

GVault QDMS Post Go-Live Survey

####The analysis include exploratory data analysis and an ordinal logistic regression model.

```
require("RCurl")
```

```
## Loading required package: RCurl
```

```
## Loading required package: bitops
```

Load the data

```
#Raw dataset
```

```
newdata1<-getURL("https://raw.githubusercontent.com/watex95/R-FOR-DATA-SCIENCE/master/DATASETS/Gvault_survey_raw.csv")
```

```
df1<-read.csv(text=newdata1)
```

EXPLORATORY DATA ANALYSIS

Load packages

```
require("plotrix")
```

```
## Loading required package: plotrix
```

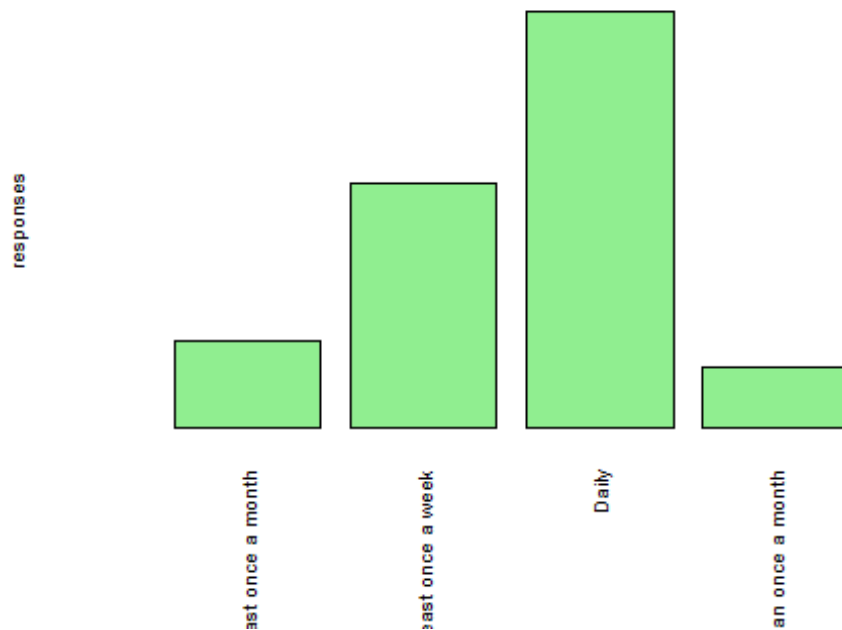
Lets explore the frequency of single choice questions

How frequently do you use GVault QDMS?

```
table(df1$freq_use)
```

```
##
## At least once a month At least once a week Daily
## 51 144 245
## Less than once a month
## 35
```

```
barplot(table(df1$freq_use),ylab = "responses",col = "light green",
, srt=45, las=2, yaxt='n', cex.names = 0.65, cex.lab=0.65)
```

