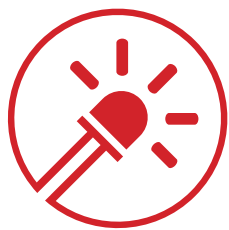# Company report

2015/2016
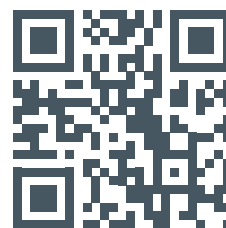
IRDIFY

Country: Slovakia
Link teacher: Mgr. Martin Daňko
Business adviser: Mgr. Eva Wolfová, PhD.

www.irdify.com

Executive summary

Company name Irdify
Country Slovakia
Motto Do more with less
Contact www.irdify.com
contact@irdify.com
www.facebook.com/irdify

Mission statement

We strive to simplify the lives of people in a way that is efficient and elegant.

Product

In this stressful age overloaded with inconvenient devices our company brings universal infrared controllers which together with your smartphone create a practical combination that allows you to control everything starting with your TV, DVD player, set-top-box, radio, projector, A/C or even your camera. The controllers are in a form of an audio jack plug providing compatibility with virtually every smartphone user.

Financial results

Turnover:	646,60€
Costs:	452,69€
Net profit:	151,25€
Profit margin:	23,39%

Contents

Marketing

It is essential for a good business to reach as many people as possible. We have created a website and a Facebook page to show our product and activities to the public. We have analysed the market to have a clear sense about what people think. We have brought Irdify to newspapers, stores and presentations. Now we have a better understanding of what the market needs.

Main goals

- Bring simple, practical and unique innovation
- Show how cool and stylish things can be
- Simplify everyday usage of common devices
- Implement our own core values in Irdify

Our performance in numbers

We have gone through **3 months of engineering**, analysis and development, **cooperated with 12 companies** and the **best high-school robotics team** in Slovakia, agreed the sales of our product at **2 local electro stores**, **gave 5 presentations** at top enterprises and had **articles in 3 local and 2** national newspapers.

"We believe that nothing proves the quality of a company more than its results. In terms of numbers, we really have brought home the bacon."

Product

Our student company is focused on infrared remote controllers. Those are just common remotes of televisions, radios, projectors, set-top boxes, players, air conditioning and many more. These devices appear mainly in households, but also in offices, hotels, bars, etc., and are a nearly inseparable part of everyday life. We decided to bring practical, simply controllable and accessible innovation right in this area.

Introduction to remote controllers

Common remote controllers use technology of infrared light (IR). Such light has lower frequency than the spectrum of visible light and it is not possible to observe it with eyes. Remote controllers contain an infrared transmitter which is activated by pressing a button and afterwards it sends a light signal - series of very short flashes. Infrared receiver (e.g. television) captures the signal and performs desired action (e.g. switching channel or changing volume). Remote controllers are not universal because every manufacturer uses distinct codes. Our product uses the same principle and technology as these remote controllers.

What does Irdify bring

The primary product of our company is a small infrared remote controller pluggable into an audio jack port of mobile phones (into a connector for headphones). With an appropriate mobile application it can control various devices and so replaces large amount of common remote controllers. User chooses the model of the device he plans to control so the application knows which set of codes should be used. By pressing a button, the application generates a sound wave that is sent to Irdify through the audio port. At the impulse of the wave, Irdify flashes infrared light the same way as common remote controllers and so is functionally indistinguishable from the remotes.

So far we have developed 2 generations of the universal controller Irdify:

Irdify One - made of two parallel infrared LED diodes, which simply use the voltage given by the smartphone while generating the audio wave by the application. However, audio output of some smartphones is even with maximised volume not sufficient enough to light up the diodes.

Modern European smartphones tend to lower the highest possible voltage of audio output in order to protect humans ears when listening to music. This does not actually play into our hands, since the voltage is a critical condition to light up the LEDs. For this reason many solutions similar to Irdify do not work, but we successfully managed to overcome this problem by putting micro-batteries into the Irdify Plus model.

