

Microsoft Technology Centers

PoC Results for AIG SOX Compliance

Agenda

- Results of the PoC
- Review PoC status
- End-to-end workflow, created during the PoC
- Broader Workflow and Current Status
- Appendixes
- Detailed Steps of the End-to-end Workflow used in the PoC
 - 0. Train the model
 - 1. Transform e-mails to messages
 - 2. Detect Request/Approve/No-intent probability using [Microsoft R](#)
 - 3. Transform prediction to detect Approver
 - 4. Business rules
- Detect Request/Approve/No-intent probability
 - Azure ML
 - LUIS

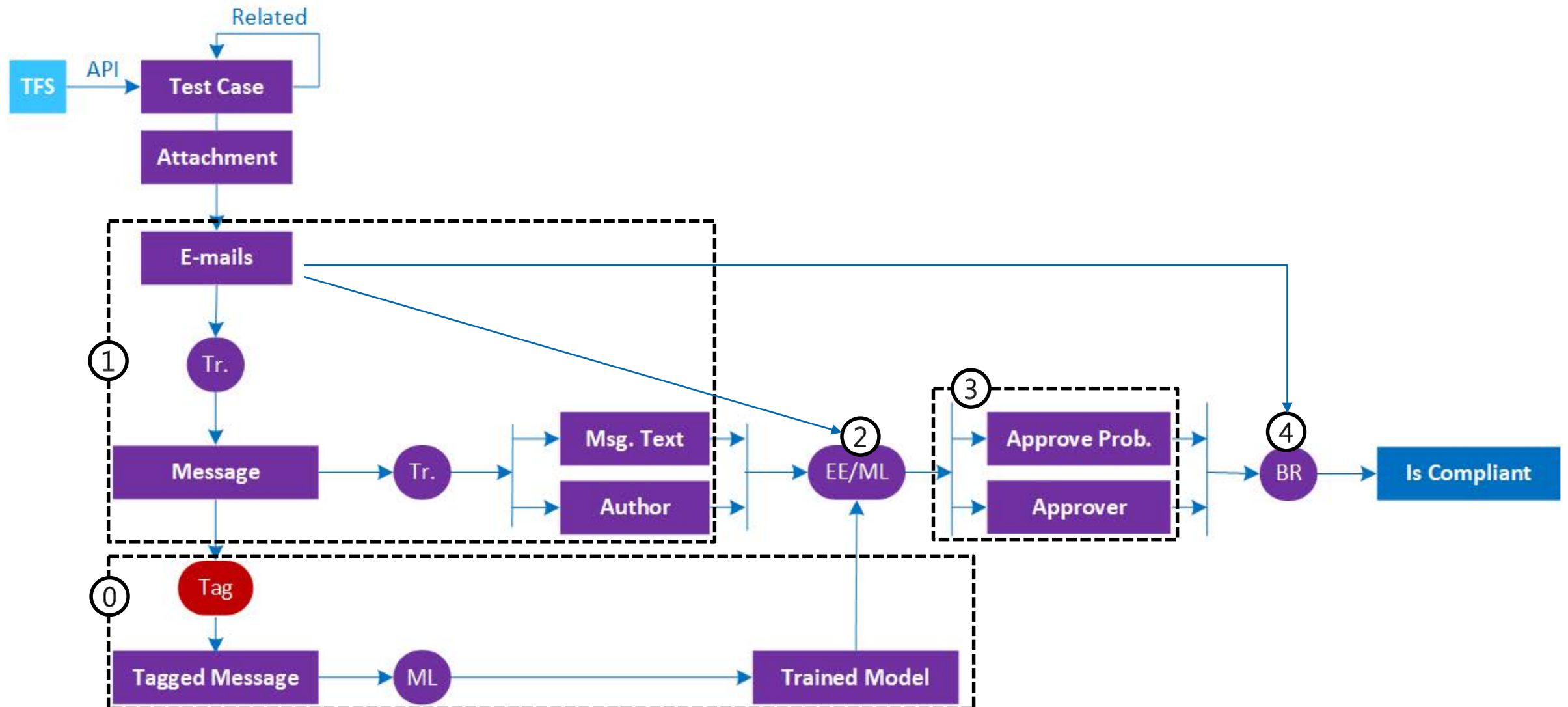
Result of the PoC

TestCase	DeployedBy	EmailApprovals
21	Prakash Muniyappa <R1-CORE\PMuniyap>	From: smith, Holy P Sent: Wednesday, August 16, 2017 12:28 PM To: lee, Mike B. <Mike.lee@aig.com> Subject: RE: Create new oracle data based for data science learning schema Excellent. All tables are correct. Please move to Production.
22	Challa, Ravishankar <R1-CORE\rchalla>	From: smith, Holy P Sent: Wednesday, August 16, 2017 10:39 AM To: lee, Mike B. <Mike.lee@aig.com> Subject: RE: Robotics Production Oracle Setup Approved.. Thanks. From: lee, Mike B. Sent: Wednesday, August 16, 2017 10:25 AM To: smith, Holy P <Holy.smith@aig.com> Subject: Robotics Production Oracle Setup I completed the testing on the Robotics Production Oracle Setup. This looks good fro implementation for next week. Need your approval
23	Rajendran, Pradeep <R1-CORE\PaRajend>	From: Johnson, Hoang bruce Sent: Wednesday, August 16, 2017 10:36 AM
24	Devanagi, Parashuram <R1-CORE\PDevanag>	From: Johnson, Hoang bruce Sent: Wednesday, August 16, 2017 11:08 AM
25	Anil Gopal Saraswathi <R1-CORE\AGopalsa>	From: smith, Holy P Sent: Wednesday, August 16, 2017 12:44 PM
26	Devanagi, Parashuram <R1-CORE\PDevanag>	From: lee, Mike B.
27	Brahmaji, Gopalam <R1-CORE\gbrahmaj>	From: smith, Holy P Sent: Wednesday, August 16, 2017 12:38 PM
28	lee, Mike B.	From: lee, Mike B. Sent: Wednesday, August 16, 2017 11:57 AM
29	Devanagi, Parashuram <R1-CORE\PDevanag>	From: lee, Mike B. Sent: Wednesday, August 16, 2017 11:57 AM
30	ServiceTFRMAdminPrd	
51	lee, Mike B.	From: lee, Mike B. Sent: Wednesday, August 16, 2017 11:57 AM

