

Vodafone – NID Gaming project

User Research

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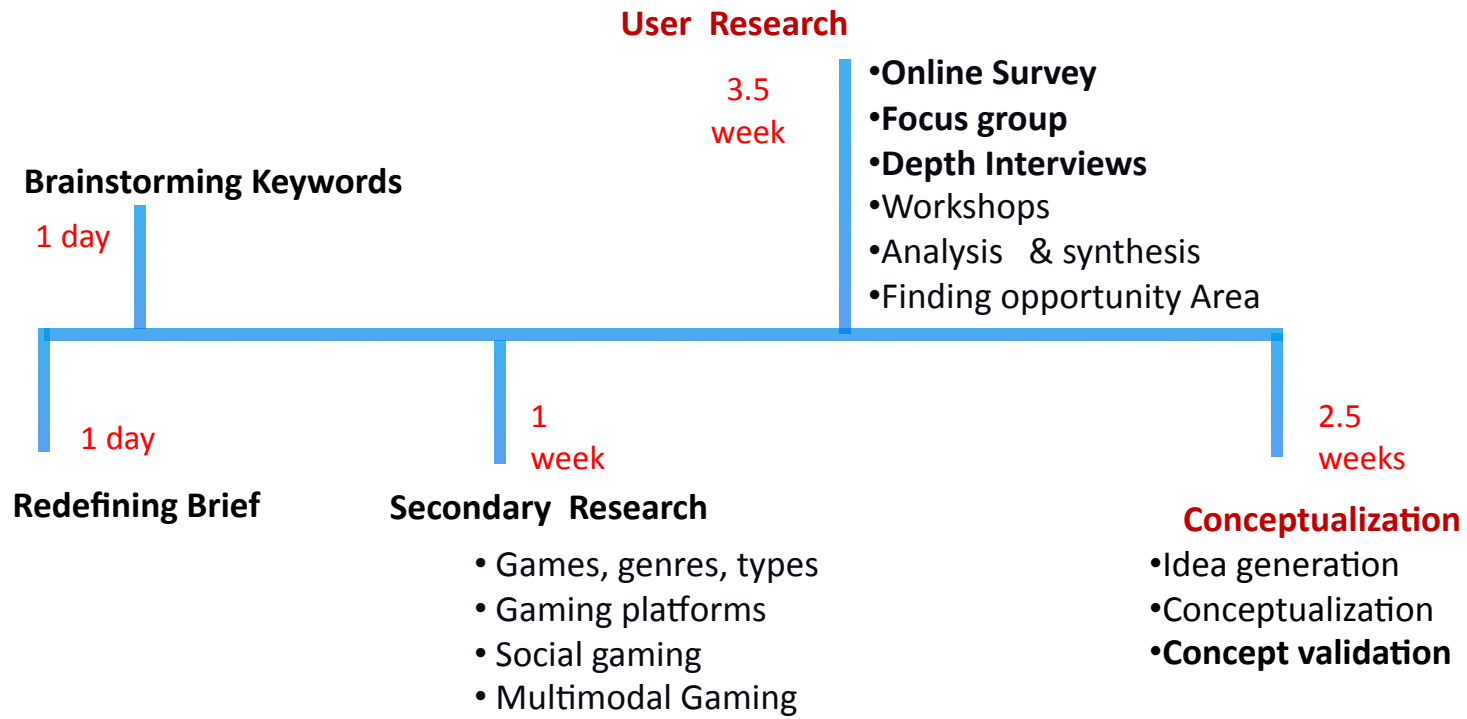
Content

- Brief
- Timeline
- Research
- Analysis
- Opportunity Areas
- Idea Generation
- Concepts

Project Brief

- “Expanding Social Gaming through Multimodal Interaction”.
- Design a mobile social game as inclusive as possible by taking advantage of different interaction modalities.
- The game should be based on actions that take place on a mobile device as well as on a shared, touch based display placed in a public area.
- The game should engage multiple players. Define cross-platform playing contexts (e.g. single user with a single mobile device in a bus playing with / against a user at home playing on the TV screen by using her/his mobile device as a controller).
- The project should encompass some phases of user research, co-design and experience evaluation.

Timeline



Game Design Workshop by Vodafone, Europe

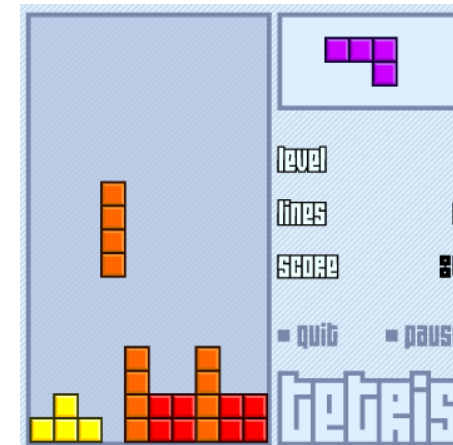
- Videogame Examples and Overview
- Principles in Game Design and User Motivation
- Examples of Modality in Videogames



Jump and Run



Role Playing Game



Puzzle

Secondary Research

Genres

Action game
Action-adventure game
Adventure game
Role-playing game
Simulation game
Sports game
Strategy game

Gaming Platforms

Arcade game
Audio game
Console game
Handheld game
Mobile game
Online game
Personal computer game

Secondary Research

Mobile Gaming

- A mobile game is a video game played on a mobile phone, Smartphone, PDA, handheld computer or portable media player. This does not include games played on handheld video game systems such as Play Station Portable or Nintendo DS.
- Mobile games are played using the technologies present on the device itself.
- The first game that was pre-installed onto a mobile phone was Snake on selected Nokia models in 1997.

