

Perception of circular economy and its communication strategy

Diploma thesis

Supervisor:

Ing. Stanislav Mokrý, Ph.D.

Bc. Lucie Frýbortová

Brno 2016

I would like to express many thanks to my thesis supervisor Ing. Stanislav Mokřý, Ph.D. for his valuable advice, support and patience within the whole elaboration of the thesis. I was also very pleased to cooperate with founder of Institute of circular economy, Ing. Soňa Jonášová, who provided me a lot of information and was helpful all the time I needed. Last but not least, big acknowledgement belongs to my family and close friends, who supported and motivated me during the whole university studies.

Statutory Declaration

Here I declare that I have written my final thesis **Perception of circular economy and its communication strategy** by myself and all sources and data used are quoted in the list of references. I agree that my work will be published in accordance with Section 47b of Act No. 111/1998 Coll. On Higher Education as amended thereafter and in accordance with *the Guidelines on the Publishing of University Student Theses*.

I am aware of the fact that my thesis is subject to Act. No. 121/2000 Sb., the Copyright Act and that Mendel University in Brno is entitled to close a licence agreement and use the results of my thesis as the "School Work" under the terms of Section 60 para. 1 of the Copyright Act. Before closing a licence agreement on the use of my thesis with another person (subject) I undertake to request for a written statement of the university that the licence agreement in question is not in conflict with the legitimate interests of the university, and undertake to pay any contribution, if eligible, to the costs associated with the creation of the thesis, up to their actual amount.

In Brno, 20nd of May 2016

Abstract

FRÝBORTOVÁ, L. *Perception of circular economy and its communication strategy*. Diploma thesis. Brno: Mendel University in Brno, 2016.

The main objective of this thesis is to determine the current state of the perception of the concept of circular economy among the czech public and businesses and proposal of communication strategy. The thesis is composed of theoretical and practical part. In theoretical part are summarized issues relating to the topic of thesis and it is made in the basis of study of scientific publications. Practical part consists of analysis of current environment and results of quantitative and qualitative research. After comparing the primary and secondary data are proposed final recommendations towards both public and companies.

Keywords

Circular economy, marketing research, questionnaire, depth interview, analysis, communication strategy.

Abstrakt

FRÝBORTOVÁ, L. *Vnímání cirkulární ekonomiky a její komunikační strategie*. Diplomová práce. Brno: Mendelova univerzita v Brně, 2016.

Hlavním cílem práce je zjistit aktuální stav povědomí o cirkulární ekonomice u české veřejnosti a firem a návrh komunikační strategie k těmto cílovým skupinám. Práce se skládá z teoretické a praktické části. V literárním přehledu je shrnuta problematika týkající se tématu práce a je vypracována na základě studia odborných publikací. Praktická část se skládá z analýzy současné situace a výsledků kvantitativního a kvalitativního výzkumu. Po porovnání primárních a sekundárních dat jsou navržena doporučení směrem jak k veřejnosti, tak i firmám.

Klíčová slova

Cirkulární ekonomika, marketingový výzkum, dotazník, hloubkový rozhovor, analýza, komunikační strategie

Table of contents

1	Introduction	13
2	Objectives	14
3	Theoretical part	15
3.1	Principles of circular economy.....	15
3.1.1	Difference between linear and circular economy.....	15
3.1.2	Cradle to Cradle	17
3.1.3	Green Supply Chain mechanism.....	18
3.1.4	Reverse Logistics.....	18
3.2	Strategic management and marketing.....	19
3.2.1	Principles of marketing.....	20
3.2.2	Objectives of marketing.....	21
3.2.3	Importance of marketing to the society	21
3.2.4	Difference between Marketing and Selling	22
3.2.5	Marketing strategy.....	22
3.3	Communication strategy	23
3.3.1	Marketing communication tools selection	25
3.3.2	Integrated Marketing Communications	25
3.3.3	Elements of marketing communication	27
3.4	Marketing research.....	36
3.4.1	Steps in marketing research project.....	37
3.4.2	Methods of marketing research.....	39

3.4.3	Primary marketing research.....	40
4	Methodology	43
4.1	Quantitative research	43
4.1.1	Questionnaire composition	43
4.1.2	Pretest and distribution of questionnaire	44
4.1.3	Hypotheses.....	44
4.1.4	Structure of respondents.....	44
4.1.5	Data analysis.....	48
4.2	Qualitative research	48
4.2.1	Performance of respondents.....	49
4.2.2	Data analysis.....	50
5	Practical part	51
5.1	Current state of circular economy	51
5.1.1	Implementation of CE in Czech republic	51
5.1.2	Implementation of CE in EU	52
5.2	Research - the future regarding the circular economy	55
5.3	Waste sorting in Czech republic	57
5.4	Communication of circular economy in the Czech republic	57
5.5	Results of the quantitative survey	59
5.6	Results of the qualitative survey	72
5.7	Final recommendations	79
5.7.1	Communication towards the public.....	79
5.7.2	Communication towards the businesses.....	82