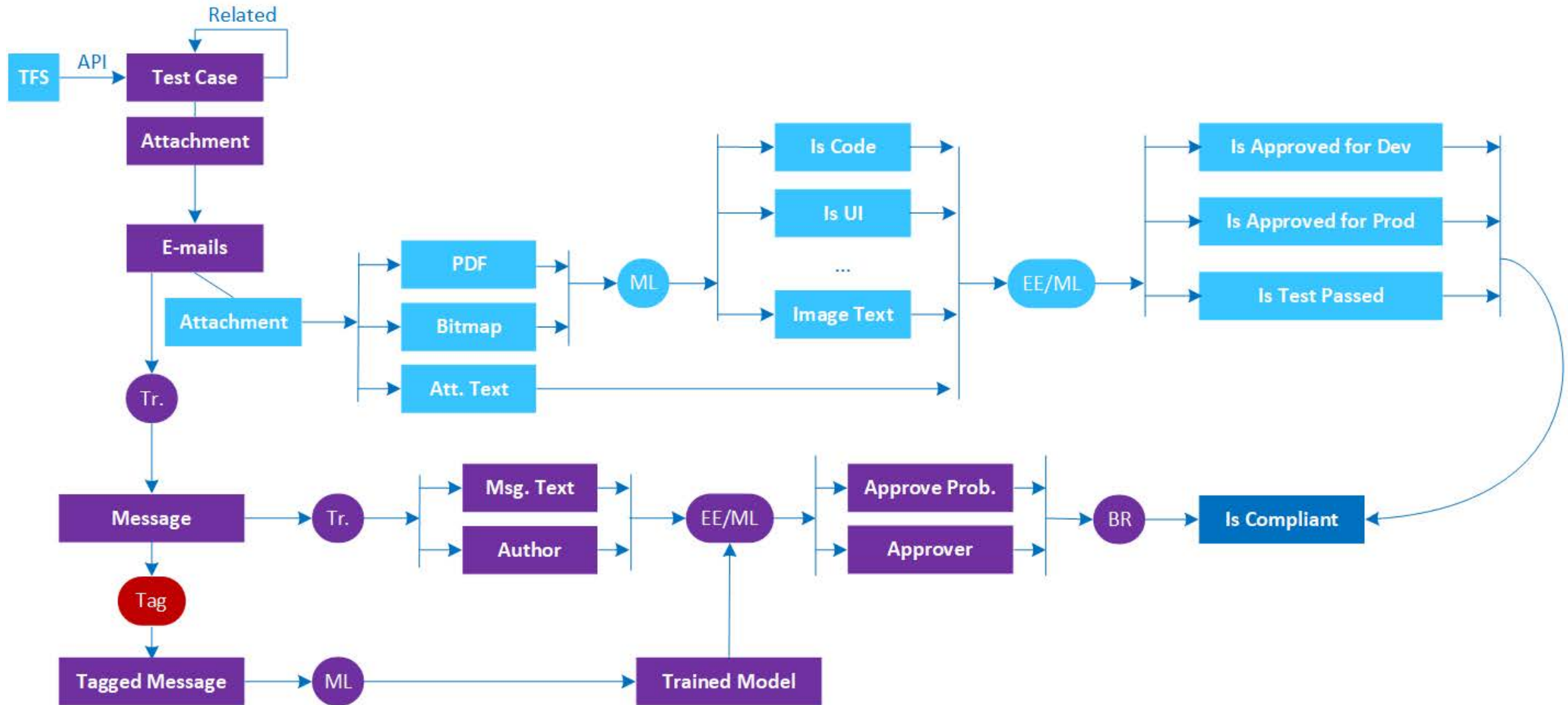


TestCaseNumber	DeployedBy	Approver	ApprovalProb	isCompliant	Reason
21	Prakash Muniyappa <R1-CORE\PMuniyap>	smith, Holy P	1.00	TRUE	Change management test is passed
22	Challa, Ravishankar <R1-CORE\rchalla>	smith, Holy P	1.00	TRUE	Change management test is passed
23	Rajendran, Pradeep <R1-CORE\PaRajend>	Johnson, Hoang bruce	1.00	TRUE	Change management test is passed
24	Devanagi, Parashuram <R1-CORE\PDevanag>	Johnson, Hoang bruce	1.00	TRUE	Change management test is passed
25	Anil Gopal Saraswathi <R1-CORE\AGopalsa>	smith, Holy P	0.01	FALSE	Positive intent of approval is not detected
26	Devanagi, Parashuram <R1-CORE\PDevanag>	lee, Mike B.	1.00	TRUE	Change management test is passed
27	Brahmaji, Gopalam <R1-CORE\gbrahmaj>	smith, Holy P	0.00	FALSE	Positive intent of approval is not detected
28	lee, Mike B.	lee, Mike B.	1.00	FALSE	Deployed and approved by the same person
29	Devanagi, Parashuram <R1-CORE\PDevanag>	lee, Mike B.	0.00	FALSE	Positive intent of approval is not detected
51	lee, Mike B.	lee, Mike B.	0.00	FALSE	Deployed and approved by the same person
54	Smith, Holy	smith, Holy P	1.00	TRUE	Change management test is passed
55	Potturi, Chandrasekhara <R1-CORE\CPOTTURI>	smith, Holy P	1.00	TRUE	Change management test is passed