Secondary Research

Mobile Gaming Platforms

Mobile games are developed using platforms and technologies such as

Windows Mobile

Palm OS

Symbian OS

Adobe's Flash Lite

DoCoMo's DoJa

Sun's Java ME (formerly branded "Java 2 Micro Edition" or J2ME)

Qualcomm's BREW (Binary Runtime Environment for Wireless)

iPhone OS

Google Android platforms

Other platforms are also available, but not as common

User Research

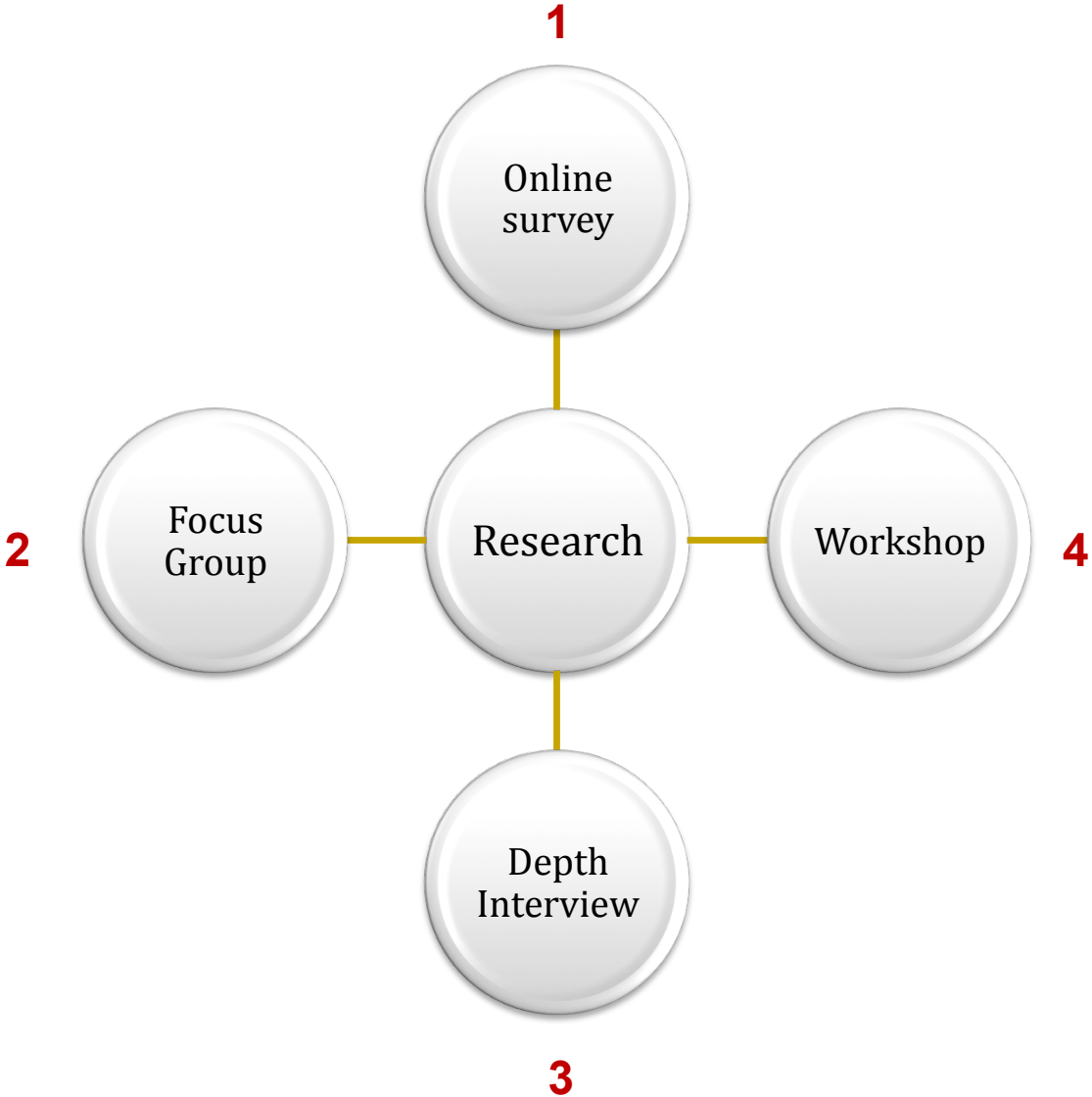
Objective

- To gain insights about **user pattern**, gaming behavior and motivation factors.
- To gain understandings of usage of multimodal and gesture based technology.
- To gain insights about **social gaming** popularity .
- To understand the **motivation pattern for gamers** and **barriers for non-gamers**

Target Audience

- Age Group: 16 to 26 yrs (Male Female both)
- Middle and Upper class

Research Methodology



Online Survey

Objective

- Quick research in the area of gaming
- Finding Platforms, Technology, Types of game
- Purpose of Gaming
- Finding Hours of play, and time & occasions

Methodology : Online questionnaire, was done as a initial parallel research activity with Depth interviews

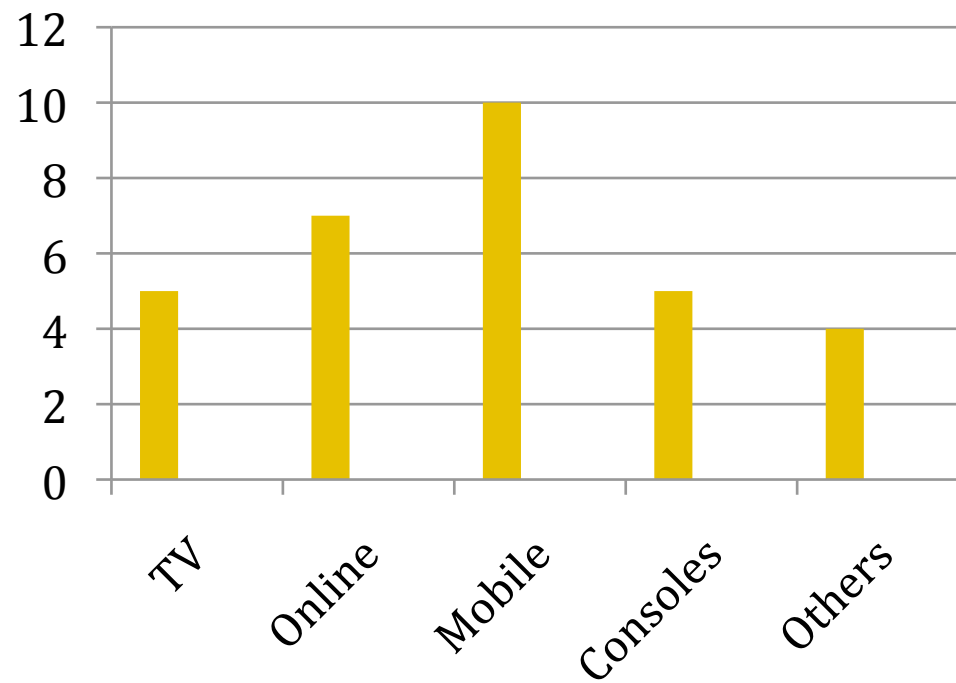
No of people covered: 30

Outcome

- Primary purpose of **gaming is fun**, and **interaction is the secondary** purpose if compared individually
- People may prefer multiplayer / multilingual / cross cultural game over games only focusing any single culture.
- Majority of people like **racing games over fight games**, education games were given least preference
- **Tactile** (button based) interaction is preferred over touch screen

