

Mohammed
Fawsan
UoP



Roshanth Gardiarachchi
(Dialog)



Sampath Deegalla
UoP

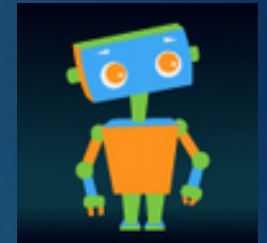
Fraud Detection with Data Mining

IN COLLABORATION WITH
"IDEAMART(DIALOG AXIATA PLC)"

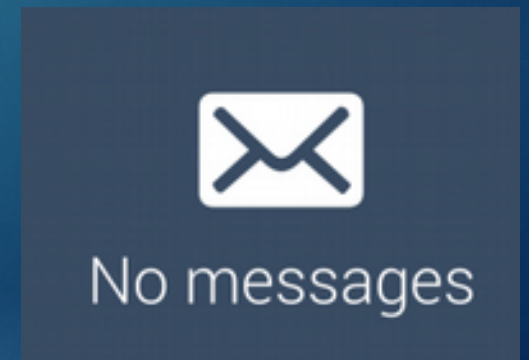
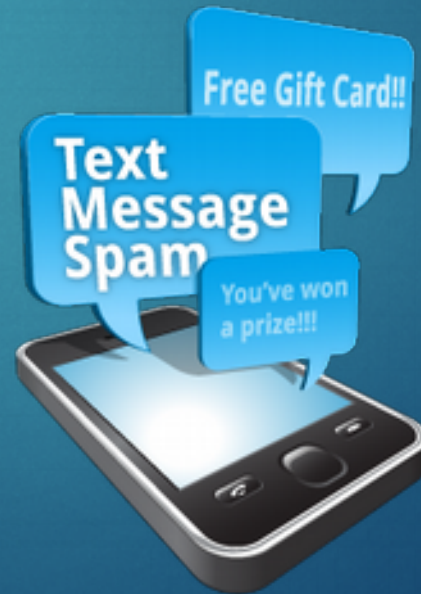
INTRODUCTION

What is Ideamart?

- ▶ **IdeaMart** is a platform presented by Dialog Axiata PLC to developers and content providers to use the Dialog network based features via shared API's and monetize their content/ideas.
- ▶ <http://www.ideamart.lk>
- ▶ <http://www.allapps.lk>



Problems faced By the IdeaMart Community



Hey Fawzan, We want to catch these scams. Shall we monitor apps individually?