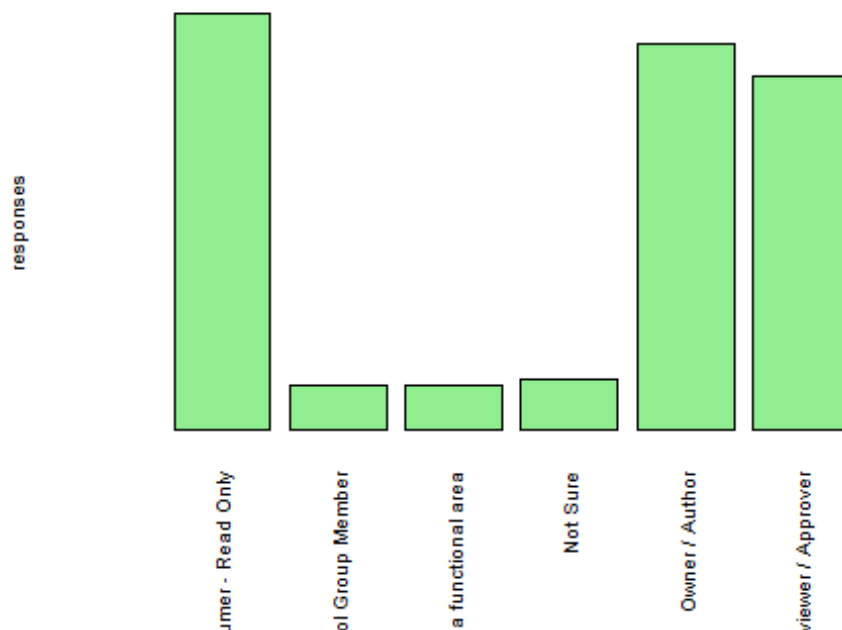


What is your role within GVault QDMS?

```
table(df1$role)
```

```
##
##          Consumer - Read Only          Document Control Group
Member
##                               153
16
## Document Steward for a functional area          Not
Sure
##                               16
18
##          Owner / Author          Reviewer /
Approver
##                               142
130
```

```
barplot(table(df1$role),ylab = "responses",col = "light green",
        srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```

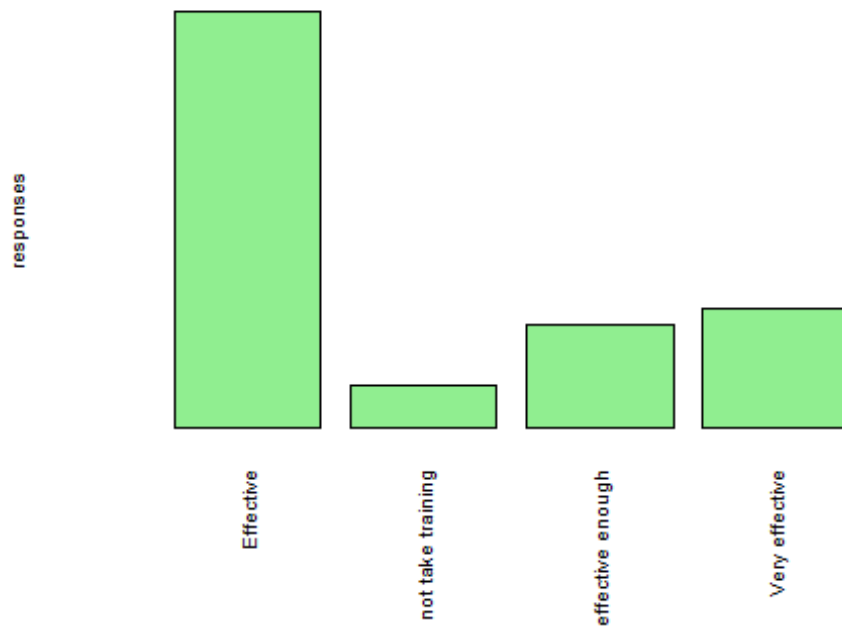


How would you describe the effectiveness of training you received?

```
table(df1$training_effectiveness)
```

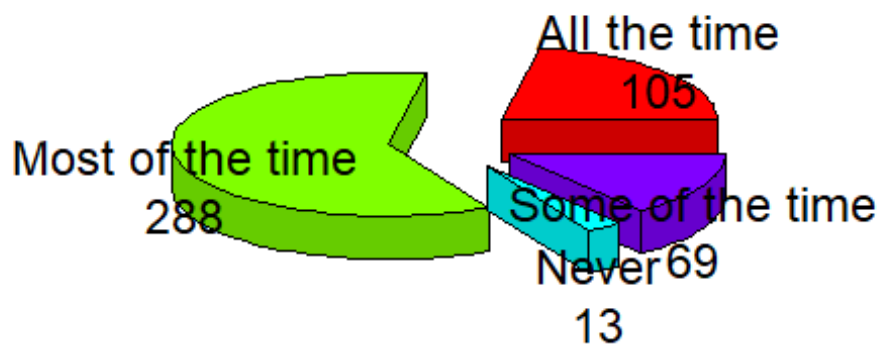
```
##
##           Effective I did not take training    Not effective enough
##           291                               29                      72
##           Very effective
##           83
```

```
barplot(table(df1$training_effectiveness),ylab = "responses",col = "light
green",srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```



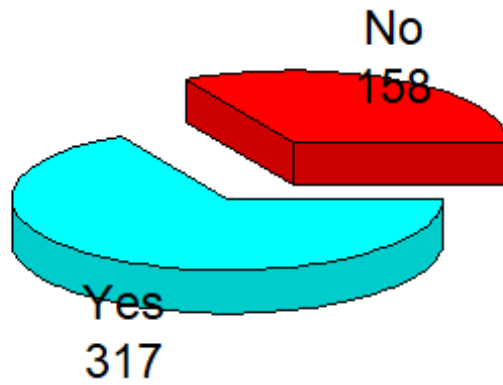
Are you able to complete work in the system without 'help' or 'intervention'?

```
require(plotrix)
mytable=table(df1$complete_without_help)
lbls <- paste(names(mytable), "\n", mytable, sep="")
pie3D(mytable, labels = lbls,explode=0.3)
```



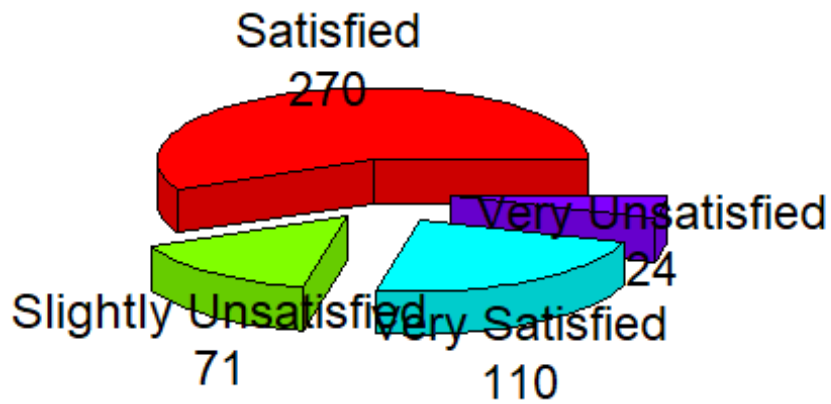
Do you find it easy to search for and access documents in GVault QDMS?

```
mytable=table(df1$easy_access_documents)
lbls <- paste(names(mytable), "\n", mytable, sep="")
pie3D(mytable, labels = lbls,explode=0.3)
```



How satisfied are you with the overall experience of GVault QDMS?

```
mytable=table(df1$satisfaction)
lbls <- paste(names(mytable), "\n", mytable, sep="")
pie3D(mytable, labels = lbls,explode=0.3)
```