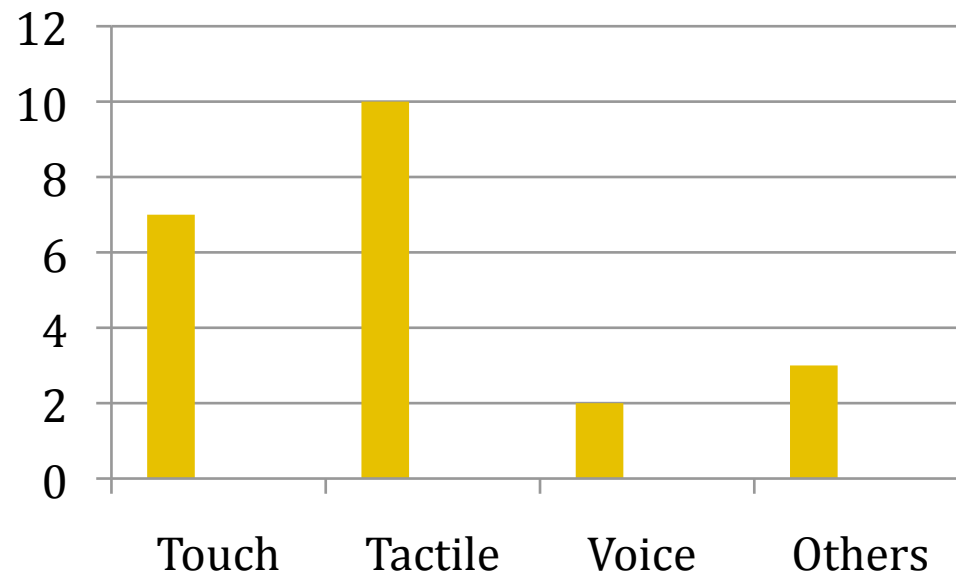
Online Survey

In our online survey maximum people opted for **Mobile** & Online gaming



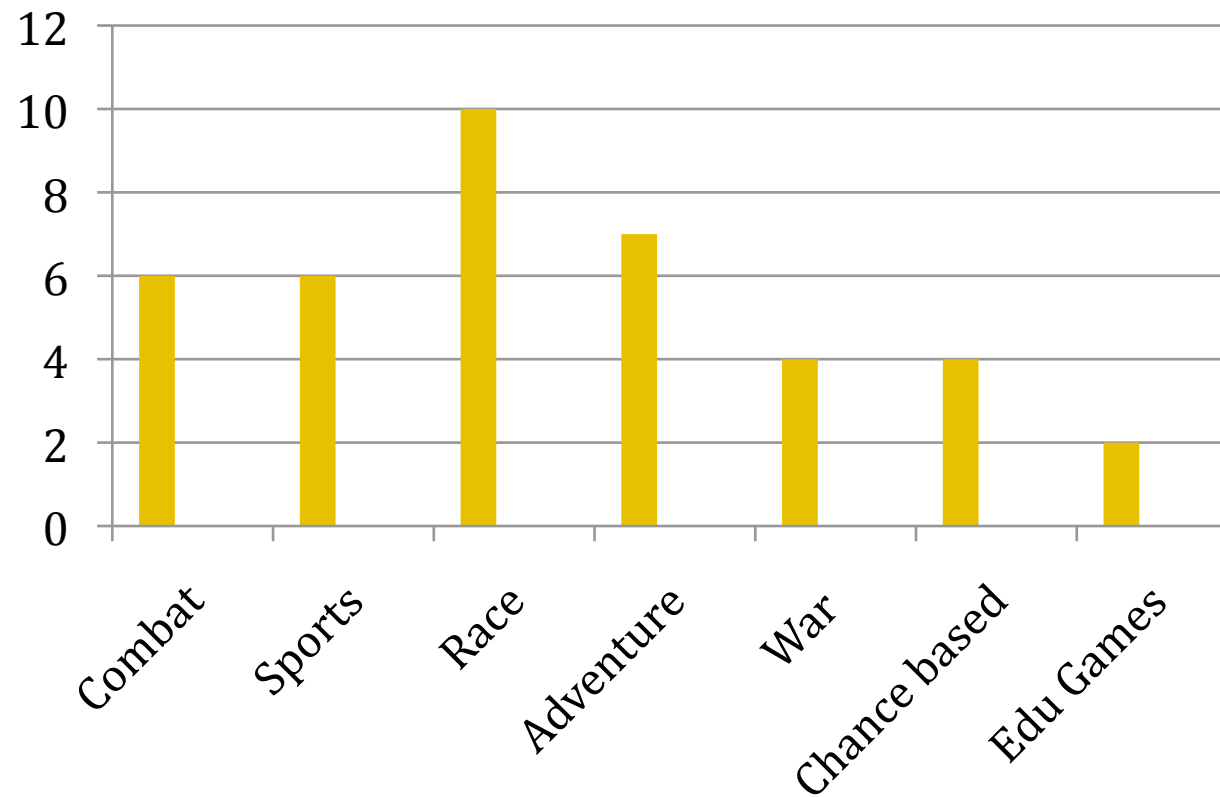
Online Survey

Tactile / Button based technology was favoured over touch for gaming



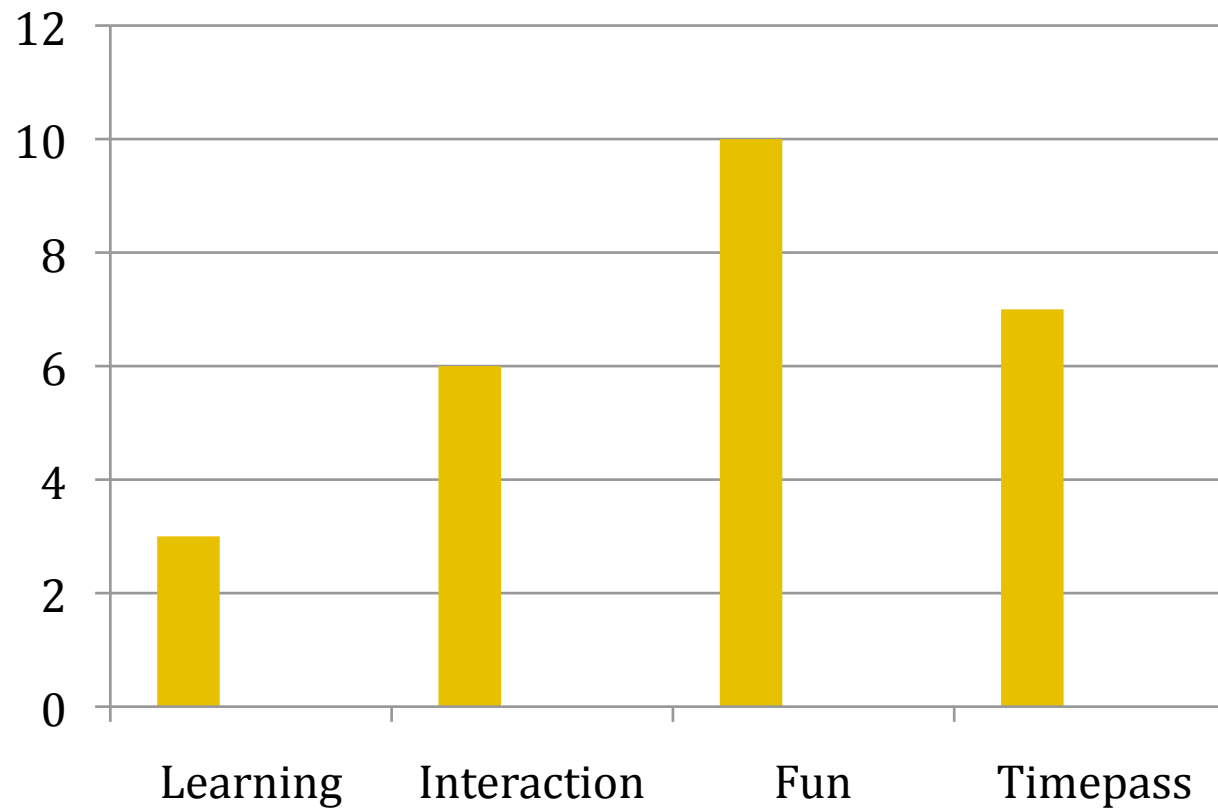
Online Survey

People like **racing & adventure** games over fight and educational gamesg



Online Survey

Basic purpose of Gaming is Fun, and not learning or interaction



Comments by Vodafone



“When” and in what particular context people

There are several “killing time” situations (e.g., commuting, waiting rooms) that are normally quite common in western countries.

It would be good to take a closer look at people's motivation, differences in motivation between ages and genders, so as to understand what engages different people.

Memory games, or cultural quiz, for example, might engage women more than fight games. A game designs could leverage such a fact to engage women in strategic games, just to make an example...

Share with us how you plan to conduct the next research steps e.g., questionnaire, focus of research, target group.

