SMALL MTERACES

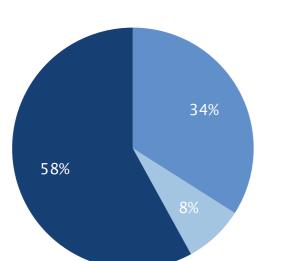
would aid the development of **SMALL SCREEN INTERFACES** particularly focusing on those of TABLETS operating on Android systems.

SAMSUNG

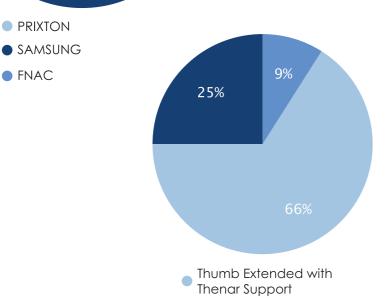
OBJECTIVES

Research existing interfaces and to locate and identify disadvantages, drawbacks and other issues that plagued the existing systems.

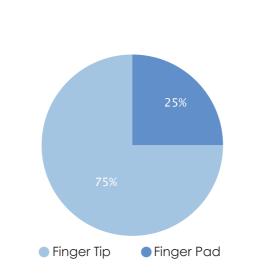
Create a universal guideline that can be used throughout all systems with the goal of eliminating existing flaws that are still present in present systems.



Three PC Tablets were evaluated ranging from a high quality, (Samsung Galaxy) medium range product (FNAC) and a low quality device (Prixton) running on Android, to identify the advantages of each and the flaws that were hidden within the interface.



PRIXTON



MEROVEMENTS

Thumb Wrap Flat Hand

Faster adaptation to the system especially for those who are using a tablet for the first time.

> A simple design and layout that's easy to follow and navigate such as clearly marked

Easy to recognise symbols and icons that every user can relate to and recognise regardless of the language or orientation of the screen.

> Consideration of the use of colour, focusing on users that have difficulty recognising colours such as those with colour blindness.

Hide features that should only be used if necessary as to avoid user error especially among novice users.

> Consideration of the target size in order to minimize the error probability to the user

> > PROTOTYPE

GUIDELINE FOR SMALL INTERFACES

Version 1 May 2013 K Garvin, F. González, R. Nevves, L. Santos, P. Ponsa

HEURISTIC

1.1	There is a list of applications	[5, 0]
1.2	There is a limited number of levels	[5, 3, 0
1.3	The nested-pull-down menus are avoided	[5, 0]

2 NAVIGATION

 The double row of horizontal tabs are avoided There are buttons that allow users move from one page to another There are interaction elements in the bottom area The dynamic organization of the space is a characteristic, considering the lack of space on smaller screens 			
.3 There are interaction elements in the bottom area .4 The dynamic organization of the space is a characteristic, considering the lack of	.1	The double row of horizontal tabs are avoided	[5, 0]
.4 The dynamic organization of the space is a characteristic, considering the lack of	.2	There are buttons that allow users move from one page to another	[5, 0]
, , , , , , , , , , , , , , , , , , , ,	.3	There are interaction elements in the bottom area	[5, 0]
	.4	, , , , , , , , , , , , , , , , , , , ,	[5, 0]

	3 DISTRIBUTION	
	The interface uses a template.	[5, 3, 0]
3.2	The actions are divided into steps inside dialog boxes and appear the steps number to finish	[5, 0]

4 COLOR 1. Absence of non appropriate combinations

4.1	Absence of non appropriate combinations	[5, 3, 0]
4.2	There is a minimum quality of contrast	[5, 3, 0]
4.3	Its clear the relationship among colors and text, aiming good vizualization	[5, 3, 0]

5 TEXT

5.1	The font number was chosen to enable the reading	[5, 0]
5.2	It allows continuous zooming and free selection of the focus point	[5, 3, 0]
	6 ICONS	

6.2 The icons enable the clear visualization	[5, 3, 0]
6.3 The icons are representative	[5, 3, 0]
6.4 The are confirming and acknowledge messages about the user action	[5, 0]
TWOMAL REPORTION	

7 VISUAL PERCEPTION

7.1	The elements which are arranged closely together are perceived as a group or unit.	[5, 0]
7.2	The elements with similar properties are perceived as belonging to a group or unit.	[5, 0]
7.3	The users perception skills could supplement incomplete elements.	[5, 0]
7.4	There is a good form with great degree of simplicity, clarity and regularity	[5, 0]
7.5	The interface presents symmetry	[5, 3, 0]
7.6	It is possible to distinguish the principal content from the background	[5, 0]

7.7 It is possible to draw conclusions based on what were already seen or experienced

8 INTERACTION

- 8.1 In two hand devices: The device has a trackball 8.2 In two hand devices: The device has a mini joystick with two degrees of freedom
- 8.3 The touch screen can distinguish the user actions between a click and a roll-over
- 8.4 The system gives instant feedback to the user 8.5 The system has an appropriate horitzontal natural mapping

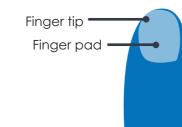
instead of analyze each new component afresh

6.1 The interface has homogeneous icons and symbols

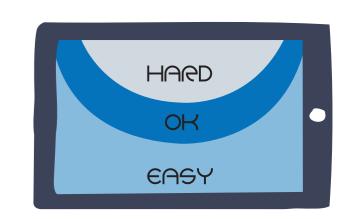
- 8.6 The system an appropriate vertical natural mapping
- 8.7 It is possible to manipulate the screen objects



EGGONOMICS



Create not just an generic interface for small screens but an enjoyable experience that is stress free not just on the mind but also on the body focusing on the eyes and hands of the user.



[5, 3, 0]

[5, 3,

[5, 0]

[5, 0]

[5, 0]

[5, 0]

[5, 3, 0]

[5, 3, 0]

[5, 3, 0]



TIMELINE How far we have come

technologically Pinpoint and predict what's next for these devices develop an interface that's adaptable not only to the current products but the future ones included.

TENDENCY

The size of the standard tablet is getting smaller the size of smartphones appear to be increasing.



the same.



Create an interface that is socially sustainable, by that we mean one that holds up over time and is inclusive to the wider population regardless of age, gender, or physical ability.