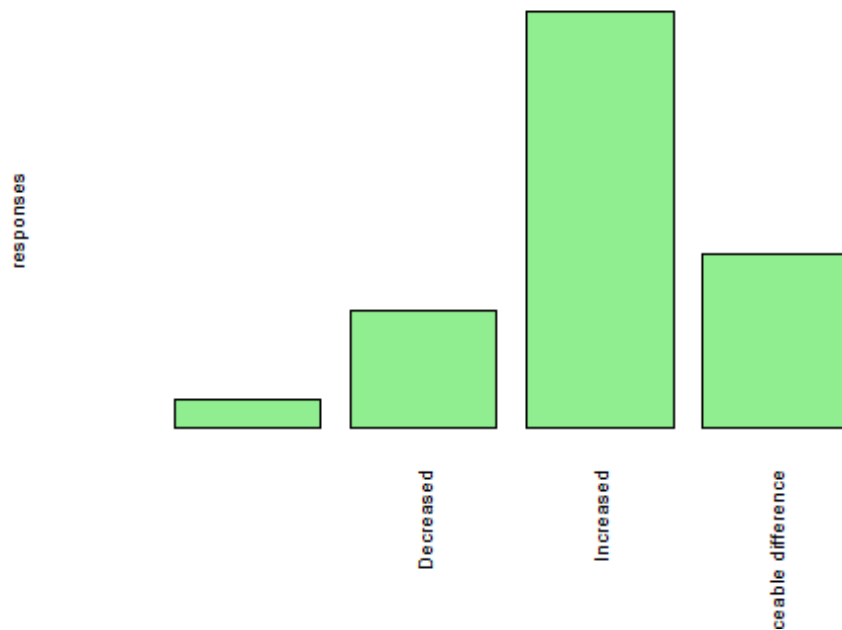


How would you describe your efficiency with GVault as compared to GDocs?

```
table(df1$Gvault_efficiency)
```

```
##
##                               Decreased              Increased
##                               75                270
## No noticeable difference
##                               112
```

```
barplot(table(df1$Gvault_efficiency),ylab = "responses",col = "light
green",srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```



Do you find GVault has improved features and functionality compared to GDocs?

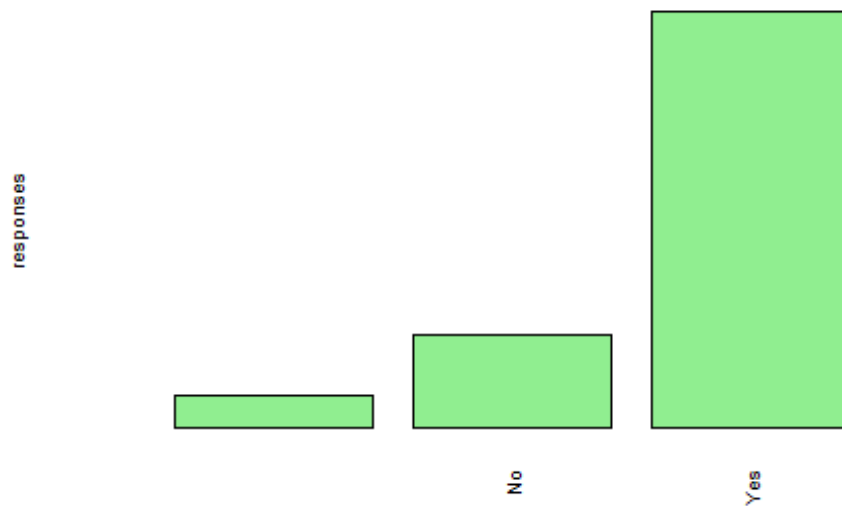
```
table(df1$Gvault_improved)
```

```
##
```

```
##      No Yes
```

```
##  28  81 366
```

```
barplot(table(df1$Gvault_improved),ylab="responses",
        col="light green",las=2, yaxt='n',cex.names = 0.65,cex.lab=0.65)
```

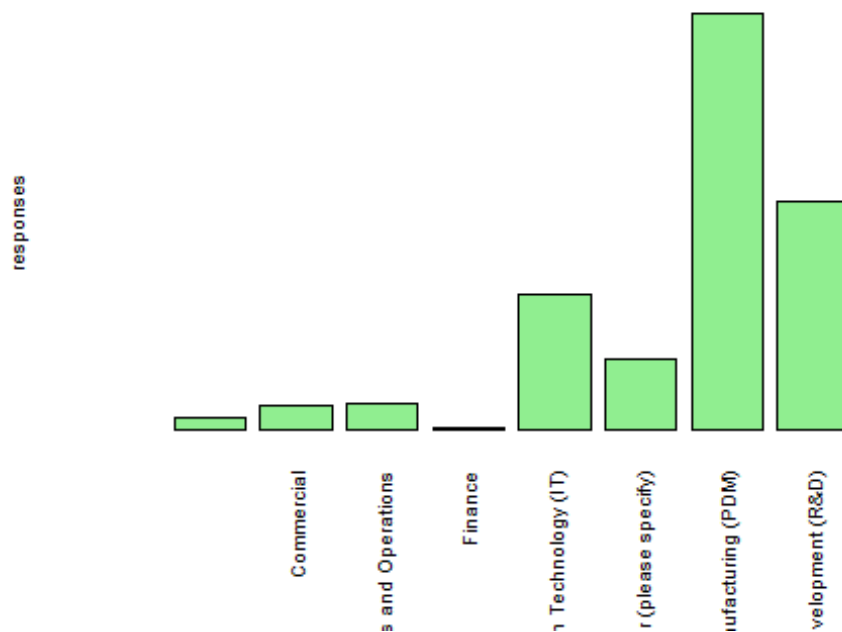



###Demographics analysis What is your functional area?