Focus Group



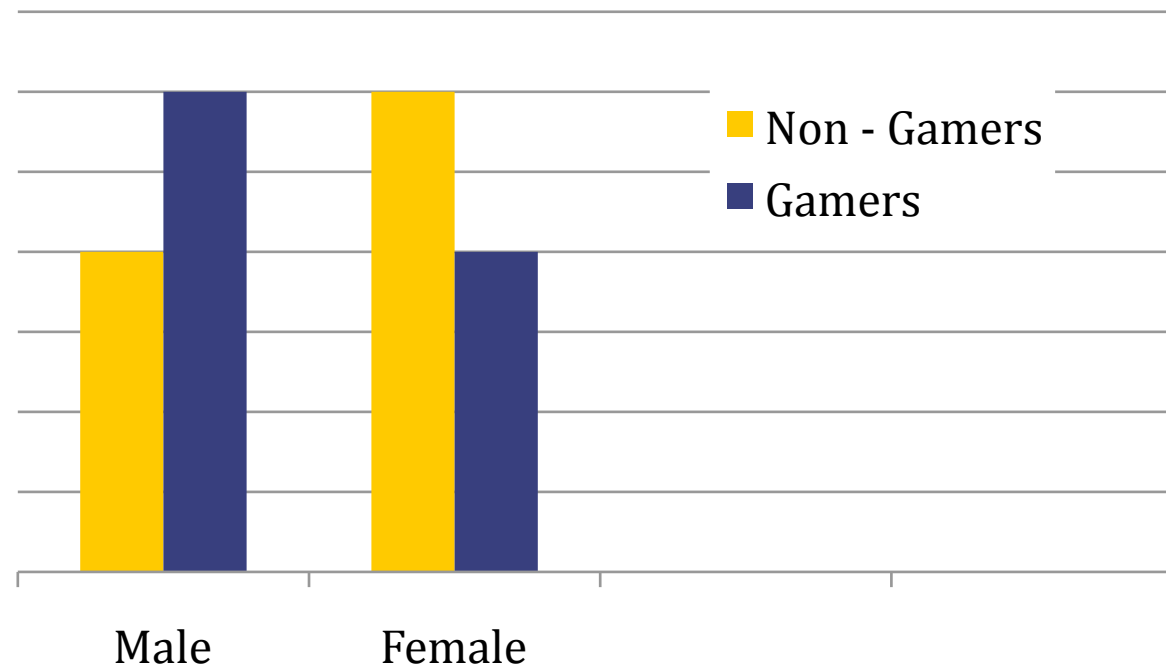
Objective

- To understand difference in gaming context, **choices and degree of involvement** in different kinds of game.
- Gaining insights from **interaction between gamers and non-gamers** (amongst participants)
- Also to understand **motivation and barriers** for gamers and non- gamers, taking in account the choices of game played in past and factors which motivates for **multiplayer and social gaming**.

Focus Group

Group Selection – Male and Female or Gamers and Non- gamers

Although Gender may or may not be the factor for generalizing the gamers and non gamers . It does not differentiate gamers from non gamers

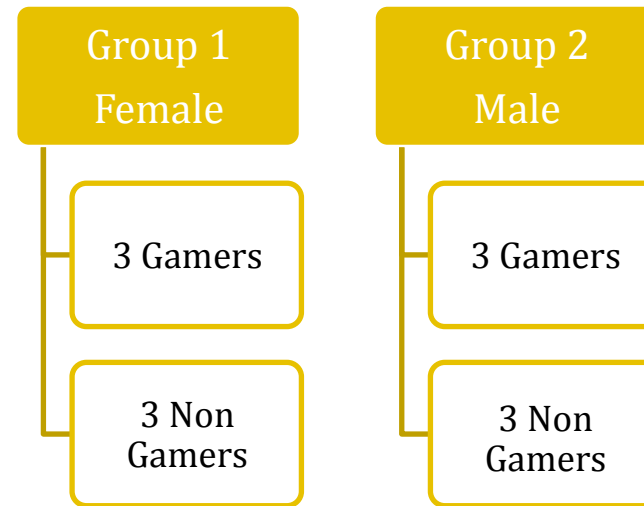


Ref : *Research on 'Gender and Computer Games' by Department of Journalism and Communication Research, Hanover University of Music and Drama*

Focus Group

Group Selection

No of focus group conducted: 4



Defining Gamer and Non Gamers

Gamers: Gaming is an activity which exists in their daily/priority list (taking time out to play) have information about current trends in gaming and take interest in latest games.