56	Johnson, Hoang bruce	Johnson, Hoang bruce	1.00	FALSE	Deployed and approved by the same person
57	Prakash Muniyappa <R1-CORE\PMuniyap>	Johnson, Hoang bruce	1.00	TRUE	Change management test is passed
58	Yeddula, Ananda <R1-CORE\ayedddula>	smith, Holy P	0.01	FALSE	Positive intent of approval is not detected
59	Rajendran, Pradeep <R1-CORE\PaRajend>	lee, Mike B.	1.00	TRUE	Change management test is passed
60	Rajendran, Senthilkumaran <R1-CORE\srajendr>	smith, Holy P	0.00	FALSE	Positive intent of approval is not detected
81	Rajendran, Pradeep <R1-CORE\PaRajend>	smith, Holy P	1.00	TRUE	Change management test is passed
82	Bhowmik, Subhas <R1-CORE\sshowmik>	smith, Holy P	1.00	TRUE	Change management test is passed
83	Rajendran, Pradeep <R1-CORE\PaRajend>	Johnson, Hoang bruce	0.94	TRUE	Change management test is passed
84	Prakash Muniyappa <R1-CORE\PMuniyap>	Johnson, Hoang bruce	0.08	FALSE	Positive intent of approval is not detected
86	Rajendran, Pradeep <R1-CORE\PaRajend>	smith, Holy P	1.00	TRUE	Change management test is passed
87	Rajendran, Pradeep <R1-CORE\PaRajend>	lee, Mike B.	0.99	TRUE	Change management test is passed
88	Challa, Ravishankar <R1-CORE\rchalla>	lee, Mike B.	0.87	TRUE	Change management test is passed
90	Prakash Muniyappa <R1-CORE\PMuniyap>	smith, Holy P	1.00	TRUE	Change management test is passed