Table of contents	11
6 Discussion	85
7 Conclusion	87
8 References	88
9 List of figures	93
10 List of tables	94
A Quantitative survey (questionnaire via Survio software)	96

1 Introduction

In recent decades, with increasing the standard of living (especially in the economically developed countries) consumption had risen so much that it began to have significant impact on the environment (next to the production itself). Modern society brings us every day a lot of new technologies, gadgets, fashion blockbusters, as well as gastronomic experiences that all are just hard to resist - and the human finds himself in the position of consumer user, who is exposed to such pressure from outside, that buys more than he would normally need. Yes, we live in a time of consumption society. This is the type of society where constantly increasing production of consumer goods leads to an excessive increase in its consumption and to create ever new needs. The result is over consumption and direct consequences on the environment consist in the fact that it creates a tremendous amount of waste. Sometimes we are talking also society of waste.

Therefore it is not surprising that some people have begun to ask question whether we have enough resources for long-term maintenance of this trend. Of course we don't. We will only with assuming that we change fundamentally the approach to dealing with old things and waste. This question also led to the inception of a new approach based on long-term solutions in the form of sustainable development. It is about society in which the standard of living and welfare of the people increases as well, but their current consumption does not threaten satisfaction of the needs of future generations and keeps vital natural values. We are talking about circular economy, where material flow is not unidirectional (ie. from manufacture to a landfill), but it circulates over and over again. After all, a lot of packaging materials, old electronic equipment, worn pieces of clothing can be reused. And what about the water and energy that we consume every day? Fortunately we are beginning to realize the impacts of human actions these days more and more.

The circular economy aims to obviate waste - not just from manufacturing processes, but systematically, throughout the life cycles of products and their components. Indeed, tight component and product cycles of use and reuse, aided by product design, help define the concept of a circular economy and distinguish it from the linear economy, which wastes a lot of embedded materials, energy and labor.

It is true that the influence of one ordinary man is not great - but the influence of the human population, which is composed of these ordinary people, is immense. Therefore each of us should be aware of our behavior and try to burden the environment as little as possible. This thesis was created in collaboration with an organization that is actively concerned with circular approach and spreading the enlightenment. Particular findings may serve not for this organization only but also for all who care about these issues and want to learn more, wondering, what is the state of consciousness of the czech population and how this population is able to absorb new information.

2 Objectives

The main objective of this thesis is to determine the current state of the perception of the concept of circular economy among the czech public and entrepreneurs. To achieve the main objective will be needed to fulfill the following partial objectives:

- Making preliminary analysis of the development of circular economy at home and abroad.
- Establish target groups which will be worked with.
- Identify the level of awareness of circular economy in Czech republic.
- Find out public attitude to the values of sustainable development.
- Determine which communication channels people use when collecting new information.
- Perform depth interviews with representatives of companies that deal with circular economy and the environment and after that identify their preferences and requirements.
- Evaluate collected data and based on them to implement final recommendations concerning the communication of circular economy in the Czech republic towards companies and the public.

3 Theoretical part

3.1 Principles of circular economy

Looking back to the beginning of the industrial revolution, mass production of goods was enabled by new manufacturing methods resulting in products with high availability and low costs. Consequently, due to new consumer societies and staggering growth in industrial activity, emissions to environment, solid waste generation and landfill have become increasingly severe. Due to a growing world population, the demand for resources is expected to rise rapidly indicating a rising consumption of natural resources while planet earth's resources are limited. In the light of discussed challenges and limitations of a linear economy, the concept of a circular economy is considered as a solution for harmonizing ambitions for economic growth and environmental protection. There are various possibilities for defining it. [49]

Mostly, it is defined as a concept in which there is no waste. It is restorative and regenerative by design, and aims to keep products, components, and materials at their highest utility and value at all times. Circular economy is a continuous positive development cycle that preserves and enhances natural capital, optimizes resource yields, and minimizes system risks by managing finite stocks and renewable flows. It works effectively at every scale. [51]