Irdify Plus - new generation with built-in micro-batteries for greater power. With this advantage, the product does not need the output voltage of the smartphone to be so high, hence it is compatible with even more devices. The integrated circuit in Irdify Plus is refined so it is capable of functioning with only one LED diode. The battery consumption is negligible, since the juice is consumed only during the short flashes, and so the product is supposed to last for years.

It is also usual that the other products similar to Irdify only allow the current to flow in one direction and therefore halve the maximum frequency of the infrared signal, which renders the controller incompatible with many receivers. Irdify makes use of both positive and negative parts of the sine signal wave, so the frequency is doubled in comparison to the more primitive devices.

Marketing

From the very beginning we always wanted to be innovative and bring a product which makes life easier in a way that is not familiar to people. That is why we have chosen Irdify amongst all the ideas. We believed in our product and as the work carried on, after certain period of time we realised that we believe in each other as well.

Within marketing we recognize four crucial parts, the Theory of 4P (product, price, place, promotion).
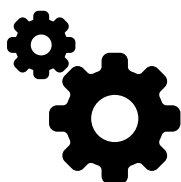
Product

The remote controller, in the way we provide it, fills a hole in the current market. Built-in infrared ports are no longer used for data transmission, but they are coming to the newest phones in the form of a controller. However, these are premium phones and the majority of the phones do not have such a built-in utility.

We were further convinced that there is a need for this product when we made an analysis of the market. It was an online form consisting of 10 questions. We have had 134 respondents of which 67% showed interest in our idea.

Our target group are active smartphone users who need to control electronic devices in their household, work or wherever they need to.

We have also analysed the world's market and found some products similar to ours. However, these were dedicated just to the iOS operation system (e.g. iRed). For Android, the devices were unreliable and did not work with the majority of smartphones. As far as we are concerned there is no competitive product to ours in Slovakia and in the world, our product is functionally ahead of the vast majority of others as stated in the product section.

Place

Regular sales
One can purchase our products at our website irdify.com or at one of our agreed stores located in Košice, Slovakia.

1. Shotter - Jakobyho 1684/1,040 01, Košice
2. Hugos Electro – Komenského 69, 040 01 Košice

Our current endeavour is dedicated to expanding the network of stores. We are in process of agreeing the sales at Datacomp, s.r.o. which is one of the leading electronics companies in Slovakia.

Marketing promo events
These include one-day events carrying us closer to the public in our stands at shopping centres and presentations for different communities.

Sales at shopping centres(SC):
SC Optima, Košice (11/3/2016)
SC Aupark, Košice (24-25/3/2016)
Business centre, Košice(26/3/2016)

Our stand at Aupark

Price

The price was established mainly according to the results of our market analysis form and the expenses during the process of manufacturing. We are convinced that it reliably reflects the threshold of an average customer when deciding to buy. The prices are as follows:
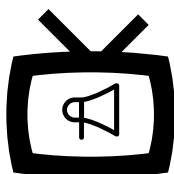
Irdify One – 4,45€

Irdify Plus – 6,95€

On a presentation for the local Rotary club we lowered the prices for our products as a starting time-limited price to 3€ for One and 5 € for Plus.

2-4 €

0-2 €

4-8 €

8-12 €

For how much would you buy our product?

Promotion

Online

Our main website, irdify.com, is optimized for different screen sizes and provides essential information of the product and our team. It also includes an opportunity to buy an Irdify or contact our tech support at tech@irdify.com.

The Facebook homepage, fb.com/irdify, serves as a way to interact with the public and shows our most recent work and events.

After many interesting conversations both online and personally, we realised how important is the contact with the public, therefore we also created a Youtube channel where you can see how our product works at a glance and it gives us an opportunity to connect with each one of you as well.