```
table(df1$functional_area)
```

```
##
##
##              6
##      Commercial
##              12
##      Facilities and Operations
##              13
##              Finance
##              1
##      Information Technology (IT)
##              70
##      Other (please specify)
##              37
## Pharmaceutical Development and Manufacturing (PDM)
##              217
##      Research and Development (R&D)
##              119
```

```
barplot(table(df1$functional_area),ylab = "responses",col = "light
green",srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```

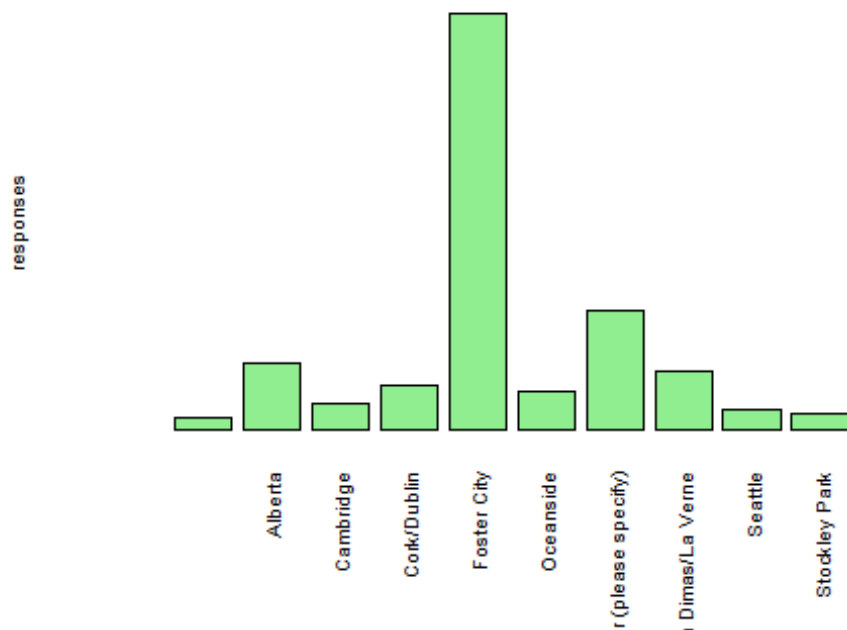


What is your office location?

```
table(df1$office_location)
```

```
##
##               Alberta      Cambridge
##               6          39          15
##      Cork/Dublin      Foster City      Oceanside
##               25          244          22
## Other (please specify) San Dimas/La Verne      Seattle
##               70          34          11
##      Stockley Park
##               9
```

```
barplot(table(df1$office_location),ylab = "responses",col = "light
green",srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```

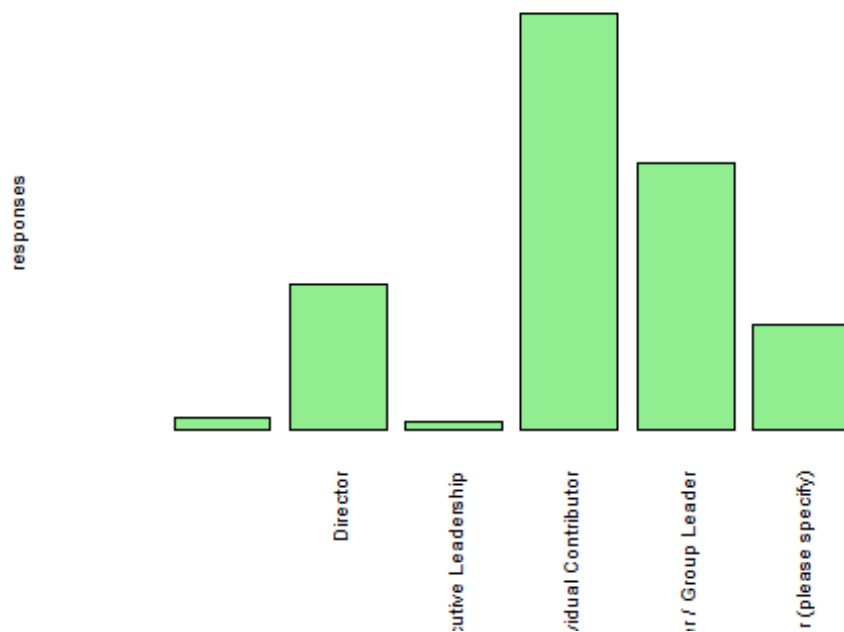


What is your Job Level?

```
table(df1$job_level)
```

```
##
##                               Director  Executive Leadership
##                               6          72          4
## Individual Contributor Manager / Group Leader Other (please specify)
##                               208        133          52
```

```
barplot(table(df1$job_level),ylab = "responses",col = "light green",
        srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```

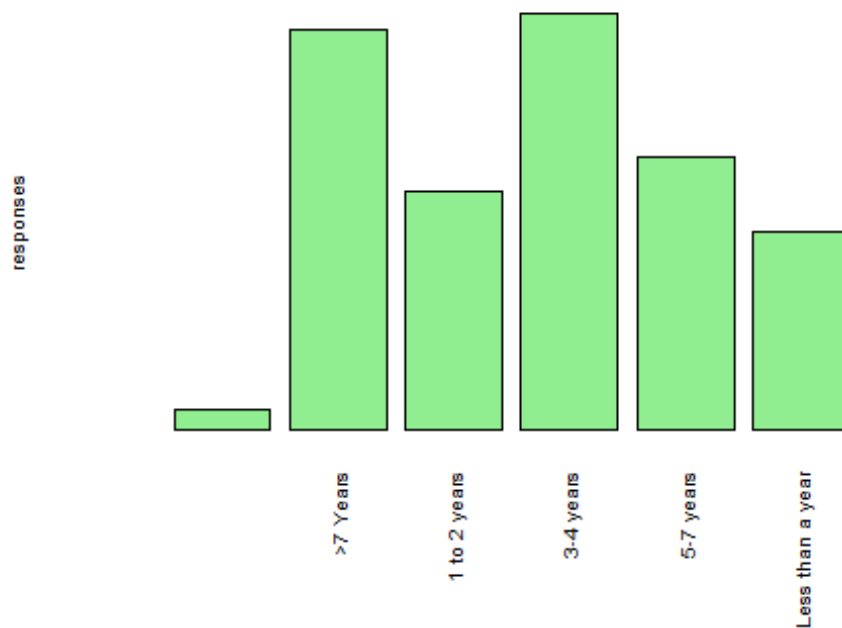


How long have you worked at Gilead?

```
table(df1$time_worked_Glead)
```

```
##
##              >7 Years      1 to 2 years      3-4 years
##              6            123             73          128
##      5-7 years Less than a year
##              84             61
```

```
barplot(table(df1$time_worked_Glead),ylab = "responses",col = "light
green",srt=45,las=2,yaxt='n',cex.names = 0.65,cex.lab=0.65)
```



