FinOpsCFO\_Savings

ssrs.usp\_FinOpsCFO\_Savings\_Region

ssrs.usp\_FinOpsCFO\_RegionPoints

ssrs.usp\_FinOpsCFO\_RegionTrend

ssrs.usp\_FinOpsCFO\_RegionProductTrend

ssrs.usp\_FinOpsCFO\_RegionProductTrend

ssrs.usp\_FinOpsCFO\_TagBudgetPoints

ssrs.usp\_FinOpsCFO\_TaggedOrUntaggedResources

ssrs.usp\_FinOpsCFO\_TaggedOrUntaggedResources

ssrs.usp\_FinOpsCFO\_TagWithBudget

ssrs.usp\_FinOpsCFO\_Savings

ssrs.usp\_FinOpsCFO\_Forecast\_Trend

SELECT TOP 500

AR.AssessmentRunID,

P.Project,

S.Service,

SA.ServiceAccount,

Sa.ID,

AR.ServiceAccountID,

AR.AssessmentDateKey,

AR.AssessmentEndTime,

AR.AssessmentStatus,

AR.SnapshotStatus,

AR.SnapshotErrorMessage

FROM

[report].[AssessmentRuns] AR

INNER JOIN

[report].ServiceAccount SA ON SA.ServiceAccountID = AR.ServiceAccountID

INNER JOIN

[report].Project P ON P.ProjectID = SA.ProjectID

INNER JOIN

[report].Service S ON S.ServiceID = SA.ServiceID

WHERE

SA.ServiceAccount = 'CoreStack\_AWS\_Master' AND P.Project = 'AllTypeOfAccounts'

ORDER BY

AR.AssessmentRunID DESC;

select \* from [report].[AssessmentCostSnapshotV2] where AssessmentRunID = 203 ;

WITH CTE AS

(

SELECT TOP 1

SNo + 1 AS SNo,

FORMAT(DATEADD(MONTH, 1, CAST('01-' + REPLACE([Month], ' (Forecasted)', '') AS DATE)), 'MMM-yyyy') + ' (expected)' AS [Month],

(SELECT TOP 1 AverageMonthlyCost - PotentialCostSavings FROM report.AssessmentCostSnapshotV2 WHERE AssessmentRunID = 228) AS Cost

FROM

report.AssessmentCostHistorySnapshotV2

WHERE

AssessmentRunID = 203

ORDER BY

SNo DESC

)

SELECT

SNo,

[Month],

Cost

FROM

report.AssessmentCostHistorySnapshotV2

WHERE

AssessmentRunID = 203

UNION ALL

SELECT

\*

FROM

CTE

ORDER BY

SNo;