Offline

We have arranged 8 presentations for organizations and companies such as AT&T, T-systems, Promiseo, Rotary Club Košice, IT valley and Startitup seeking cooperation and partnership.
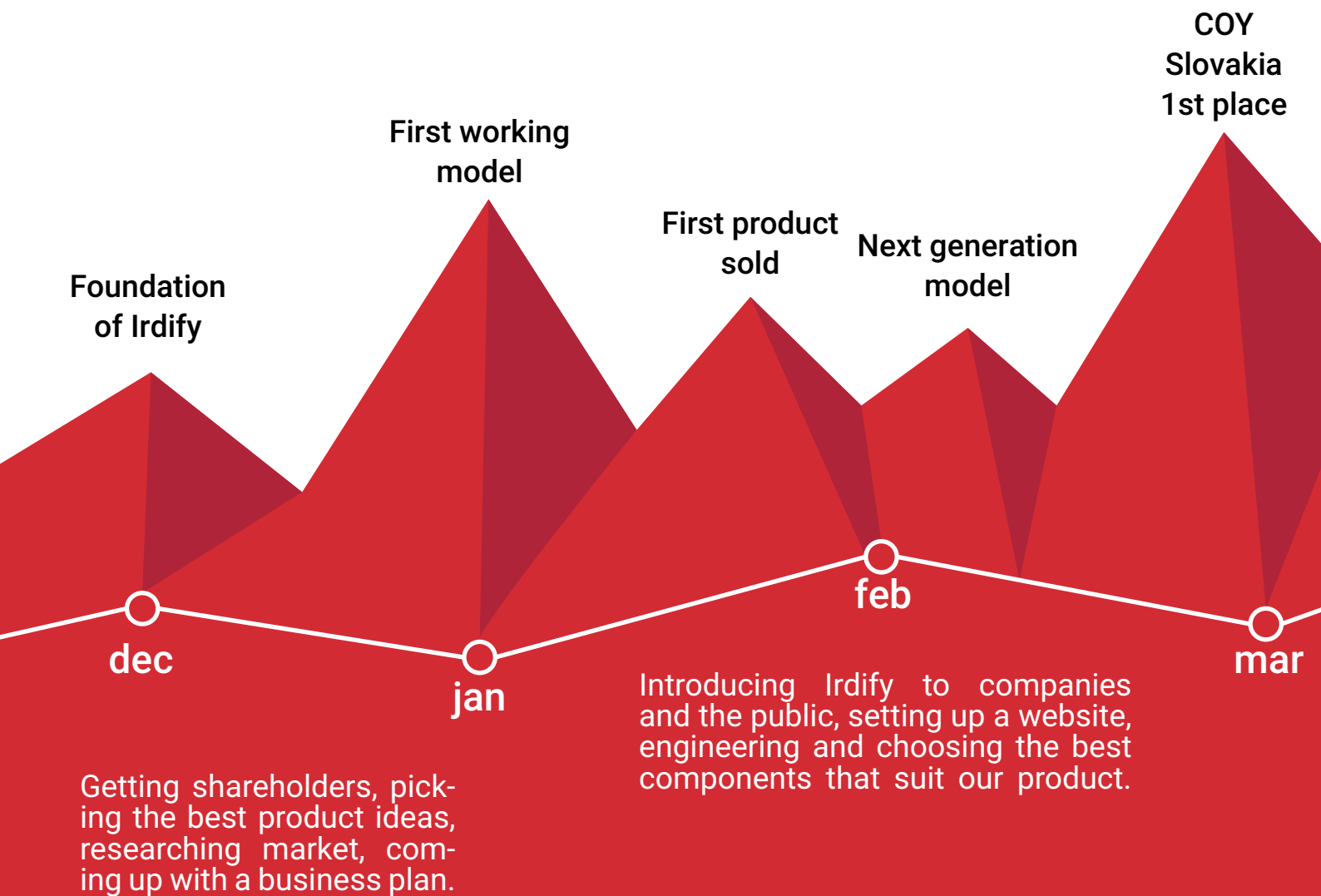
Media