###Ordinal Logistic Regression (OLR) ##### Load the Libraries

```
require(foreign)
## Loading required package: foreign
require(ggplot2)
## Loading required package: ggplot2
require(MASS)
## Loading required package: MASS
require(Hmisc)
## Loading required package: Hmisc
## Loading required package: lattice
## Loading required package: survival
## Loading required package: Formula
##
## Attaching package: 'Hmisc'
```

```
## The following objects are masked from 'package:base':  
##  
##     format.pval, units
```

```
require(reshape2)
```

```
## Loading required package: reshape2
```

For building this model, we will be using the polr command to estimate an ordered logistic regression. Then, we'll specify Hess=TRUE to let the model output show the observed information matrix from optimization which is used to get standard errors.

```
m<-polr(df1$satisfaction ~ df1$freq_use + df1$role  
      +df1$training_instructor_led + df1$training_web_based  
      + df1$training_read+ df1$no_training+df1$training_effectiveness  
      + df1$support_Gnet + df1$support_inapplication  
      +df1$support_ref_doc + df1$support_SOP + df1$support_contacted  
      +df1$support_IT + df1$complete_without_help  
      +df1$easy_access_documents + df1$Gvault_efficiency  
      +df1$Gvault_improved,data=df1,Hess=TRUE)  
summary(m)  
  
## Call:  
## polr(formula = df1$satisfaction ~ df1$freq_use + df1$role +  
df1$training_instructor_led +  
##     df1$training_web_based + df1$training_read + df1$no_training +  
##     df1$training_effectiveness + df1$support_Gnet +  
df1$support_inapplication +  
##     df1$support_ref_doc + df1$support_SOP + df1$support_contacted +  
##     df1$support_IT + df1$complete_without_help + df1$easy_access_documents  
+  
##     df1$Gvault_efficiency + df1$Gvault_improved, data = df1,  
##     Hess = TRUE)  
##  
## Coefficients:  
##  
Value  
## df1$freq_useAt least once a week  
-0.061256  
## df1$freq_useDaily  
-0.225149  
## df1$freq_useLess than once a month  
-0.298138  
## df1$roleDocument Control Group Member  
-0.035346  
## df1$roleDocument Steward for a functional area  
0.839250  
## df1$roleNot Sure  
-0.710795  
## df1$roleOwner / Author  
0.232541
```

```

## df1$roleReviewer / Approver
0.149034
## df1$training_instructor_ledInstructor Led
-0.014088
## df1$training_web_basedWeb/Computer Based
-0.201767
## df1$training_readRead & Understood of Procedural Document(s)
0.233305
## df1$no_trainingI did not take training
-2.164934
## df1$training_effectivenessI did not take training
2.662338
## df1$training_effectivenessNot effective enough
0.418935
## df1$training_effectivenessVery effective
1.469944
## df1$support_GnetGNet
0.007038
## df1$support_inapplicationIn-Application (GVault)
0.672101
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 0.349751
## df1$support_SOPSOPs and Work Instructions
0.112311
## df1$support_contactedContacted my Document Control or Training Group
-0.224774
## df1$support_ITIT Support / SPARC
0.062084
## df1$complete_without_helpMost of the time
-0.900815
## df1$complete_without_helpNever
0.499156
## df1$complete_without_helpSome of the time
-0.261270
## df1$easy_access_documentsYes
-0.162641
## df1$Gvault_efficiencyDecreased
0.925684
## df1$Gvault_efficiencyIncreased
0.813776
## df1$Gvault_efficiencyNo noticeable difference
0.107436
## df1$Gvault_improvedNo
1.889843
## df1$Gvault_improvedYes
0.539834
##
Std. Error
## df1$freq_useAt least once a week
0.3640