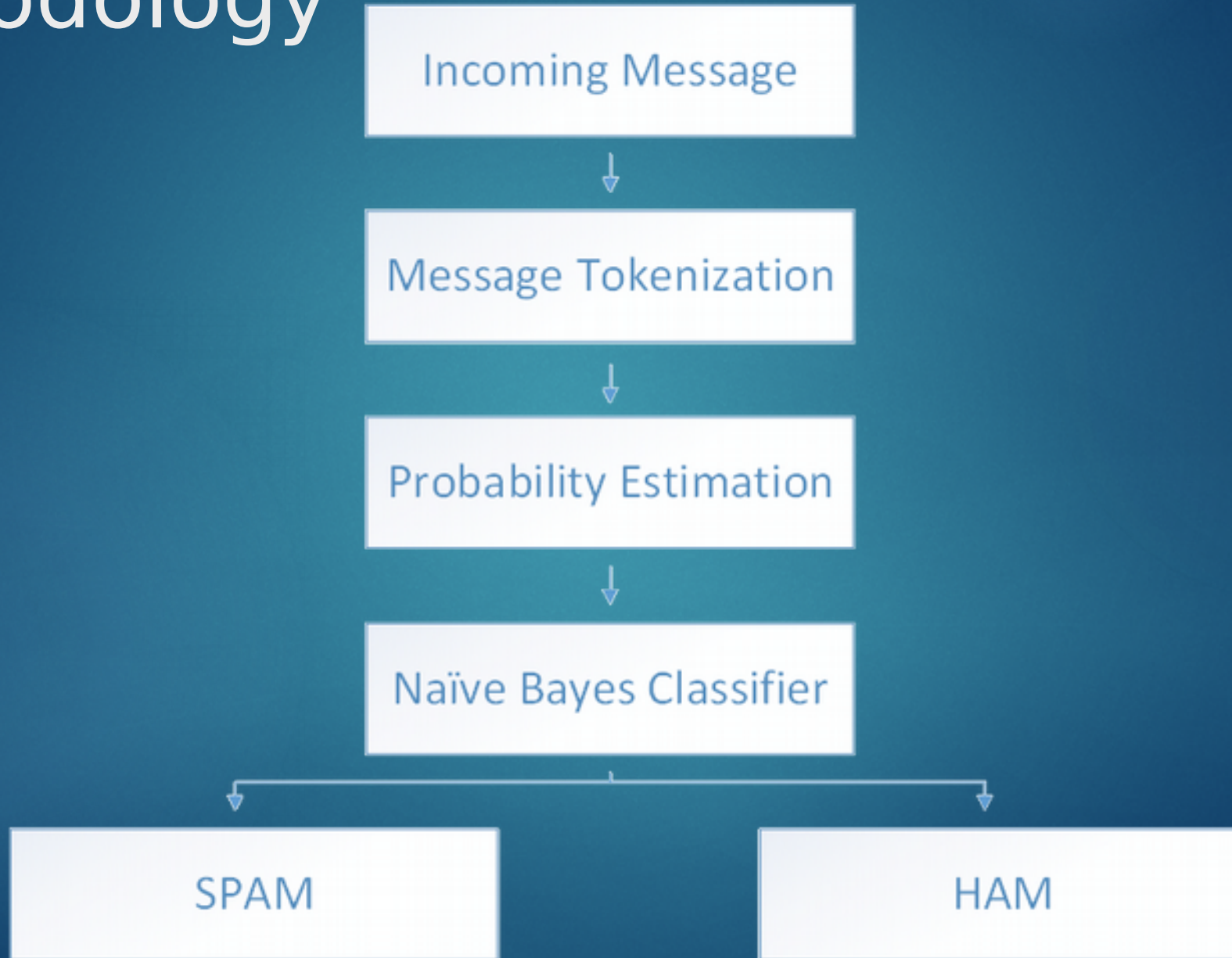
Well.... No, I have a better idea.