Non Gamers: Gaming is not in priority, not involved and doesn't have information about latest games and popular ones, may play at times to burn time.

Focus Group

Methodology

No of focus group conducted: 4

Group Size: 6 Participants, 1 moderator, 1 observer / analyzer

Duration : 40 – 50 minutes

Process: - Introduction of topic

- Raising points of discussion
- Noting key points / Participants viewpoint
- Blank Slips distributed to participants for giving additional note on topic discussed.
- Collection of slips and concluding the discussion



Focus Group

Points of discussion

- Different games played
- What motivates game playing
- What stops to play game
- Context of game play
- To what degree involvement is there
- Future trend in gaming
- What can add to excitement of gaming
- Technology on which games are played



[Video](#)

Comments by Vodafone

*Keep the **questions quite open** and understand what people associate with playing and what motivates or keeps them from doing so.*

*The interview should possibly be a **sort of in depth interview** in which the **technology comes in the end**, because at this stage you mostly want to understand **motivations and barriers**, and in principle technology should just serve as tool*

I agree that some kind of interaction techniques, like touch, might motivate people to play in some cases

In order to achieve your design goal motivate people to play and get back to the game, you need to maximize motivations and/or weaken blocks.



Comments by Vodafone



Some quick comments on the questionnaire:

- I would not limit the gaming platform to mobile, but ask the question about games in general (fixed and mobile)*
- For those that do not play games and for those that play only few times, also ask what would lead them to play/play more (e.g. the motivators) – as an example someone who might think games are not interesting, because they see them merely for ‘burning time’, might be interested if other motivators (such as fitness, etc) would be fulfilled*
- The reason for this is that an interesting game design resulting from this workshop might not just be the emulation of something that already works, but maybe a new idea that would lead people that are currently not interested in video games to play games*

*Kind regards,
Julian*

Depth Interview

Objective

To get understanding of barrier and dislike factors for male & female behind gaming

No of males & female : 11 (6 male & 5 female)

Methodology

Duration of interview: 30-40 minutes

Video recording was done to ensure availability of every point covered.

Outcome of focus group and depth interview was analyzed at the end together after conducting workshop with same audience

Workshop



Objective

- To get insight about the **gaming on public displays** in public area
- Insights about using mobile devices, types of games, **playtime, interaction with devices, physical response while playing, gestures and expressions etc**

No of male : 6 (3 Gamer & 3 Non Gamer)

No of female : 6 (3 Gamer & 3 Non Gamer)

Methodology

- HP Touch Smart PC and active board was used for gaming and was placed at a public place
- Observing the handheld devices such as Gaming Console, (Tactile), Nintendo Wii Remote which were used for play
- The games which are were played were Racing, PRG, MRPG, MMORPG, Small games, Casual touch based games.

1	Female		Male	
	Non – Gamers	Gamers	Non- Gamers	Gamers
Category	Casual games Arcade - puzzle	Casual games Arcade - puzzle Arcade -strategy Arcade - adventure Racing RPG, MRPG	Casual games Arcade – puzzle Racing	Arcade -strategy Arcade - adventure Racing RPG, MRPG
Example of maximum game played	Tetris, Snake	Tetris, Snake, Minesweeper, Mario, Prince NFS, Contra, Counter strike, Farm Villa - facebook	Snake, Car/bike racing games NFS	Mario, NFS, Counter strike, Quake3, IGI, Age of Empires, Mafia wars & Farm Villa-facebook
Context / Duration / Involvement	Waiting for train / bus, travelling, Waiting anywhere 10-15 mins	Group gatherings Friends place, 30-40mins	Depends on environment and when compelled by peer group, Friends place Waiting for train / Bus travelling, Waiting Anywhere, at times while visiting malls 20 – 30 mins	Gaming Parlors Playing on LAN in college PC labs, more than 1 hour, For Social networking on facebook Regularly
Platform	Mobile phone,	PC, Online, Consoles- Wii, Hanheld devices- Mobile	PC, Online, Mobile	PC , Lan, Online, Consoles-Wii, Xbox, Play station , Handheld devices-PSP, Mobile,

2	Female		Male	
	Non-Gamers	Gamers	Non-Gamers	Gamers
Motivation	Kill-time, getting entertained, game playable on handheld or accessible games, stress relief from casual play	Thrill of wining, Breaking highest score, simple and easily understandable games, less complex rules,	Time-passing and getting entertained while waiting , any game playable on handheld or accessible, Peer compelling , engaging games, recreation means	Scoring more than friend / colleague, competing with peers, real life situation, real life graphics, war experience, Ability to perform tasks which are not possible in real life
Barriers	Requires too much of engagement Waste of time , it's a distraction Just gaining scores and winning doesn't excite, not having any other benefits ("what will get from this? Lets do something productive"), Game life / virtual life doesn't seem true , less exciting gaming subjects, complex rules	Accessibility of games and platform, less motivation from female counterparts, loosing game on male counterparts, not able to relate with game life / virtual life prevents continuous excitement	Waste of time Just gaining scores and winning doesn't excite , not having any other benefits	Accessibility of games and platform.

3	Female	Male
		Non-Gamers
Opportunity Area	<ul style="list-style-type: none"> 1) Multiplayer /AI casual games, playable on handheld device 3) Game with social interaction & fun 4) Fun filled game competing with friends /colleagues 7) Less complex rules and quick ending games 5) Subjects which female can relate to 6) Subjects- mind ,puzzles and logic based exercises. 7) Parallel activity/ communication possible while Playing 	<ul style="list-style-type: none"> 1) Single player competitive games, playable on handheld device 2) Gaming on public displays using handheld device (mobiles) in trains during long journey for 'kill time' situation. 3) Quick level games & less time consuming. 5) Subjects from real life scenarios, highly competitive . 5) Adding benefits and real life reward / gifts

Thank You



NID-Vodafone Game Design

Single Player Scenario

- The user has to select the instrument to create music, in a given limited time.
- Then user can Listen & download the music to their phones.
- User Can Share Music to get rewards.



