```

```
## df1$freq_useDaily
0.3642
## df1$freq_useLess than once a month
0.5118
## df1$roleDocument Control Group Member
0.5846
## df1$roleDocument Steward for a functional area
0.5561
## df1$roleNot Sure
0.6216
## df1$roleOwner / Author
0.2884
## df1$roleReviewer / Approver
0.2782
## df1$training_instructor_ledInstructor Led
0.2450
## df1$training_web_basedWeb/Computer Based
0.2269
## df1$training_readRead & Understood of Procedural Document(s)
0.2339
## df1$no_trainingI did not take training
1.3209
## df1$training_effectivenessI did not take training
1.3396
## df1$training_effectivenessNot effective enough
0.2972
## df1$training_effectivenessVery effective
0.2688
## df1$support_GnetGNet
0.2210
## df1$support_inapplicationIn-Application (GVault)
0.2336
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 0.2145
## df1$support_SOPSOPs and Work Instructions
0.2152
## df1$support_contactedContacted my Document Control or Training Group
0.2209
## df1$support_ITIT Support / SPARC
0.3173
## df1$complete_without_helpMost of the time
0.2542
## df1$complete_without_helpNever
0.6184
## df1$complete_without_helpSome of the time
0.3708
## df1$easy_access_documentsYes
0.2574
## df1$Gvault_efficiencyDecreased
0.8537
```



```
## df1$Gvault_efficiencyIncreased
0.8234
## df1$Gvault_efficiencyNo noticeable difference
0.8297
## df1$Gvault_improvedNo
0.6701
## df1$Gvault_improvedYes
0.6258
##
t value
## df1$freq_useAt least once a week
-0.16828
## df1$freq_useDaily
-0.61814
## df1$freq_useLess than once a month
-0.58252
## df1$roleDocument Control Group Member
-0.06046
## df1$roleDocument Steward for a functional area
1.50921
## df1$roleNot Sure
-1.14345
## df1$roleOwner / Author
0.80632
## df1$roleReviewer / Approver
0.53578
## df1$training_instructor_ledInstructor Led
-0.05751
## df1$training_web_basedWeb/Computer Based
-0.88939
## df1$training_readRead & Understood of Procedural Document(s)
0.99730
## df1$no_trainingI did not take training
-1.63898
## df1$training_effectivenessI did not take training
1.98735
## df1$training_effectivenessNot effective enough
1.40961
## df1$training_effectivenessVery effective
5.46838
## df1$support_GnetGNet
0.03184
## df1$support_inapplicationIn-Application (GVault)
2.87713
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 1.63043
## df1$support_SOPSOPs and Work Instructions
0.52185
## df1$support_contactedContacted my Document Control or Training Group
-1.01772
```

```
## df1$support_ITIT Support / SPARC
0.19564
## df1$complete_without_helpMost of the time
-3.54343
## df1$complete_without_helpNever
0.80717
## df1$complete_without_helpSome of the time
-0.70457
## df1$easy_access_documentsYes
-0.63187
## df1$Gvault_efficiencyDecreased
1.08428
## df1$Gvault_efficiencyIncreased
0.98825
## df1$Gvault_efficiencyNo noticeable difference
0.12949
## df1$Gvault_improvedNo
2.82023
## df1$Gvault_improvedYes
0.86269
##
## Intercepts:
##
## Value Std. Error t value
## Satisfied|Slightly Unsatisfied 1.6519 0.7826 2.1109
## Slightly Unsatisfied|Very Satisfied 2.4814 0.7885 3.1472
## Very Satisfied|Very Unsatisfied 4.7798 0.8193 5.8342
##
## Residual Deviance: 914.5326
## AIC: 980.5326
```

We see the usual regression output coefficient table including the value of each coefficient, standard errors, t values, estimates for the two intercepts, residual deviance and AIC. AIC is the information criteria. Lesser the better.

Now we'll calculate some essential metrics such as p-Value, CI, Odds ratio. The output displayed next are values: log odds(coefficients of estimation), t values are the t-distribution test statistic values, and finally the p-values are the probability of error.

```
ctable <- coef(summary(m))
p <- pnorm(abs(ctable[, "t value"]), lower.tail = FALSE) * 2
ctable <- cbind(ctable, "p value" = p)
ctable

##
Value
## df1$freq_useAt least once a week
-0.061255520
## df1$freq_useDaily
-0.225148789
## df1$freq_useLess than once a month
```

-0.298137738
df1\$roleDocument Control Group Member
-0.035346366
df1\$roleDocument Steward for a functional area
0.839250212
df1\$roleNot Sure
-0.710794769
df1\$roleOwner / Author
0.232540770
df1\$roleReviewer / Approver
0.149033738
df1\$training_instructor_ledInstructor Led
-0.014088132
df1\$training_web_basedWeb/Computer Based
-0.201766655
df1\$training_readRead & Understood of Procedural Document(s)
0.233305064
df1\$no_trainingI did not take training
-2.164933941
df1\$training_effectivenessI did not take training
2.662337561
df1\$training_effectivenessNot effective enough
0.418934925
df1\$training_effectivenessVery effective
1.469944319
df1\$support_GnetGNet
0.007037608
df1\$support_inapplicationIn-Application (GVault)
0.672101137
df1\$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 0.349751351
df1\$support_SOPSOPs and Work Instructions
0.112310847
df1\$support_contactedContacted my Document Control or Training Group
-0.224773958
df1\$support_ITIT Support / SPARC
0.062083893
df1\$complete_without_helpMost of the time
-0.900814906
df1\$complete_without_helpNever
0.499156305
df1\$complete_without_helpSome of the time
-0.261270473
df1\$easy_access_documentsYes
-0.162640886
df1\$Gvault_efficiencyDecreased
0.925683533
df1\$Gvault_efficiencyIncreased
0.813775704
df1\$Gvault_efficiencyNo noticeable difference

0.107435707
df1\$Gvault_improvedNo
1.889843138
df1\$Gvault_improvedYes
0.539833742
Satisfied|Slightly Unsatisfied
1.651903387
Slightly Unsatisfied|Very Satisfied
2.481428832
Very Satisfied|Very Unsatisfied
4.779807594

