

NEWS TRACKER APPLICATION

PROPOSED SOLUTION DOCUMENT

INTRODUCTION

As news is increasingly accessed on smartphones and tablets, the need for personalising news app interactions is apparent. We report a series of three studies addressing key issues in the development of adaptive news app interfaces. We first surveyed users' news reading preferences and behaviours; analysis revealed three primary types of reader. We then implemented and deployed an Android news app that logs users' interactions with the app. We used the logs to train a classifier and showed that it is able to reliably recognise a user according to their reader type. Finally we evaluated alternative, adaptive user interfaces for each reader type. The evaluation demonstrates the differential benefit of the adaptation for different users of the news app and the feasibility of adaptive interfaces for news apps.

NOVELTY OF PROJECT

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WEB app ecosystems are transforming patterns of news consumption. Until quite recently, reading the news was a niche use for smartphones, mostly for when users were 'on the go'; now however, two in every three users of mobile devices in the US regularly access news and as many as one in five read in-depth news articles daily [2]; a similar picture is found in the UK. This growth in mobile news access continues the migration of news consumers to the Internet. Mobile news access perfectly complements the continuously updating, 24-hour nature of digital news services. But if users are now never out of range of the news, they need more than ever for that access to be adaptive and personalised. Personalised news services are already able to help people find news that is relevant to them, to profit or commercial advantage and that copies bear this notice and the full citation on the first page. Copyrights for components of this work owned by others than ACM must be honored. Abstracting with credit is permitted. To copy otherwise, or republish, to post on servers or to

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FEASIBILITY OF CODE

We labeled the three news reader types as ‘Trackers’, ‘Reviewers’ and ‘Dippers’. Tracker: A person who likes to be informed about the latest stories and any updates to stories he or she is following, usually reading the news for up to 10 minutes at a time and several times a day at intervals, for example, when travelling. Due to her limited time she prefers to extract the important bits of a story (i.e. reading by skimming). Reviewer: A person who likes to catch up on the day’s news, preferably at home. He likes an in-depth analysis of the stories he reads and will read at length to fully understand the story (i.e. a detailed reading). He usually reads the news once a day, spending more than 10 minutes to get through all the stories of interest and likes being informed on a variety of topics. Dipper: A person with a casual interest in the news but likes to read news on specific topics such as sport. She always knows what she is looking for so does not spend more than 5 minutes accessing the news. She likes to browse particular sections to find stories and looks for specific facts or pieces of information without reading everything (i.e. reading by scanning).

<i>Reader types</i> <i>Clustering factors</i>	'Trackers'	'Reviewers'	'Dippers'
Frequency	Many times a day	Once a day	Less than once a day
Total daily reading	5-10 min	10+ min	0-5 min
Browsing strategy	Both	Through all sections	Particular section
Reading style	Skimming	Detailed reading	Scanning
Location	Public Transport	Home	Home

Adaptive mobile User Interfaces; ACM Classification Keywords H.5.m.