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BAND

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MUZIK
BAND

Music Created by you

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Your Created Music

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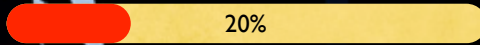
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To play drums click on drums

Click on drums to activate.

Timer

02:00

Music Counter

0000

Back



To play drums click on drums

Click on drums to activate.

Timer

01:00

Music Counter

0001

Back



To play drums click on drums

Click on drums to activate.

Timer

00:00

Music Counter

0002

Back



M4 MUZIK
BAND

Music Created by you

0002

Your Created Music

0001

Play

Downlaod

0002

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M4 MUZIK
BAND

Music Created by you

0002

Your Created Music

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0002

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M4 MUZIK BAND

Music Created by you
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Playing 0002 00:08/01:00

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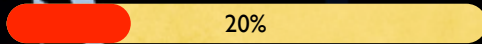
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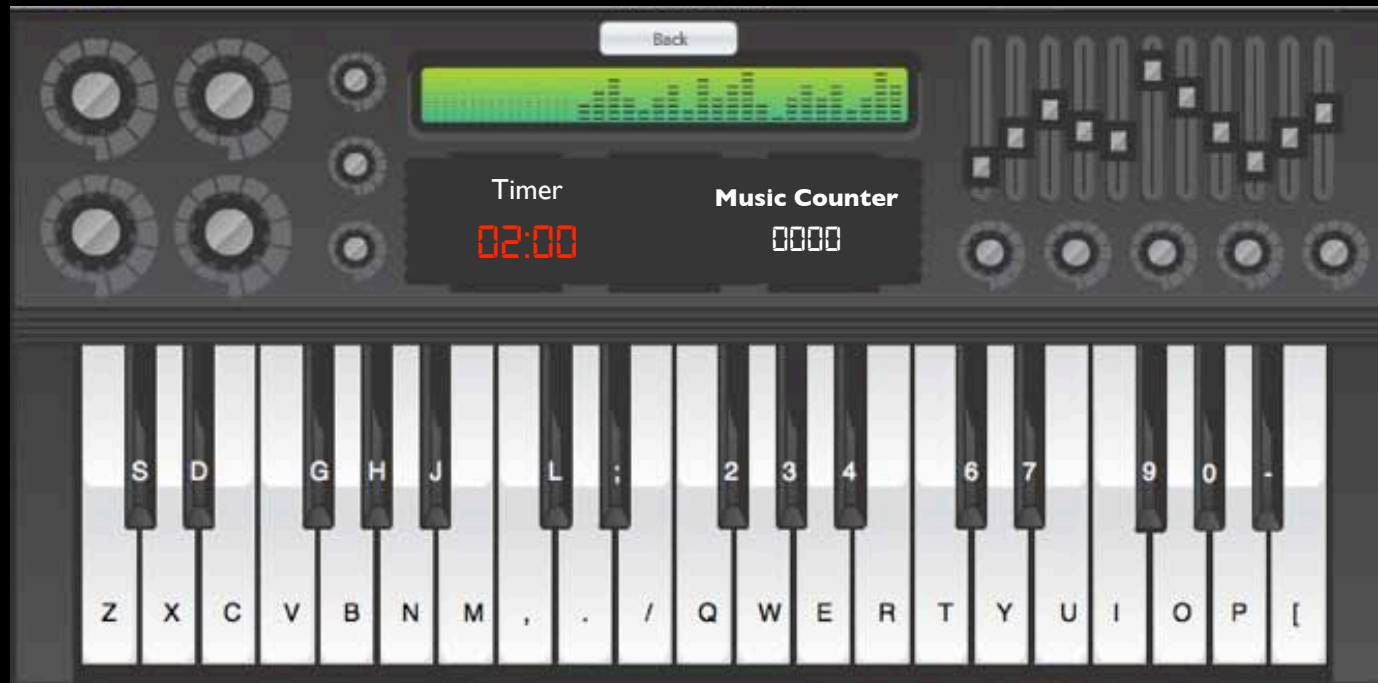
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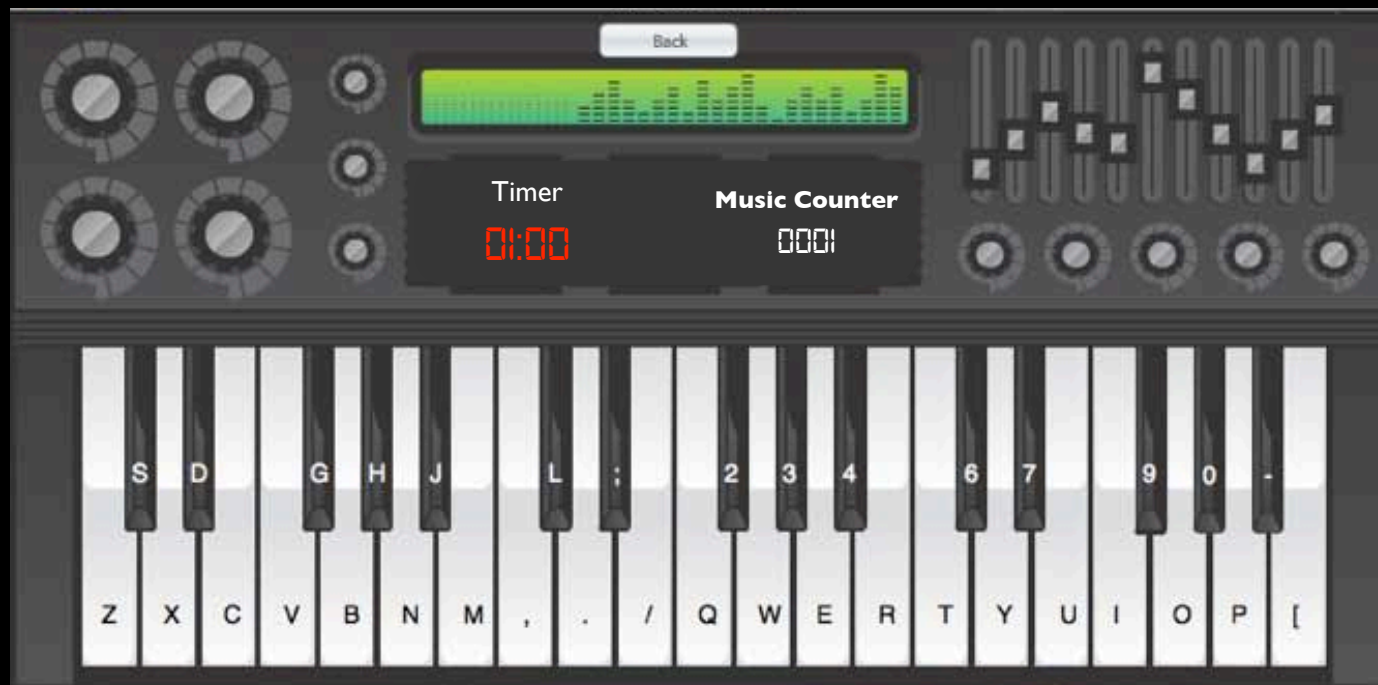
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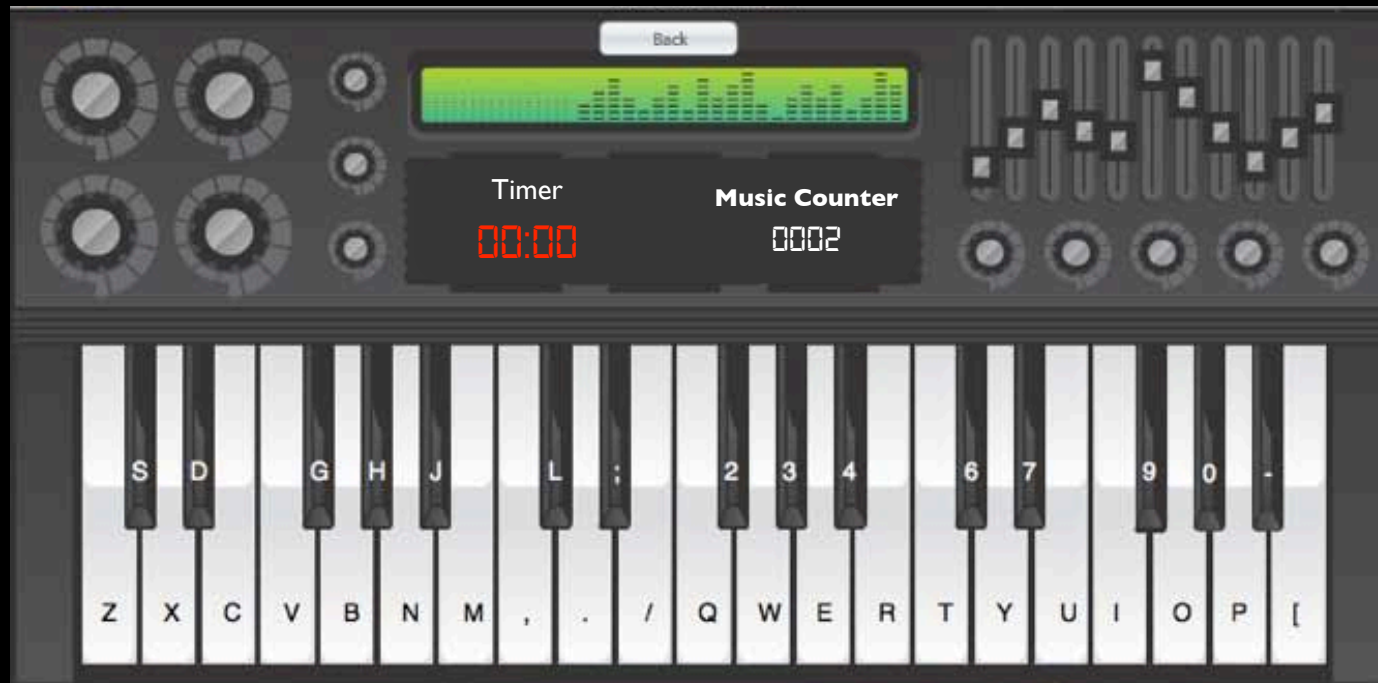
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0002