Std. Error
df1\$freq_useAt least once a week
0.3640076
df1\$freq_useDaily
0.3642379
df1\$freq_useLess than once a month
0.5118063
df1\$roleDocument Control Group Member
0.5846309
df1\$roleDocument Steward for a functional area
0.5560856
df1\$roleNot Sure
0.6216254
df1\$roleOwner / Author
0.2883987
df1\$roleReviewer / Approver
0.2781638
df1\$training_instructor_ledInstructor Led
0.2449576
df1\$training_web_basedWeb/Computer Based
0.2268604
df1\$training_readRead & Understood of Procedural Document(s)
0.2339372
df1\$no_trainingI did not take training
1.3209057
df1\$training_effectivenessI did not take training
1.3396388
df1\$training_effectivenessNot effective enough
0.2971996
df1\$training_effectivenessVery effective
0.2688082
df1\$support_GnetGNet
0.2210034
df1\$support_inapplicationIn-Application (GVault)
0.2336016
df1\$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 0.2145142
df1\$support_SOPSOPs and Work Instructions

```
0.2152168
## df1$support_contactedContacted my Document Control or Training Group
0.2208596
## df1$support_ITIT Support / SPARC
0.3173358
## df1$complete_without_helpMost of the time
0.2542211
## df1$complete_without_helpNever
0.6184067
## df1$complete_without_helpSome of the time
0.3708206
## df1$easy_access_documentsYes
0.2573965
## df1$Gvault_efficiencyDecreased
0.8537290
## df1$Gvault_efficiencyIncreased
0.8234482
## df1$Gvault_efficiencyNo noticeable difference
0.8296784
## df1$Gvault_improvedNo
0.6701029
## df1$Gvault_improvedYes
0.6257589
## Satisfied|Slightly Unsatisfied
0.7825531
## Slightly Unsatisfied|Very Satisfied
0.7884581
## Very Satisfied|Very Unsatisfied
0.8192696
##
t value
## df1$freq_useAt least once a week
-0.16828087
## df1$freq_useDaily
-0.61813665
## df1$freq_useLess than once a month
-0.58252067
## df1$roleDocument Control Group Member
-0.06045929
## df1$roleDocument Steward for a functional area
1.50921053
## df1$roleNot Sure
-1.14344556
## df1$roleOwner / Author
0.80631711
## df1$roleReviewer / Approver
0.53577681
## df1$training_instructor_ledInstructor Led
-0.05751253
## df1$training_web_basedWeb/Computer Based
```

```

-0.88938675
## df1$training_readRead & Understood of Procedural Document(s)
0.99729791
## df1$no_trainingI did not take training
-1.63897685
## df1$training_effectivenessI did not take training
1.98735477
## df1$training_effectivenessNot effective enough
1.40960810
## df1$training_effectivenessVery effective
5.46837694
## df1$support_GnetGNet
0.03184388
## df1$support_inapplicationIn-Application (GVault)
2.87712521
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 1.63043451
## df1$support_SOPSOPs and Work Instructions
0.52184971
## df1$support_contactedContacted my Document Control or Training Group
-1.01772325
## df1$support_ITIT Support / SPARC
0.19564098
## df1$complete_without_helpMost of the time
-3.54343092
## df1$complete_without_helpNever
0.80716509
## df1$complete_without_helpSome of the time
-0.70457384
## df1$easy_access_documentsYes
-0.63186911
## df1$Gvault_efficiencyDecreased
1.08428267
## df1$Gvault_efficiencyIncreased
0.98825372
## df1$Gvault_efficiencyNo noticeable difference
0.12949078
## df1$Gvault_improvedNo
2.82022827
## df1$Gvault_improvedYes
0.86268647
## Satisfied|Slightly Unsatisfied
2.11091543
## Slightly Unsatisfied|Very Satisfied
3.14719184
## Very Satisfied|Very Unsatisfied
5.83423013
##
p value
## df1$freq_useAt least once a week

```

8.663623e-01
df1\$freq_useDaily
5.364853e-01
df1\$freq_useLess than once a month
5.602160e-01
df1\$roleDocument Control Group Member
9.517898e-01
df1\$roleDocument Steward for a functional area
1.312450e-01
df1\$roleNot Sure
2.528536e-01
df1\$roleOwner / Author
4.200600e-01
df1\$roleReviewer / Approver
5.921128e-01
df1\$training_instructor_ledInstructor Led
9.541369e-01
df1\$training_web_basedWeb/Computer Based
3.737953e-01
df1\$training_readRead & Understood of Procedural Document(s)
3.186199e-01
df1\$no_trainingI did not take training
1.012181e-01
df1\$training_effectivenessI did not take training
4.688310e-02
df1\$training_effectivenessNot effective enough
1.586554e-01
df1\$training_effectivenessVery effective
4.541752e-08
df1\$support_GnetGNet
9.745965e-01
df1\$support_inapplicationIn-Application (GVault)
4.013163e-03
df1\$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 1.030097e-01
df1\$support_SOPSOPs and Work Instructions
6.017750e-01
df1\$support_contactedContacted my Document Control or Training Group
3.088095e-01
df1\$support_ITIT Support / SPARC
8.448912e-01
df1\$complete_without_helpMost of the time
3.949568e-04
df1\$complete_without_helpNever
4.195714e-01
df1\$complete_without_helpSome of the time
4.810755e-01
df1\$easy_access_documentsYes
5.274724e-01
df1\$GVault_efficiencyDecreased

```

2.782395e-01
## df1$Gvault_efficiencyIncreased
3.230284e-01
## df1$Gvault_efficiencyNo noticeable difference
8.969693e-01
## df1$Gvault_improvedNo
4.798950e-03
## df1$Gvault_improvedYes
3.883099e-01
## Satisfied|Slightly Unsatisfied
3.477958e-02
## Slightly Unsatisfied|Very Satisfied
1.648468e-03
## Very Satisfied|Very Unsatisfied
5.403950e-09

```

Odds Ratios and their Confidence Intervals

```

ci <- confint(m)

## Waiting for profiling to be done...

exp(cbind(OR = coef(m), ci))

##
OR
## df1$freq_useAt least once a week
0.9405829
## df1$freq_useDaily
0.7983974
## df1$freq_useLess than once a month
0.7421991
## df1$roleDocument Control Group Member
0.9652710
## df1$roleDocument Steward for a functional area
2.3146308
## df1$roleNot Sure
0.4912536
## df1$roleOwner / Author
1.2618019
## df1$roleReviewer / Approver
1.1607121
## df1$training_instructor_ledInstructor Led
0.9860106
## df1$training_web_basedWeb/Computer Based
0.8172856
## df1$training_readRead & Understood of Procedural Document(s)
1.2627666
## df1$no_trainingI did not take training
0.1147575
## df1$training_effectivenessI did not take training
14.3297466