End-to-end workflow, created during the PoC



Broader Workflow and Current Status



Significant opportunities

for machine learning in change management

Compliance area	Test	Industry Proven Technology
Analyze testing of the change	Have users approved the test?	
	Have users provided feedback on test	
	Is development in-line with initial request	Text mining to detect
Analyze the IT development of the change		
	Is development in-line with a testing	

Conclusion

- Based on current dataset and created models, the model built using Microsoft R Server neural network is more accurate.
- Models should be re-evaluated on a bigger real dataset to choose the best one.
- In the train dataset we need equal distribution of test cases for different classes.
- To improve the model it's needed to analyze (and potentially retag) records with false positives and false negatives.
-Partner...Commitments...

Appendixes

Transform e-mails to messages

TestCase	RequestedBy	DeploymentType	DeployedBy	EmailApprovals	Step1	Step2	Step4
5	Dhandapani, Balaji <ut1-COutzu\	Non-Prod	BGHahmaji, Gopalam <GH1-COGHE\gb	From: smith, Holy P Sent: Wednesday, August 16, 2017 12:44 PM To: lee, Mike B. <Mike.lee@aig.com> Subject: RE: Create new oracle data based for data science learning schema Holy Smith DB Manager – IT Corporate Systems Global - IT Tel +1 203 465 3456 Cell +1 203 893 111 From: lee, Mike B. Sent: Wednesday, August 16, 2017 11:50 AM To: smith, Holy P <Holy.smith@aig.com> Subject: RE: Create new oracle data based for data science learning schema	fail	Pass	
7	smith, Holy P	Prod	uhevanagi, PaGHashuGHam <GH1-COG	From: smith, Holy P Sent: Wednesday, August 16, 2017	Fail	Pass	
9	Spady, Gail L <ut1-COutzu\gaspa	Prod	uheivasigamani, GHamgesh <GH1-COG	From: lee, Mike B. Sent: Wednesday, August 16, 2017	fail	Pass	
10	Aiswautya AG	Prod	GHajaGHajan SunuhaGHamuGHthy <GH1-COGHE\GHaSunuhaGH		Fail	fail	

```

1 library("readxl")
2 library(dplyr)
3 library(tidyr)
4 library(xlsx)
5
6 setwd("C:\\Users\\ivank\\Microsoft\\AIG & Microsoft - Documents\\Data")
7 TestCases <- read_excel("test data- preliminary round-to MS-v4.xlsx")
8
9 s <- strsplit (TestCases$EmailApprovals, split = "From: ")
10
11 emails <- data.frame (TestCaseNumber = rep(TestCases$TestCaseNumber,
12                                     supply(s, length)),
13                       Message = unlist(s))
14
15 messages <- (((emails %>% separate (Message, c("From", "Message"), "\r\nSent: ")
16 ) %>% separate (Message, c("Sent", "Message"), "\r\nTo: ")
17 ) %>% separate (Message, c("To", "Message"), "\r\nSubject: ")
18 )
19
20 messages <- messages[complete.cases(messages), ]
21
22 write.xlsx(messages, "messages-v4.xlsx")