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M4 MUZIK BAND

Music Created by you
0002

Playing 0002 00:08/01:00

Your Created Music

0001	Play	Downlaod
0002	Play	Downlaod

Progress bar: 00:08 / 01:00

Controls: Play, Volume, Repeat



M4 MUZIK
BAND

Music Created by you

0002

Your Created Music

0001

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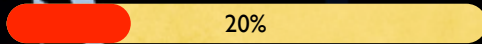
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MU MUZIK
BAND

Timer
02:00



Click on bongos to activate.
To play bongos click on bongos

Back

Music Counter
0000

MU MUZIK
BAND

Timer

01:10



Click on bongos to activate.
To play bongos click on bongos

Back

Music Counter

0002

MU MUZIK
BAND

Timer
00:00



Click on bongos to activate.
To play bongos click on bongos

Back

Music Counter
0003

MUZIK
BAND

Music Created by you

0003



Your Created Music

0001

Play

Downlaod

0002

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MUZIK
BAND

Music Created by you

0003



Your Created Music

0001

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MUZIK BAND

Music Created by you
0003

Playing 0003 00:10/00:40

Your Created Music

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0002	Play	Downlaod
0003	Play	Downlaod

MUZIK
BAND

Music Created by you

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Your Created Music

- 0001 [Play](#) [Downlaod](#)
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- 0003 [Play](#) [Downlaod](#)

MUZIK
BAND

Music Created by you

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Your Created Music

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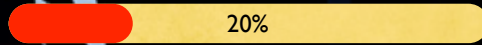
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NID-HP-Vodafone Game Design Project