```



```
## df1$training_effectivenessNot effective enough
1.5203414
## df1$training_effectivenessVery effective
4.3489930
## df1$support_GnetGNet
1.0070624
## df1$support_inapplicationIn-Application (GVault)
1.9583478
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 1.4187147
## df1$support_SOPSOPs and Work Instructions
1.1188606
## df1$support_contactedContacted my Document Control or Training Group
0.7986967
## df1$support_ITIT Support / SPARC
1.0640516
## df1$complete_without_helpMost of the time
0.4062385
## df1$complete_without_helpNever
1.6473308
## df1$complete_without_helpSome of the time
0.7700726
## df1$easy_access_documentsYes
0.8498963
## df1$Gvault_efficiencyDecreased
2.5235926
## df1$Gvault_efficiencyIncreased
2.2564115
## df1$Gvault_efficiencyNo noticeable difference
1.1134193
## df1$Gvault_improvedNo
6.6183304
## df1$Gvault_improvedYes
1.7157216
##
2.5 %
## df1$freq_useAt least once a week
0.463984624
## df1$freq_useDaily
0.393674401
## df1$freq_useLess than once a month
0.266853560
## df1$roleDocument Control Group Member
0.298130157
## df1$roleDocument Steward for a functional area
0.756901241
## df1$roleNot Sure
0.131970798
## df1$roleOwner / Author
0.717716313
```

```

## df1$roleReviewer / Approver
0.673176065
## df1$training_instructor_ledInstructor Led
0.610563800
## df1$training_web_basedWeb/Computer Based
0.524022291
## df1$training_readRead & Understood of Procedural Document(s)
0.800739629
## df1$no_trainingI did not take training
0.004596766
## df1$training_effectivenessI did not take training
1.250406179
## df1$training_effectivenessNot effective enough
0.843980236
## df1$training_effectivenessVery effective
2.572731017
## df1$support_GnetGNet
0.650983679
## df1$support_inapplicationIn-Application (GVault)
1.238240827
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 0.932364218
## df1$support_SOPSOPs and Work Instructions
0.733004716
## df1$support_contactedContacted my Document Control or Training Group
0.517337265
## df1$support_ITIT Support / SPARC
0.564939050
## df1$complete_without_helpMost of the time
0.246551259
## df1$complete_without_helpNever
0.473766898
## df1$complete_without_helpSome of the time
0.370922492
## df1$easy_access_documentsYes
0.513532685
## df1$Gvault_efficiencyDecreased
0.479579095
## df1$Gvault_efficiencyIncreased
0.456763606
## df1$Gvault_efficiencyNo noticeable difference
0.221095979
## df1$Gvault_improvedNo
1.896190043
## df1$Gvault_improvedYes
0.537459748
##
97.5 %
## df1$freq_useAt least once a week
1.9416099

```

```
## df1$freq_useDaily
1.6491686
## df1$freq_useLess than once a month
2.0030414
## df1$roleDocument Control Group Member
2.9884884
## df1$roleDocument Steward for a functional area
6.8122375
## df1$roleNot Sure
1.5668129
## df1$roleOwner / Author
2.2266164
## df1$roleReviewer / Approver
2.0062932
## df1$training_instructor_ledInstructor Led
1.5969506
## df1$training_web_basedWeb/Computer Based
1.2766539
## df1$training_readRead & Understood of Procedural Document(s)
2.0058319
## df1$no_trainingI did not take training
1.2460146
## df1$training_effectivenessI did not take training
363.9223923
## df1$training_effectivenessNot effective enough
2.7125669
## df1$training_effectivenessVery effective
7.3915420
## df1$support_GnetGNet
1.5498643
## df1$support_inapplicationIn-Application (GVault)
3.0976786
## df1$support_ref_docReference Document (User Manual, Reference Guide,
Training Material, etc) 2.1638272
## df1$support_SOPSOPs and Work Instructions
1.7057883
## df1$support_contactedContacted my Document Control or Training Group
1.2308936
## df1$support_ITIT Support / SPARC
1.9673261
## df1$complete_without_helpMost of the time
0.6688372
## df1$complete_without_helpNever
5.4780282
## df1$complete_without_helpSome of the time
1.5909998
## df1$easy_access_documentsYes
1.4113909
## df1$Gvault_efficiencyDecreased
14.4853373
```

```
## df1$Gvault_efficiencyIncreased
12.3340562
## df1$Gvault_efficiencyNo noticeable difference
6.1067697
## df1$Gvault_improvedNo
27.2439790
## df1$Gvault_improvedYes
6.5299143
```

Interpretation at a glance: The effect of one predictor on the odds/likelihood of satisfaction When Gvault is used atleast once a week versus atleast once a month, the odds of satisfaction being very satisfied are 0.9 greater than the odds of either “satisfied” , “slightly unsatisfied” or “very unsatisfied” combined. NOTE: The reference level selected was “atleast once a month”

When the training is very effective versus effective training, the odds of a user being very satisfied are 4.38 greater than the odds of being either “satisfied” , “slightly unsatisfied” or “very unsatisfied” combined. NOTE: The reference level selected was “effective”

Summary

Most of the predictor variables were not statistically significant in predicting the level of satisfaction with the overall experience of GVault QDMS. Training effectiveness (p-value=0.04688), Support for In application(p-value=0.00401), complete work without(p-value=0.000395) help,and whether Gvault improved features(p-value=0.000479) were the variables that significantly affected satisfaction of a user.