Moving towards a CE necessitates substantial transformations in design, production, consumption, use, waste and reuse practices. Overall, the aim is to keep valuable materials in circulation through a series of system feedback loops between life-cycle stages, powered through efficient industrial processes. [33]

Circular economy is about re-thinking and re-designing the way to make stuff. The 'Re-Thinking Progress' pursues how through change it can be re-designed the way our economy works - designing products that can be 'made to be made again' and powering the system with renewable resources. It inquires whether with creativity and innovation can be built a restorative economy. [2]

The crucial thing is also the economic benefit of circularity in business. The anticipated benefits of the transition to a circular economy (hereinafter CE) are estimated at \$ 1 trillion to the global economy in 2025, together with the emergence of 100,000 new jobs in the next 5 years. MVO Netherlands adds that a change in the economic system is being developed at all levels - social, sector, organizational, personal and individual level. [44]

CE has the potential to understand and implement radically new patterns and help society reach increased sustainability and wellbeing at low or no material, energy and environmental costs. [42]

3.1.1 Difference between linear and circular economy

In current linear system there are heavily drawn raw materials, which in turn are converted into products and services and after the end of their life cycle (often

very short) we dispose of them. It means that we permanently lose a valuable and scarce materials in rubbish dumps or waste incinerations. This solution may appear to be functional in terms of municipalities, businesses and households, but from a global perspective, there is necessarily notified unsustainable direction by which our civilization is confronted. Now we know that the linear model relies on large quantities of cheap, easily accessible materials and energy, and is a model that is reaching its physical limits. [46]

Circular economy is challenging linear way of thinking that says that the outcome of the process must be always directly proportional to input. It points out that any natural systems are able to be evolutionarily developed in a positive direction. Then it is talked about biometric aspect of the circular economy, to imitate nature in terms of resource efficiency and creating sustainable ecosystems. [2]

A circular economy is an attractive and viable alternative that businesses have already started exploring today. Concept deals with ways to increase the quality of the environment and human life by improving production efficiency. The products are not considered as a future waste, but as a source for further use. [46]

Circular economy that can utilize products and their components for further production and use, is promoted by the companies as well as the European Commission. The last more than 100 years, the global economy works rather by a linear formula. Firms are interested how to dispose of the product as cheaply as possible without thinking about how subsequently use it for further production. Change from linear to circular economy is a necessary condition for sustainable development of our society. It requires innovation in the reuse of materials, components, products and related business strategies. Waste is valuable and it is not solution to burn it or take it to a dump. Waste can be also used as feedstock of other product and circular economy shows the way how to achieve it. [2]

The transition towards the circular economy is an attempt to face the challenges presented by the modern world. As resources are both increasingly contested and used in a non-sustainable way, and the quantity of waste is rising at terrifying speed, the concept of production needs to be fundamentally changed. Waste can be used to improve the accessibility to resources for industry. This possibility – as per circular economy's tenets – needs to be incorporated already in a design phase of a given product. [48]

Circular economy can have a double effect on the environment – it will not only reduce the amount of waste that has to be managed, but it will limit the amount of harmful emissions. [45]

In conclusion the circular economy is gaining increasing attention not only in Europe but around the world as a potential way for society to increase prosperity, while reducing dependence on primary materials and energy. The circular economy represents huge opportunity for Europe. With its system, the circular economy has the potential to make better decisions about resource use, design out waste, provide added value for business, and proceed along a secure route to society. This is wide prosperity and environmental sustainability for future generations. Moreo-

ver the circular economy can shift the economic mix to increase the number of jobs at the same time. [50]

3.1.2 Cradle to Cradle

Cradle to Cradle concept is a new approach for designing intelligent products, processes and systems taking into account the whole life cycle of the product, optimizing material health, recyclability, renewable energy use, water efficiency and quality and last but not least social responsibility. [2]

As it is mentioned by Braungart and McDonough in their first publication where they have introduced this term (2002) , the circular economy concept is the circulation of resources in the economy and Cradle to Cradle design ensures that the product is recyclable. Products are manufactured, used and then recycled, without creating the slightest waste. Components that remain after use, could be again 100% used - for the development and use of other products. This is the basic idea of Cradle to Cradle®. The cycle of the product. A lot of companies implements it to its production.