We earned publicity in a major TV channel, 2 local and a national newspaper.
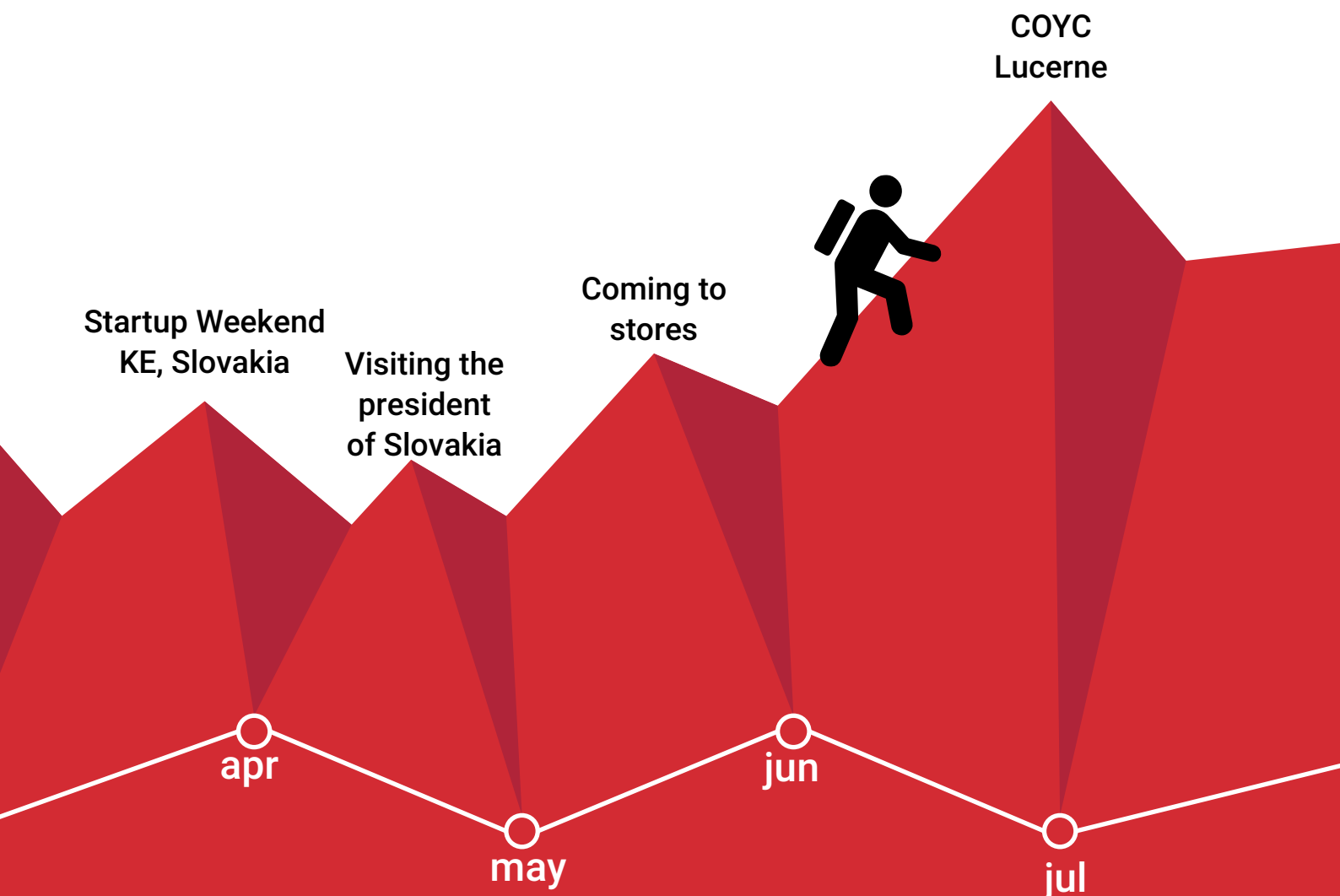
Irdify at a local newspaper

OUR
MILESTONES
2015/2016

COY
Slovakia
1st place

First working
model

First product
sold

Next generation
model

Foundation
of Irdify

dec

jan

feb

mar

Getting shareholders, pick-
ing the best product ideas,
researching market, com-
ing up with a business plan.