```

RowID	TestCase	From	Sent To	Message	Intent	isApproval
39	14	lee, Mike B	Wed Joh	Finance Asset- Import FX rates Hey give me your approval. Can't implement	Request	not Approval
41	15	smith, Hol	Wed lee	RE: Create new oracle data based for data science	None	not Approval
42	15	lee, Mike B	Wed sm	RE: Create new oracle data based for data science	Request	not Approval
43	15	lee, Mike B	Wed sm	Create new oracle data based for data science	Request	not Approval
45	16	lee, Mike B	Wed Joh	Move schema objects from abc to NBC Approved But I have never had to approve a ticket like this before- is	Approval	Approval
46	16	lee, Mike B	Wed Joh	Move schema objects from abc to NBC Schema is ok	Request	not Approval

Detect Request/Approve/No-intent probability

Microsoft R (v.9.1)

```
20 #save sentiment from the pre-trained model based on "Message" as a feature
21 trainXdf <- RxXdfData("E:/WorkSpace/AIG_POC/train.xdf")
22 testXdf <- RxXdfData("E:/WorkSpace/AIG_POC/test.xdf")
23 rxFeaturize(data=trainData, outData = trainXdf,
24             mlTransforms = list(getSentiment(vars = c(preSentiment="Message"))),
25             overwrite = TRUE, randomSeed = 1)
26 )
27
28 rxFeaturize(data=testData, outData = testXdf,
29             mlTransforms = list(getSentiment(vars = c(preSentiment="Message"))),
30             overwrite = TRUE, randomSeed = 1)
31 )
32
33 #Define model formula and ml transformation
34 modelFormula <- Intent ~ MessageTrain + preSentiment
35 ft <- list(featureizeText(vars=c(MessageTrain="Message"), language = "English",
36                               stopwordsRemover = stopwordsDefault(),
37                               case = "lower", keepDiacritics = FALSE, keepPunctuations = FALSE,
38                               keepNumbers = TRUE, dictionary = NULL,
39                               wordFeatureExtractor = ngramCount(), charFeatureExtractor = NULL,
40                               vectorNormalizer = "l2"))
41
42 columnNames <- rxGetVarNames(testData)
43 variables_to_remove <- c("RowID", "X")
44 columnNames <- columnNames[!(columnNames %in% variables_to_remove)]
45
46 #train logistic regression model
47 model_logistic <- rxLogisticRegression(modelFormula, trainXdf, type='multiclass', mlTransforms = ft)
48
49 #get the accuracy of logistic regression model on training and testing data
50 score_logistic_train <- rxPredict(model_logistic, trainXdf, extraVarsToWrite = "Intent")
51 score_logistic_test <- rxPredict(model_logistic, testXdf, extraVarsToWrite = columnNames)
52 result_logistic_train <- rxCrossTabs(~Intent:PredictedLabel, score_logistic_train, returnXtabs = TRUE)
53 accuracy_logistic_train <- sum(diag(result_logistic_train))/sum(result_logistic_train)
54 result_logistic_test <- rxCrossTabs(~Intent:PredictedLabel, score_logistic_test, returnXtabs = TRUE)
55 accuracy_logistic_test <- sum(diag(result_logistic_test))/sum(result_logistic_test)
56
57 #Write test results of logisitc regression model into a cvs file
58 write.csv(score_logistic_test, file = "E:/WorkSpace/AIG_POC/testResults_logistic.csv", row.names=FALSE)
59
60
61 #train neural network model
62 model_nn <- rxNeuralNet(modelFormula, trainXdf, type = 'multiclass', mlTransforms = ft, randomSeed = 1,
63                         optimizer = adaDeltaSgd(), numIterations = 60)
64
65 #Get the accuracy of neural network model on training and testing data
66 score_nn_train <- rxPredict(model_nn, trainXdf, extraVarsToWrite = "Intent")
67 score_nn_test <- rxPredict(model_nn, testXdf, extraVarsToWrite = columnNames)
68 result_nn_train <- rxCrossTabs(~Intent:PredictedLabel, score_nn_train, returnXtabs = TRUE)
69 accuracy_nn_train <- sum(diag(result_nn_train))/sum(result_nn_train)
70 result_nn_test <- rxCrossTabs(~Intent:PredictedLabel, score_nn_test, returnXtabs = TRUE)
```