The term was invented by the swiss architect Walter R. Stahl, who was a supporter of the production and consumption of high-quality materials with a long life with the possibility of reuse, repair or modification. Another shift occurred because of Michael Braungart and William McDonough, who began to popularize this concept at the beginning of the millennium, and thanks to whom it is getting into the political mainstream now. [2]

Cradle to Cradle design takes inspiration from nature where all materials used can provide "nutrition" for nature or industry, maximize material value and safeguard ecosystems. It eliminates the concept of waste entirely. The principles of this concept are: [2]

- eliminate the concept of waste
- use renewable energy
- celebrate diversity

Waste doesn't exist in nature, because the processes of each organism contribute to the health of the whole ecosystem. Designers select safe materials and optimize products and services, creating closed-loop material flows that are inherently benign and sustainable throughout the production, use, and take back stages. The Cradle to Cradle design paradigm encourages active development of solar derived energy instead of passively limiting power usage produced by traditional unsustainable techniques such as nuclear power and fossil fuel based power. The Cradle to Cradle design paradigm recognizes and values diversity in ecosystems, culture, individual needs and problem solving. [43]

The main purpose is to restore continuous cycles of biological as well as technical nutrients with long terms positive effects on profitability, the environment and human health. It distinguishes between two types of products depending on their behavior during use - products of consumption as biological nutrients in the

biological cycle and products of service as technical nutrients in the technical cycle. In the Fig.1 is scheme of biological and technical cycle. [2]

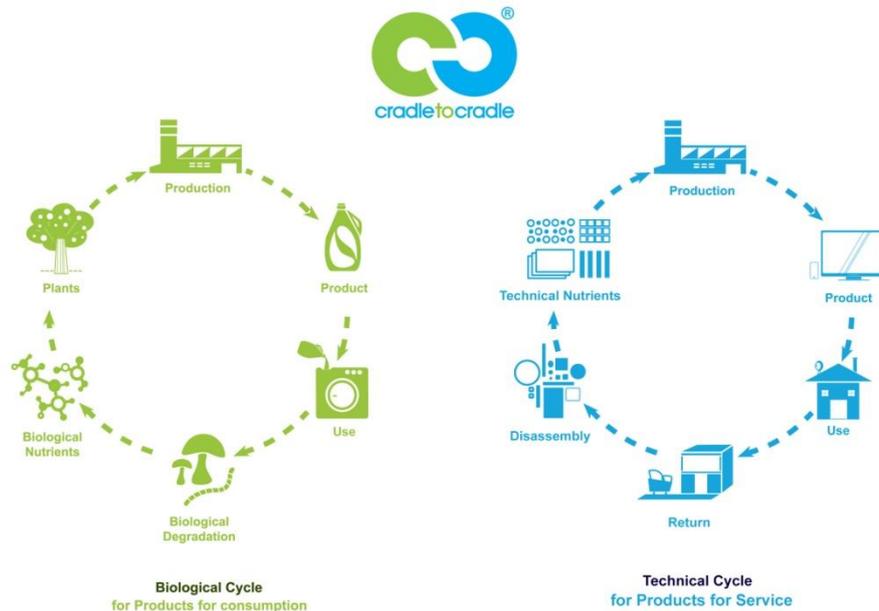


Fig. 1 Biological and technical cycle
Source: C2C Taiwan, 2016.

3.1.3 Green Supply Chain mechanism

Each firm that would like to hold principles of CE should have fully developed green supply chain considering sustainability for every participant at every step, from design to manufacture, transportation, storage, and use to eventual disposal or recycling. This system would reduce waste, mitigate legal and environmental risks, minimize and possibly eliminate adverse health impacts throughout the value added process, improve the reputations of companies and their products and enable compliance with increasingly stringent regulations and societal expectations. Thus it offers the opportunity to boost efficiency, value, and access to markets through improving a company's environmental, social, and economic performance. [43]

3.1.4 Reverse Logistics

The business concept of Reverse Logistics as a new trend, has received growing attention in the last decades, mostly because of the environmental impacts, competition, marketing motives and direct economic motives. With the legislative measures go up, there are not too much options left with the companies, than to go to Reverse logistics practices. Reverse logistics is a process where manufacturer sys-

tematically accepts preciously shipped products or parts from the point for consumption for possible recycling, remanufacture or disposal. A big amount of companies start to focus more on the reuses, remanufacturing, recycling and disposals of products and materials in their environmental management practices. [41]

Questions of reverse logistics is how to recover and reuse materials. Many companies already have rudimentary reverse systems to deal with customers' returns of items they do not want or that were found defective or otherwise unsatisfactory. An expanded reverse logistics system would ultimately replace the linearity of production methods with Cradle to Cradle design. The products are either recycled and placed back into the manufacture or broken down into compostable materials. [43]