Introducing Irdify to companies
and the public, setting up a website,
engineering and choosing the best
components that suit our product.

IRDIFY

"I will skate to where the puck is going to be, not where it has been."

- Wayne Gretzky

COYC
Lucerne

Coming to
stores

Startup Weekend
KE, Slovakia

**Visiting the
president
of Slovakia**

apr

may

jun

jul

Communication with electronics manu-
facturers and advertisement companies,
selling our product at shopping centres,
working hard to bring Irdify to stores.

Preparing for the Company of the
Year Competition 2016 and looking
forward to what the future does hold.

Analysis of financials

Since the development of our second generation had been finished (February 2016), our income shows constantly raising tendency. So far, we have sold 104 products through different selling channels.

Our profit margin has reached 23,29%. We want to make use of all the profit and invest in things that would give us the best benefits.

Summary for the time period from 15/12/2015 to 13/6/2016

Product sales

Model	Sold	Income (€)
Irdify One	19	77,30
Irdify Plus	85	569,30
TOTAL INCOME	104	646,60

Costs

| Item	Value (€)
Material	296,14
Web domain	10,38
Marketing	77,83
Transport	27,34
Wages	31,00
Other costs	10,00
TOTAL COSTS	452,69

Current assets (€)

Cash at bank	0,00
Cash in hand	693,91
Debtors	0,00
TOTAL ASSETS	693,91

Operating profit (€)	193,91
Tax (€)	42,66
NET PROFIT (€)	**151,25**

Verified by Mgr. Eva Wolfová, PhD.
Business advisor

Current liabilities (€)

100 shares at 5€	500
Loans	0,00
Creditors	0,00
Net profit	151,25
Tax	42,66
TOTAL LIABILITIES	693,91

Net profit

Costs

Tax
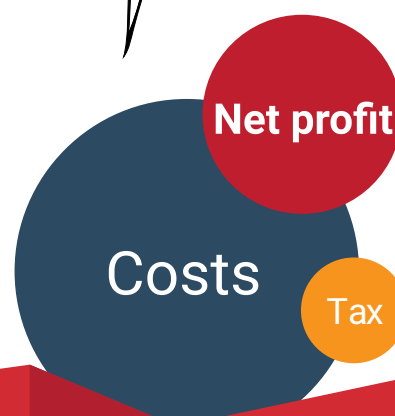
Analysis of overall performance and profitability

The company´s incomes came from one hundred shares each at 5€ and from selling our products. All our costs were paid from the initial budget.

Our business would get even much more profitable with an expansion in which would our company get to foreign higher developed markets as well as foreign e-shops.

Our selling numbers are constantly raising which indicates a stable selling performance supported by profitability of the business. From the time point of view, monthly we report similar numbers of sold products which also shows long-term interest in our products.

From the place point of view, we are the most successful at promo actions and presentations where we are in the direct contact with our customers and they have the opportunity to hear every detail which interests them in the direct conversation. At those presentations we sold 47% of all sold products.
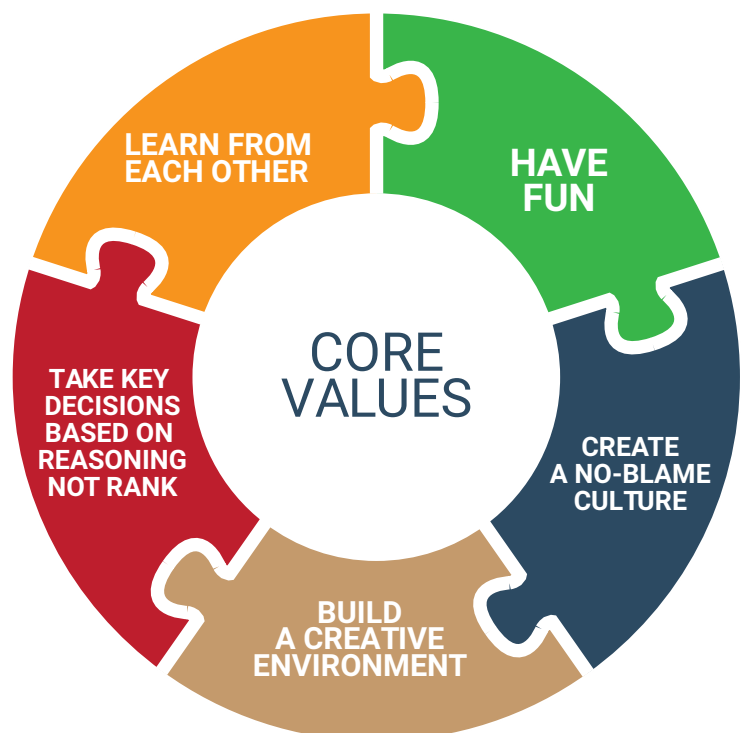
Customers are mostly interested in the second generation – Irdify Plus – 82% of all sold products are Irdify Plus. This number shows that the development of our second generation was the right step and pushed our profitability much further. From this number we can assume that with long-term intensive development we are able to multiple our selling efficiency and profitability.