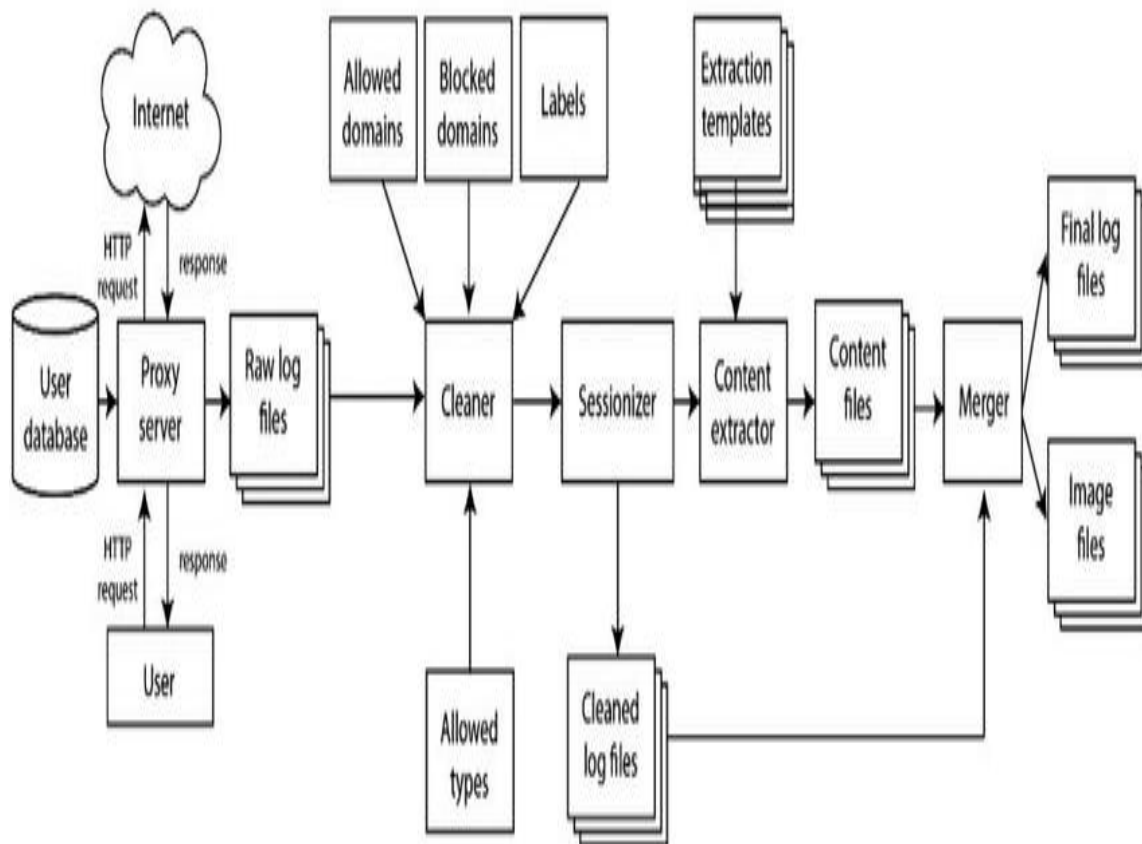
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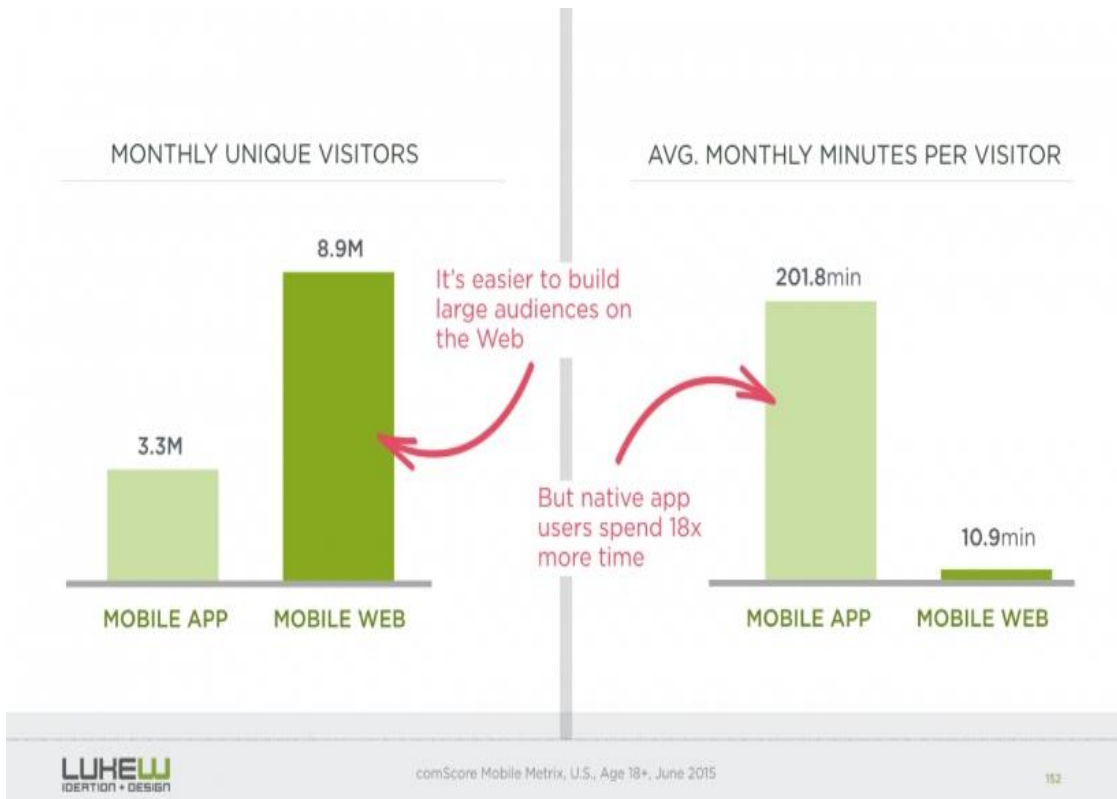
news by aggregation over multiple sources. This adaptivity is achieved through several methods [5] including: news content personalisation by pushing filtered articles predicted to match the user's interests; adaptive news browsing by changing the order of news categories; contextual news access by offering users access to additional information related to the news they are reading; and news aggregation, by automatically identifying main news topics emerging from multiple sources.