Companies typically send items from consumers into the reverse supply chain by leasing their products or providing collection points or by other means of recovering the items once their service life ends. Companies that remanufacture their products are estimated to save 40–60 % of the cost of manufacturing a completely new product while requiring only 20 % of the effort. It is leading to significant and structural savings. [43]

3.2 Strategic management and marketing

Defined by Jakubíková (2008), strategic management is a dynamic process of creation and implementation of development projects that are crucial to the development of the company. It includes activities aimed at maintaining the long-term coherence between the mission of the company, its long-term objectives and also between the company and the environment in which the company exists, through defining the vision, objectives, strategies and portfolios for the entire company. The core of strategic management is strategy which is a function of top management. Here are appointed some examples of strategic decisions: [10]

- Vision and mission of company
- Goals setting
- Formulation and implementation of strategies
- Determination of roles within the company
- Decision about allocation of sources

Vision stands at the very beginning of the strategic management process. It represents a set of specific ideals and priorities of the organization, its image of a successful future, based on fundamental values or philosophy with which are associated goals and plans of the company. Vision answers the question of how the organization will look like in the future. A well-formulated vision conceals an innovative hub and creates positive feelings of all the people involved for motivation. It must be clearly formulated, realistic and well-communicating. [13]

Vision has three main objectives: [13]

- Clarifying the general direction
- Motivation of people
- Fast and effective coordination of efforts in the company

Strength of vision is that is common to all members of the organization. It is important not only to accept vision but also believe it. [14]

With the foundation of the company is important to formulate its mission. We should be able to answer following questions: What *is* our business? Who *is* the customer? What *do* consumers value? What *should* our business be? Successful companies raise these questions and answer them carefully and completely. The mission statement is a statement of organization's purpose - clear mission statement acts as an "invisible hand" that guides people in organization. [13] All of companies need to turn mission into detailed supporting objectives for each level of management. Objectives are desired future outcomes and depend on the organization's mission. Senior management has responsibility for the determination.

We can sort them according to importance, size, content, or time. They should correspond with the SMART rule, therefore, be smartly set and comply with the following characteristics: **S**pecific, **M**easurable, **A**greed, **R**ealistic and **T**rackable. All marketing strategies and programs must be developed to support objectives of the company. [10]

3.2.1 Principles of marketing

Marketing is a broad term that became the object of many economists. It belongs to the entire product development strategies, pricing policies, distribution or perhaps also a form of communication with customers and CRM (Customer Relationship Management). Almost every textbook has different definition of term marketing.

According to Solomon (2009), marketing is one of the activities carried out by organizations and a set of processes for creating, communication and providing value to customers and for managing customer relationships in a manner from which have benefit organizations and interest groups associated with it.

Figure 2 represents five-step model of marketing process. First four steps contain work to understand consumers, create customer value and build strong relationships with them. In the fifth final step, companies reap rewards of creating superior customer value. This is the simplest way, how to express procedure by which firm try to manage its marketing activities. [13]

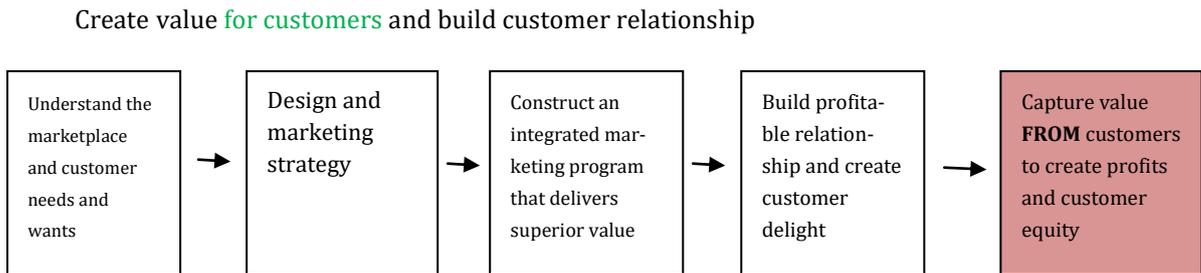


Fig. 2 A simple model of marketing process
Source: Kotler, Armstrong, 2014.