Management

The organizational structure of our company is separated into four main branches, namely finance, sales, marketing and human resources. Each of the 20 students of our class has an individual role in their respective departments managed and supervised by the core board of our team.

Running this company we were fortunate enough to heavily rely on the comprehensive skillset of our own organization. Matters such as technical design, web marketing and production were entirely initiated by the students of our group.

Even though we started as mere colleagues, the amount of work and effort brought all the 20 students together creating the Irdify family. Our core values have shaped not only the success of our company but the people as well.

LEARN FROM EACH OTHER

HAVE FUN

TAKE KEY DECISIONS BASED ON REASONING NOT RANK

CORE VALUES

CREATE A NO-BLAME CULTURE

BUILD A CREATIVE ENVIRONMENT

Partners and consultants

Carrying out such an eminently specialized project as Irdify we had to look for mentoring and partnerships not only in our local communities but we needed to look further. We created a network of consultants and partners who gave us great support concerning marketing and technical elements in Slovakia, Hungary, Sweden and China. By interacting with so many different people we became much more aware of the necessity for good communication skills which we improved during our business program significantly.

Promiseo - Online marketing agency that gave us helpful tips on how to make product videos

Hi-Reklama - Advertising agency we could consult our designs and ideas with

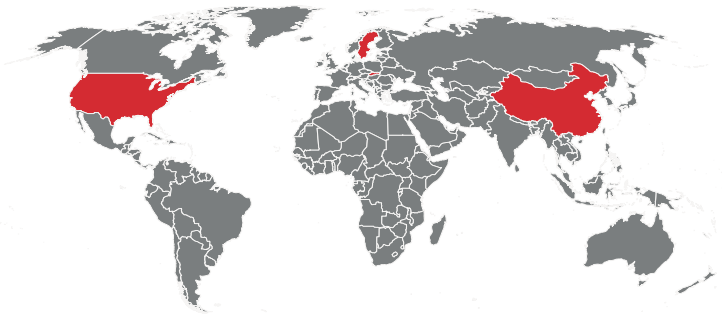*LemonCreative* - Printing company which printed our banners

AT&T - American multinational telecommunications corporation we could talk to about how we could improve our company's structure

T-Systems - German global IT services and consulting company that discussed our marketing strategy with us

Binarymode - Designers of Irplus – the app used and tested with our product

Unified Intents AB - Swedish app developer we want to design our own app with

Titoma - Asian electronic products designer, developer and manufacturer we are consulting the mass production of our product with.

Future

New Features
Especially with our product we have to be ready to move with the times in technical details and features as well as in design. Our permanent research may bring us new models of our product with even more advantages – more universal, easier to use, smaller etc.

We also understood that the more requirements of people we are able to fulfil, the better sale it may bring. We are ready to come up with new colours and shapes of our products, as well as anything our customers would appreciate.