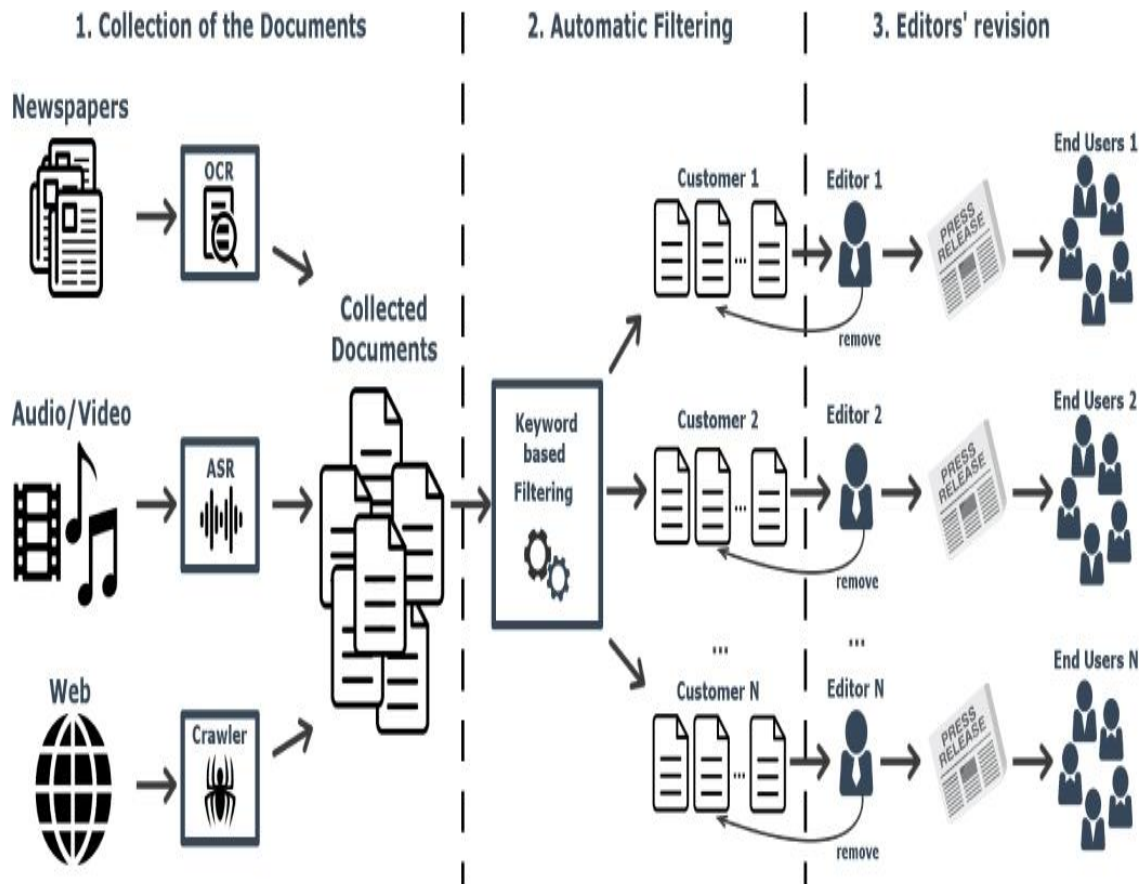
BUSINESS MODEL

data collection	preprocessing		
	1. cleaning	2. content extration	3. merging



SCALABILITY OF SOLUTION





SOCIAL IMPACT

User Interface

It is an old saying “first impression is the last impression”. So the developer should make sure that the application should leave a mark on the users. This is where you need to focus on bringing interactive, visual and architectural designs as well. It means that the content should be distributed in the app such that the screen do not appear crowded with the content.

Filter content

The option of filtering the content based on different category should be incorporated in the app to provide the audience wide taste and sensibilities. So the users can read news that matters to them.

Easy offline access

When a user is not online due to some reason he/she should have to access to the internet. Whenever the user is online the news content is downloaded in the cache memory of the app, this is how a user can access to the content offline.

Social Media integration

This will help the users to share news on various platforms such as Twitter and Facebook. This will not only give an amazing user experience and also will also increase the views

CONCLUSION AND FUTURE WORK

We explored the feasibility of recognising patterns of news reading interactions and evaluated three adaptive interface designs for different news reader types. We show that from their interaction log, a specific user can be recognised as one of three kinds. The reader types emerging from the online survey are well defined and distinct. The evaluation of the three variant interfaces suggests that different news reader types need different user interfaces. We have demonstrated a method for monitoring users' news reading behaviour and inferring news reader type from it. In the future we will further explore the design of adaptive interfaces, in order to be in a position to demonstrate a complete adaptive mobile news framework providing automatic personalisation of news apps.