3.2.2 Objectives of marketing

In modern world, the objective of marketing is more than just making profit. According to Joshi (2012), the aims of marketing are following:

- Intelligent application of modern marketing policies
- To develop policies and their implementation for a good result
- To suggest solutions by studying the problems relating to marketing
- To find sources for further information concerning the market problems
- To strengthen existing marketing function
- To take suitable actions as required

Marketing objectives are divided into psychographic and economic and they are mutually interconnected. While economic goals focus on market transactions, psychographic targets are associated with unobservable mental processes such as increase brand/firm recognition, obtaining the effect of knowledge, reinforce attitudes, increasing preference and satisfaction etc. [10]

3.2.3 Importance of marketing to the society

Why does marketing play major role in today's society? It is connecting link between the consumer and the producer. It is based on communication whereas new items are brought to retail shops, where consumer can buy them. It helps also in increasing living standards of people (larger scale of production means that prices of goods come down and it leads to higher standard of living). Effective system of marketing reduces the cost to the minimum, this in turn lowers the prices and the consumer's purchasing power increases – this results in increase of national income. Likewise we can see contribution in increases of employment opportunities. For continuous production continuous marketing is needed so increased activity provides more job opportunities to many people. And last but not least, marketing helps in selling surplus goods to other countries where there is demand for such goods. [11]

3.2.4 Difference between Marketing and Selling

Till now only marketing was discussed. But what is the aim of selling? Selling is need of sellers and is internal aim of business. It has nothing to do with needs and interest of buyers, only with sellers. To see differences clearly, it is good to have a look on Table 1, which puts into contrasts particular characteristics: [11]

Tab. 1 Difference between marketing and selling

Selling	Marketing
Emphasizes product.	Emphasizes on consumer's wants.
Sales are the primary motive.	Satisfaction of consumers is primary.
First production, then selling takes place at a profit without knowing customer's needs.	First customer's need is known and then production takes place; then the product is sold at a profit.
Internal company orientation.	External-market orientation.
Company's need is the motive.	Buyer's need is the motive.
Cost determines price.	Consumer determines price.
"Selling" views the customer as the last link in the business.	Marketing views the customer as the very purpose of the business.
It is an activity that converts the goods into cash.	It is a function that converts the consumer needs into products.

Source: Joshi, 2012.

3.2.5 Marketing strategy

Strategy is sort of future plan of action, usually understood as being undertaken by senior management at high level of abstraction. [17]

Each company must find plan for long-run survival and growth. For this purpose will help strategic planning – process of developing and maintaining a strategic fit between the organization's goals, capabilities and changing marketing opportunities. The purpose of strategic planning is to find ways in which can company use its strengths to take advantage of attractive opportunities in the environment. [13]

At the beginning, company defines its overall purpose and mission. It was already explained in the second chapter "Strategic management and marketing". After that, mission is turned into detailed supporting objectives that guide the entire company. Next step, headquarters decides what portfolio of businesses and products is best for the company and how much to support to give each one. In turn, each business and product develops detailed marketing and other plans of departments that support the company wide plan. Thus, marketing planning occurs at the business unit, product and market levels and supports strategic planning with more detailed plans for specific marketing opportunities. [13]



Fig. 3 Steps in strategic planning
Source: Kotler, Armstrong, 2014, p. 39.

Guided by the company mission and objectives, management must plan its business portfolio (further "BP"). It is the collection of businesses and products that make up company. Strategic and marketing planning for business portfolios of large companies can be daunting but critical task. Planning of BP involves two steps. First, company should analyze its current portfolio and determine which businesses should receive more, less, or no investment. Second, it must shape the future BP by developing strategies for growth and downsizing. [13]

Last step of strategic planning is to explain marketing's role and how marketing works with its partners to create and deliver customer value. Marketing plays crucial role in company strategic planning in several ways. It provides guiding philosophy as well as inputs to strategic planners by helping to identify attractive market opportunities and assessing the firms potential to take advantage of them. Marketing also designs strategies for reaching department unit's objectives and once they are set, marketing's task is to help carry them out profitably. [13]

3.3 Communication strategy

According to Hanzelková (2009) a communications strategy is about WHAT we communicate to the customer. This is a very important element of the entire strategy, because communication is the key element of persuasion. Must be relevant and in line with corporate strategy. It is also important to distinguish it from the competition and be clear and striking. According to Pickton and Broderick (2005) there are eight types of communication strategies that are analyzed more in detail further.