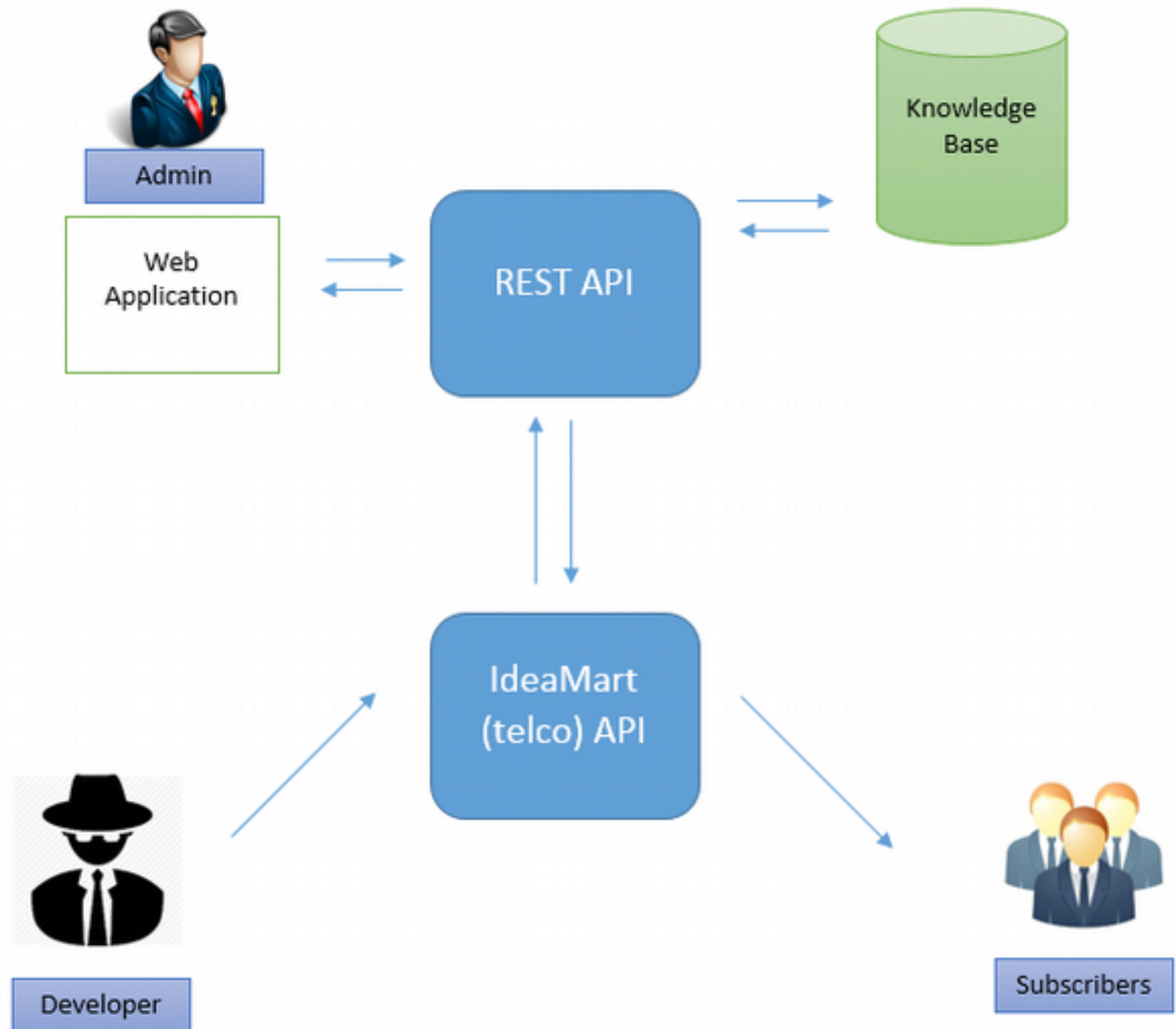
Solutions

- ▶ **Creating an efficient Spam Filter for SMS**
 - ▶ Unlike emails, SMS has very less information. So we are trying to apply the same techniques as emails with modifications.
- ▶ **REST API to integrate the Spam Filter with IdeaMart**
- ▶ **Data Visualization & Statistics**