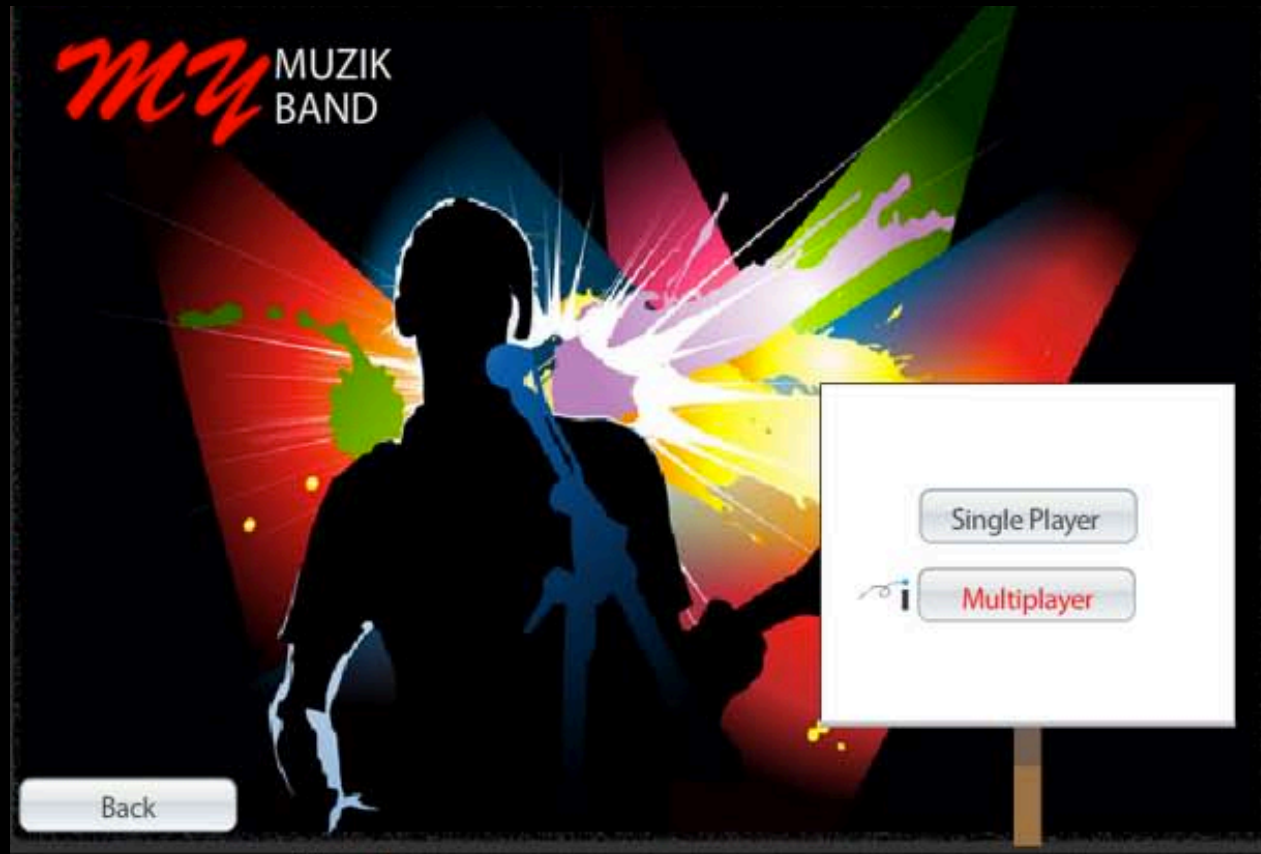
Multi Player Scenario

- The user has to select the instrument and join the band to create the music.
- The time is limited to 5 minutes for composing a music.
- Then members in the band can Listen & download the music to their phones.
- User Can Share Music to get rewards.













MUZIK
BAND

Searching for other players

- | | | |
|-------------|-----------|-----|
| Raghu | on Drums | Add |
| Aaditya | on Guitar | Add |
| Shivendra | on Drums | Add |
| Sheetal | on Piano | Add |
| Jai Shankar | on Guitar | Add |
| Mahima | on Bongos | Add |

MUZIK
BAND

Searching for other players

- Raghu on Drums
- Aaditya on Guitar
- Shivendra on Drums
- Sheetal on Piano
- Jai Shankar on Guitar
- Mahima on Bongos

MUZIK
BAND

Searching for Shared Display



HP Touch Smart
MacBook Pro

Add

Add

MZ MUZIK
BAND

Searching for Shared Display



HP Touch Smart
MacBook Pro

Add

MUZIK
BAND

Loading Other players

Music Created by you

0000

Timer

05:00

Rahul

on Drums



HP TouchSmart

MUZIK
BAND

Loading Other players

Music Created by you

0000

Timer

05:00

Sheetal

on Piano



Rahul

on Drums



HP TouchSmart

MUZIK
BAND

Loading Other players

Music Created by you

0000

Timer

05:00

Sheetal

on Piano



Jai Shankar

on Guitar



Rahul

on Drums



HP TouchSmart

MUZIK BAND

Loading Other players

Music Created by you

Timer

0000

05:00

Sheetal

on Piano



Jai Shankar

on Guitar



Rahul

on Drums



Mahima

on Bongos



HP TouchSmart

MUZIK BAND

Start

Music Created by you

Timer

0000

05:00

Sheetal

on Piano



Jai Shankar

on Guitar



Rahul

on Drums



Mahima

on Bongos



HP TouchSmart

MUZIK
BAND

Music Created by you

Timer

00:00

03:00

Sheetal

on Piano



Jai Shankar

on Guitar



Rahul

on Drums



Mahima

on Bongos



HP TouchSmart

MUZIK
BAND

Music Created by you

0001

Timer

01:00

Sheetal

on Piano



Jai Shankar

on Guitar



Rahul

on Drums



Mahima

on Bongos



HP TouchSmart

MUZIK
BAND

Music Created by you

Timer

00:02

00:00

Sheetal

on Piano



Jai Shankar

on Guitar



Rahul

on Drums



Mahima

on Bongos



HP TouchSmart





MUZIK BAND

Music Created by you
0002

Playing 0001 00:02/02:30

Your Created Music

0001	Play	Downlaod
0002	Play	Downlaod

The interface features a central silhouette of a musician playing a guitar, set against a vibrant background of colorful light splashes in red, blue, green, and yellow. The top left corner displays the 'MUZIK BAND' logo. The top right corner shows 'Music Created by you' with a digital counter at '0002'. The bottom left contains playback controls: a play button, a progress bar, and a volume icon. The bottom right section, titled 'Your Created Music', lists two items with '0001' and '0002' identifiers, each accompanied by 'Play' and 'Downlaod' buttons.





MZ MUZIK
BAND

Saving

0%

The Default Location is the Download folder on your Phone

Your Created Music

0001

Play

Downlaod

0002

Play

Downlaod

MUZYK BAND

Saving 20%

The Default Location is the Download folder on your Phone

Your Created Music

0001	Play	Downlaod
0002	Play	Downlaod

M4 MUZIK BAND

Saving 40%

The Default Location is the Download folder on your Phone

Your Created Music

0001	Play	Downlaod
0002	Play	Downlaod

M4 MUZIK BAND

Saving 60%

The Default Location is the Download folder on your Phone

Your Created Music

0001	Play	Downlaod
0002	Play	Downlaod

MUZY MUZIK BAND

Saving 80%

Your Created Music

0001	Play	Downlaod
0002	Play	Downlaod

The Default Location is the Download folder on your Phone

MU MUZIK
BAND

Saving

100%

The Default Location is the Download folder on your Phone

Your Created Music

0001

Play

Downlaod

0002

Play

Downlaod