Generic strategy

This strategy does not distinguish between different brands and focuses more on promoting specific products. The strategy aim is to support the growth of the market and the consumption of these products. Strategy is commonly used by monopoly suppliers and leading companies in the market. [4]

Pre-emptive strategy

General allegations combines with the claim that a given brand is something special. Competitors must ensure that their communication doesn't seem like it only imitates the first competitor. Strategy is appropriate for markets where other competitors use a general strategy or where competitors are not profiled in communication. [4]

Unique selling proposition strategy

This strategy, as the name suggests, is based on communicating the unique features of the product that differentiates it from the competition. [4]

Brand image strategy

The strategy is based on building brand image. Image is something that differentiates the brand from competitors. This type is used mainly in markets where competing products are very similar. [4]

Positioning strategy

The effort of strategy is to create a mental niche that defines the brand against competitors. Mostly is then used to define against the leading brand in the market. [4]

Resonance strategy

Communication strategy which raises earlier experiences, thoughts and associations for the target group that are relevant to it. This strategy uses the example of Raiffeisenbank (TV commercials, "What bothers you at your bank?"). [4]

Affective strategy

It is trying to provoke the audience emotions. [4]

Information strategy

As the title implies, the purpose of this strategy is to give customers as much relevant information as possible that would be difficult to look for. It is suitable for the types of products whose characteristics are not well known, and the customer must be rationally convinced of their purchase. [4]

3.3.1 Marketing communication tools selection

All tools and activities, which the company uses to communicate with the customer, together form the communications mix. Marketing communication is the collection of all elements in an organization's marketing mix that facilitates exchanges by establishing shared meaning with the organization's customers or clients. [25] The communication mix form depends on many factors - product type, objectives of marketing communications, the type of competitive environment, etc. According to Pickton and Broderick (2005) company should decide about communication tools according to what product categories covers. The more products fall into the category permanent industrial products (eg. investment units, machinery, expensive corporate education), the more the manufacturer should prioritize personal sales, PR and suppressing the other components of the communication mix. On the contrary, a purely consumption goods (food, clothing, etc.) should be emphasized in advertising and sales promotion.

3.3.2 Integrated Marketing Communications

Interdependence of all communications activities, which leads to the creation of communication tailored to individual target groups - it is an integrated marketing communications. It is a comprehensive process involving analysis, planning, implementation and control of all personal and impersonal communications, media, communications and sales support tools, which are aimed at a selected group of customers. The process is planned and organized so that customers receive clear, understandable, consistent and compelling message. In integrated communication are used multiple communication tools and channels at once. The ratio of each tool usage depends on the chosen strategy and the type of product that we communicate. Thanks to integrated marketing communication (further "IMC") company can achieve synergistic effect, ie. one communication channel effect strengthens the effect of the second tool and thereby increases the overall effectiveness of the communication entity. [16]

IMC takes a holistic approach to communications and drives an organization to consider the total impact of all of their communications activities at any one time. Directly impacting upon marketing planning by acknowledging that all aspects of organizational communication have the potential of affecting all stages of the customers' buying process. [6]

By Příkladová, Jahodová (2010), IMC has four main advantages:

- targeting - addressing each target group in another way
- economy and efficiency - with the appropriate mix of instruments
- clear positioning of brand - to create a unified and clear image in the minds of customers
- interactivity - dialogue and listening opinion of the person to whom the message was intended

Sum up, it brings together all the company's messages under one campaign to promote a single, clear and consistent positioning statement. IMC is strategic two-way communication targeted to specific customers and their needs coordinated through variety of media. Content and delivery of all messages are the result of an overall plan. Delivery of messages is synchronized so that synergy can be reached. It is two-way dialogue between marketer and the target audience. Feedback is very important because without feedback marketing cannot move towards desired results. Process seeks the answer to the question concerning what the customer needs or wants to know in order to make next decision - mostly purchase. [12] During setting the objectives of marketing communication, it is necessary to be acquainted about four different levels in company (Figure 4). Each level communicates in different way. [5]

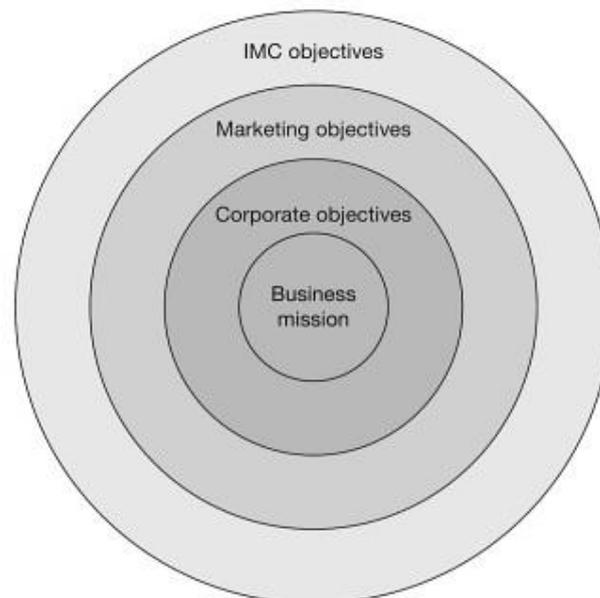


Fig. 4 Layers of organizational objectives

Source: Eagle, Dahl, 2014.