Methodology



Integration

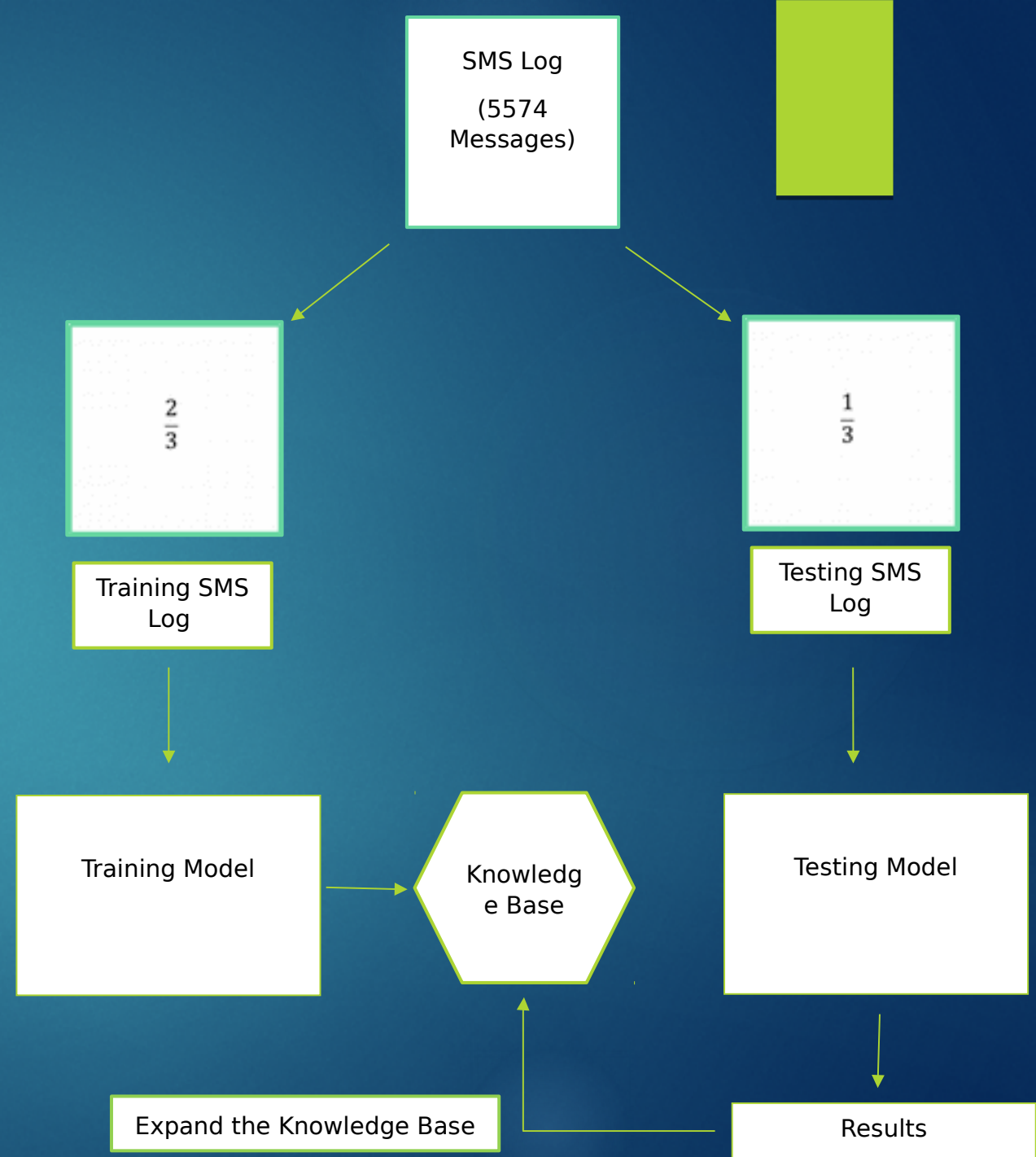


Training & Testing

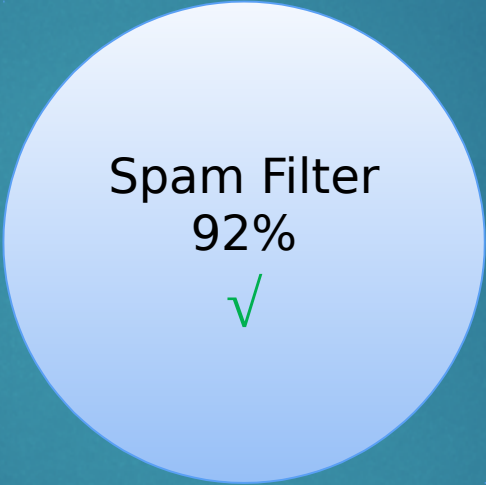
ROUND 1		Test Messages	
		SPAM	HAM
Tagged Messages	SPAM	99%	1%
	HAM	9%	91%

ROUND 2		Test Messages	
		SPAM	HAM
Tagged Messages	SPAM	94%	6%
	HAM	9%	91%

ROUND 3		Test Messages	
		SPAM	HAM
Tagged Messages	SPAM	94%	6%
	HAM	9%	91%




Conclusion & Future Work



Spam Filter
92%
✓

Conclusion & Future Work



Spam Filter
92%
✓

Rest API
✓

Conclusion & Future Work



Spam Filter
92%



Domain
Knowledge

Combining
Multiple
Messages

Rest API



Data
Visualization



Thank You