TestCase	From	Sent	To	Intent	Message	Predicted	Score	Score.Approval	Score.D	Score.No Intent
2	lee, Mike	{Wednesd	smith, Hol	Request	I complete	Request	0.827	0.07752908	0.0849	0.0108
3	lee, Mike	{Wednesd	Johnson, I	Request	Ready to r	Request	0.821	0.05963948	0.1014	0.0181
6	lee, Mike	{Wednesd	Johnson, I	Request	Schema is	Request	0.502	0.192264184	0.106	0.1995
15	lee, Mike	{Wednesd	smith, Hol	Request	Hate to be	Request	0.895	0.022037052	0.0648	0.0183
22	smith, Hol	Wednesd	lee, Mike	{Approval	Approved	Approval	0.042	0.911256135	0.034	0.0132
23	lee, Mike	{Wednesd	Johnson, I	Request	Ready to r	Request	0.821	0.05963948	0.1014	0.0181
27	smith, Hol	Wednesd	lee, Mike	{Disapprov	Holy COW	Disapprov	0.322	0.224204898	0.4175	0.0358
34	smith, Hol	Wednesd	lee, Mike	{Approval	Approved	Approval	0.042	0.911256135	0.034	0.0132
35	lee, Mike	{Wednesd	Johnson, I	Request	Ready to r	Request	0.821	0.05963948	0.1014	0.0181
39	lee, Mike	{Wednesd	smith, Hol	Request	FX : FX Loa	Request	0.874	0.044565924	0.0601	0.0213

Neural Networks:

```
> result_nn_train
```

Intent	PredictedLabel	Request	Approval	Disapproval	No Intent
Request		56	0	0	0
Approval		0	50	0	0
Disapproval		0	0	39	0
No Intent		3	0	0	2

```
> result_nn_test
```

Intent	PredictedLabel	Request	Approval	Disapproval	No Intent
Request		12	0	0	0
Approval		0	14	1	0
Disapproval		0	0	11	0
No Intent		0	0	0	0

```
> accuracy_nn_train
```

```
[1] 0.98
```

```
> accuracy_nn_test
```

```
[1] 0.9736842
```

Logistic Regression:

```
> result_logistic_train
```

Intent	PredictedLabel	Request	Approval	Disapproval	No Intent
Request		54	0	2	0
Approval		0	48	2	0
Disapproval		0	1	38	0
No Intent		3	2	0	0

```
> result_logistic_test
```

Intent	PredictedLabel	Request	Approval	Disapproval	No Intent
Request		12	0	0	0
Approval		0	14	1	0
Disapproval		0	0	11	0
No Intent		0	0	0	0

```
> accuracy_logistic_train
```

```
[1] 0.9333333
```

```
> accuracy_logistic_test
```

```
[1] 0.9736842
```

Transform prediction to detect Approver

```

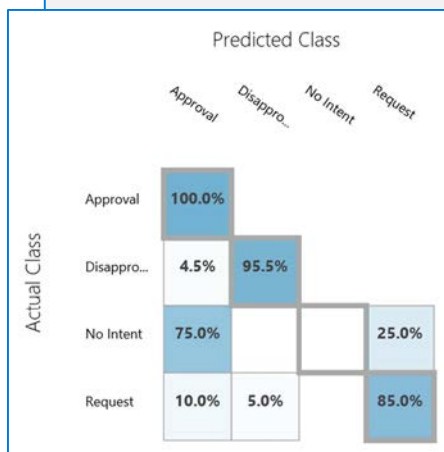
1 # This script takes joins tickets file with emails of Approvers detected by
2 library("readxl")
3 library(dplyr)
4 library(tidyr)
5 library(xlsx)
6 #library(sqldf)
7
8 setwd("C:\\Users\\ivank\\Microsoft\\AIG & Microsoft - Documents\\Data")
9
10 # Read initial file
11 TestCases <- read_excel("test data- preliminary round-to MS-v4.xlsx")
12
13 # Read file with scored labels detected by LUIS
14 Scored <- read_excel("Sonia - Scored 3.xlsx")
15
16 names(Scored)[names(Scored)=="Scored.Probabilities.for.Class.Approval"] <- "ApprovalProb"
17 names(Scored)[names(Scored)=="Scored.Probabilities.for.Class.Disapproval"] <- "DisapprovalProb"
18 names(Scored)[names(Scored)=="Scored.Probabilities.for.Class.No.Intent"] <- "NoIntentProb"
19 names(Scored)[names(Scored)=="Scored.Probabilities.for.Class.Request"] <- "RequestProb"
20
21 # In each Ticket rank Approver by probability.
22 Scored <- transform(Scored, ApprovalRank =
23   ave(ApprovalProb, TestCaseNumber,
24     FUN = function(x) rank(-x, ties.method = "first")))
25
26 # Join TestCases and approver candidates
27 TestCasesApprovers <- merge (TestCases, filter (Scored, ApprovalRank == 1))
28
29 #write.xlsx(TestCasesApprovers, "tickets with approvers-v4.xlsx")
30 #saveWorkbook(TestCasesApprovers, "tickets with approvers-v4.xlsx")
31
32 write.csv(select(TestCasesApprovers, TestCaseNumber, From, ApprovalProb), file = "tickets with approvers-v4.csv")
33