Mass production
A big breakthrough in terms of manufacturing time and number of units would be mass production of our products. We are currently looking for a company willing to let us design our product and produce it for us in mass production. This way our product stays unique and ours but its production gets more effective.

We would be happy to find this company in east Slovakia to help reduce unemployment in our region.

New ways and places to sell
Firstly, we would like to improve our website and enrich it with an e-shop, which is more comfortable than a request form and easy to use for everyone.

We would also like to focus on mass sale for:

Hotels – as a replacement of remotes for many devices in rooms such as TV, air conditioning, radios etc. (people often feel uncomfortable touching them, also when they seem clean and they often disappear due to a big number of users)

Schools – as a replacement of remotes for interactive boards and projectors (these are often lost as a consequence of contact with many people every day)
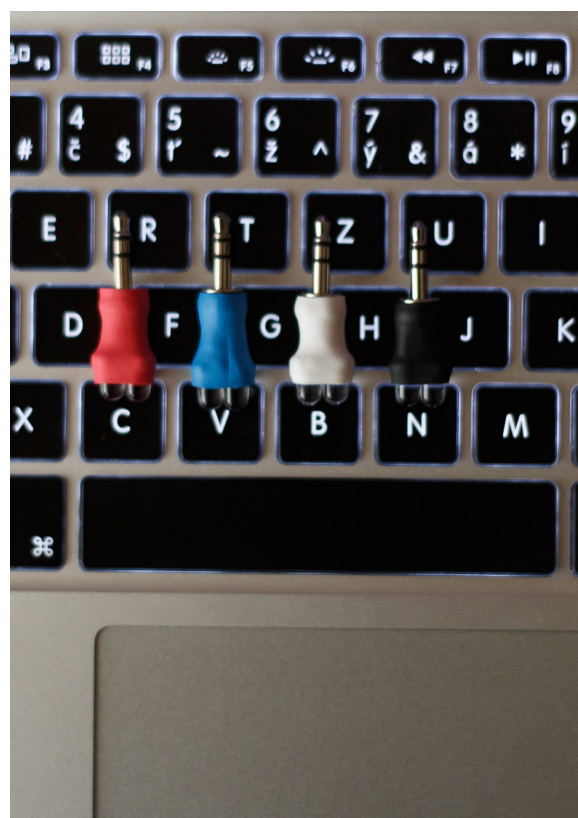
Hospitals – as a replacement of remotes for devices placed in the rooms (hospitals require sterile environment and remotes used by many sick people are unhygienic, therefore not suitable for these conditions).
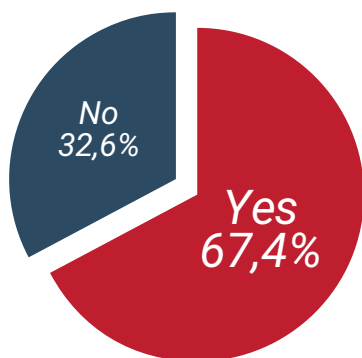
Appendices
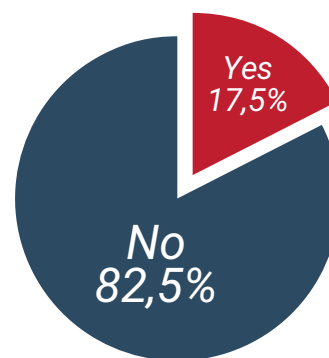
Image appendices

One of our leaflets

Colour design of Irdify

The most interesting results of our market analysis

No 32,6%

Yes 67,4%

Would you appreciate controlling your TV, set-top-box, projector, etc. with your smartphone?

Yes 17,5%

No 82,5%

Do you have a built-in infrared controller in your smartphone?

LemonCreative
JA Slovakia
AT&T
Promiseo
T-Systems
Kika Nábytok
Hi-Reklama
DoubleTree by Hilton
SUN 4M6, s.r.o.
Rotary Klub Košice
binarymode
Oliver Čajka
MUDr. Rastislav Kalist
Matúš Zeťák

Thank you!