```

Key Phr	RowID	TestCase	From	Se To	Intent	Me: Col	Prej	Nur	NGr	Prej	Sco	Sco	Sco	Sco	Sco	Scored Labels
fx fx loa	105	39	lee, Mik	W sn	Request	FX : FX L	fx fx	0	[]	0	0	0	0	0	1	Request
produc	2	1	smith, H	W le	Approval	Exceller	exco	0	[]	0	1	0	0	0	0	Approval
ok	15	5	lee, Mik	W sn	Request	Hate to	hate	0	[]	0	0	0	0	0	1	Request
release	65	24	Johnson	W le	Approval	Approva	app	1	["a	1	1	0	0	0	0	Approval
ok	30	11	lee, Mik	W sn	Request	Hey tes	hey	0	[]	0	0	0	0	0	1	Request
comple	230	91	lee, Mik	W sn	Request	I compl	com	0	[]	0	0	0	0	0	1	Request
sun		141			Disapproval	Can't a	app	1	["a	1	0	1	0	0	0	Disapproval
schema	19	6	lee, Mik	W Jo	Request	Schema	sche	0	[]	0	0	0	0	0	1	Request
good p	251	102	Johnson	W le	Approval	Wow -	two	1	["a	1	1	0	0	0	0	Approval
approv	39	14	lee, Mik	W Jo	Request	Hey giv	hey	0	[]	0	0	0	0	0	1	Request
s email	91	35	Johnson	W le	Approval	Review	revi	1	["a	1	1	0	0	0	0	Approval
ok	154	58	lee, Mik	W sn	Request	Hey tes	hey	0	[]	0	0	0	0	0	1	Request

TestCaseNumber	From	ApprovalProb
1	smith, Holy P	0.82
2	smith, Holy P	0.86
4	Johnson, Hoang bruce	1.00
5	smith, Holy P	0.33
6	lee, Mike B.	0.07
8	lee, Mike B.	0.92
9	lee, Mike B.	0.65
11	lee, Mike B.	0.00

Azure ML



Key Phr	RowID	TestCase	From	Se TcIntent	Me:ColiPrej	Nur NGrPrej	Sco	Sco	Sco	Sco	Scored	Labels
fx fx loi	105	39	lee,	Mil W	sn Request	FX : FX L fx fi	0 []	0	0	0	0	1 Request
produc	2	1	smith,	I W	ler Approval	Exceller exci	0 []	0	1	0	0	0 Approval
ok	15	5	lee,	Mil W	sn Request	Hate to hatc	0 []	0	0	0	0	1 Request
release	65	24	Johnso	W	ler Approval	Approvaapp	1 "1"af	1	1	0	0	0 Approval
ok	30	11	lee,	Mil W	sn Request	Hey testhey	0 []	0	0	0	0	1 Request
comple	230	91	lee,	Mil W	sn Request	I complcom	0 []	0	0	0	0	1 Request
sun		141			Disapproval	Can't aapp	1 "1"af	1	0	1	0	0 Disapproval
schemz	19	6	lee,	Mil W	Jo Request	Schema schi	0 []	0	0	0	0	1 Request
good p	251	102	Johnso	W	ler Approval	Wow - twoc	1 "1"af	1	1	0	0	0 Approval
approv	39	14	lee,	Mil W	Jo Request	Hey givhey	0 []	0	0	0	0	1 Request
s email	91	35	Johnso	W	ler Approval	Reviewrevi	1 "1"af	1	1	0	0	0 Approval
ok	154	58	lee,	Mil W	sn Request	Hey testhey	0 []	0	0	0	0	1 Request



Detect Request/Approve/No-intent probability

LUIS

Approval

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (9) Entities in use (6) Suggested utterances

Type a new utterance & press Enter ...

Save Discard Delete Reassign Intent

Labels view (Ctrl+E): Entities

Search in utterances ...

Utterance text	Predicted intent
<input type="checkbox"/> [\$subject] hey , i reviewed your description and approve it . please move to production . regards , [\$person] manager [\$mail]	0.29 Request 0.21 Approval
<input type="checkbox"/> [\$subject] the beany babies say that is excellent . all master tables are rock . please move to production . this is aproved . best , [\$person] [\$department] - [\$department] cell [\$phonenumber]	0.82 Approval
<input type="checkbox"/> [\$subject] this looks good - lets go with the implementation thanks mike [\$person] [\$department] [\$address] office : [\$phonenumber] i cell [\$phonenumber] [\$mail]	0.52 Approval
<input type="checkbox"/> [\$subject] approved but i have never had to approve a ticket like this before - is this new ? the email that elaine sent was to move to production if successful . regards [\$person] , disa , crisc , cpa , ctp , pmp [\$role] [\$department] [\$address] office : [\$phonenumber] i email : [\$mail]	0.94 Approval

Disapproval

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (5) Entities in use (5) Suggested utterances

Type a new utterance & press Enter ...

Save Discard Delete Reassign Intent

Labels view (Ctrl+E): Entities

Search in utterances ...

Utterance text	Predicted intent
<input type="checkbox"/> [\$subject] i reviewed requirements and cannot approve because the quieue cannot be placed to unprotected area . [\$person] , [\$department] [\$mail]	0.27 None 0.08 Disapproval
<input type="checkbox"/> [\$subject] i disapproved on behalf of the almighty . [\$person] [\$role] - [\$department] tel [\$phonenumber] i cell + 1 203 893 111	0.54 Disapproval
<input type="checkbox"/> [\$subject] beware of the dark side of the force . the dark side did not approved this change . [\$person] [\$department] tel + 1 203 . 455 . 8963	0.53 Disapproval
<input type="checkbox"/> [\$subject] the force did not approve this . [\$person] [\$role] - [\$department] i global - it tel [\$phonenumber] i cell + 1 203 893 111	0.4 Disapproval

Entities

Manage a list of entities in

Entities list Labels

Add custom entity A

Entity Name

address

department

mail

person

phonenumber

role

subject

system

None

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (7) Entities in use (3) Suggested utterances

Type a new utterance & press Enter ...

Save Discard Delete Reassign Intent

Labels view (Ctrl+E): Entities

Search in utterances ...

Utterance text	Predicted intent
<input type="checkbox"/> [\$subject] i am still analyzing requirements . probably will need more details . john	0.64 None
<input type="checkbox"/> [\$subject] still working on this	0.74 None
<input type="checkbox"/> [\$subject] i plan to implement this next week . will keep you informed . regards , john . developer .	0.52 None

Request

Here you are in full control of this intent; you can manage its utterances, used entities and suggested utterances ... [Learn more](#)

Utterances (7) Entities in use (3) Suggested utterances

Type a new utterance & press Enter ...

Save Discard Delete Reassign Intent

Labels view (Ctrl+E): Entities

Search in utterances ...

Utterance text	Predicted intent
<input type="checkbox"/> [\$subject] take a look at attached testing results for the load issues . if its ok need you [\$person] to implement . [\$person]	0.4 Request
<input type="checkbox"/> [\$subject] ready to implement . need a confirmation from you regards , ivan .	0.72 Request
<input type="checkbox"/> [\$subject] hi mike , please approve the development of this feature regards , [\$person]	0.69 Request