Integrated marketing communications objectives are formulated to support other objectives - mission, corporate and marketing. These objectives take many forms

and relate to factors that can be directly influenced by marketing communications. They include such things as levels of awareness, degree of positivity toward the product or service and likelihood of trial. Here are listed some examples of IMC objectives: [5]

- to increase awareness of respective brand by x % over the course of a specified campaign
- to increase levels of trial of the brand by a given segment by x % over the course of specified campaign
- to increase consumer positivity toward the brand relative to its rivals over the course of specified campaign

3.3.3 Elements of marketing communication

The elements of communication mix are integrated to form a coherent campaign in relation to entire corporate strategy. The basic elements of mix are:

- Advertising and internet marketing¹
- Personal selling
- Sales Promotion
- Public Relations
- Direct marketing
- Sponsorship
- Event marketing
- Trade fairs and exhibitions

First of all it should be made clear distinction between marketing communications tools and the media that may carry their messages. [6]

Marketing communication tools - processes by which marketers develop and present an appropriate set of communication's stimuli

Media - Channels through which the communications are carried (e.g. television, internet etc.)

¹ Internet marketing with all its elements is specific type of advertising, so some general characteristics of advertising may differ from characteristics of internet (online) marketing

It is important not to confuse "tools" and "media" because they have different characteristics and serve different roles. It is also important to distinguish these terms because aspects surrounding electronic media (e.g. the internet) are frequently posited as processes set apart from other aspects of marketing (e.g. e-marketing, Internet marketing, etc.). From the perspective of marketing communicators are Internet with other electronic channels an additional mediums of communication. [6]

The different tools have different strengths and weaknesses, which will be discussed later, but there are a number of other critical considerations that also need to be taken into account during planning activities which according to Egan (2014) include:

- The amount of time available to develop the communication message and format
- How much control is required over its delivery
- The extent of financial resources available for its production
- The skills and expertise available for its creation
- The respective levels of credibility that each tool and its delivery media add to the organization/brand
- The relative size and geographic scale of the target audience

Advertising

For many companies advertising is the most important element of communication. It is a paid form of impersonal presentation of the company, product or ideas. Advertising is bringing a product to the attention of potential and current customers. Advertising is focused on one particular product/service or image of company. An advertising plan for one product might be very different than that for another product. [52]

This type of communication is widely used by firms to reach out to geographically distributed consumers in a large scale. It could be through media as television, newspapers, billboards, radio announcements etc. [25]

This is a one-way form of communication because it is not personal, it may cause less convincing. Price for advertising can range from a few euros (mostly online advertising) to million euro (TV advertising in prime time, high interference). [25]

Advertising strategy is a plan of action that is based on four activities: setting objectives, formulating budgets, creating advertising messages and selecting a media and vehicles. [25]

Advertising objectives should be always in cooperation with promotional and marketing objectives, as well as the business strategy or mission of the organization. Objectives are the goals that advertising efforts attempt to achieve. Examples include increase of sales, consumer awareness and favorability of attitudes. [25]

Advertising objectives fall into following **three categories**: [25]

a) Informative advertising

Informative advertising is often used for launch of new product, or for an updated or re-launched product. The aim is to develop initial demand for a good and service. It is used when a new product is put on the market or when an old product has been updated or re-launched. It tells about the product, explain how it works, provide pricing and product information, and should build awareness for the product as well as the company. The image of the product and the company should be compatible. It should provide enough information to motivate the consumer to take some sort of action. [25]

b) Persuasive Advertising

Marketers use this type of advertising to increase the demand for an existing good or service. The idea is persuade a target group to change brands, buy their product, and develop customer loyalty. Persuasive advertising is highly competitive when there are similar products in the market and products are competing for their market share. The winning product will differentiate itself from the competition and possess benefits that are superior to, or compete strongly with, the competition. [25]

c) Reminder Advertising

Reminder advertising reinforces previous promotional activities. It is used to keep the people interested in, and aware of, a well-established product that is most likely at the end of the product life cycle. [25]

As you can see in the following table, the advantages and disadvantages in different types of media vary considerably. For example advantages of television are broad reach, persuasiveness, increase of image etc., but the disadvantage is the long time production and high production cost. In this area Internet advertising gets the upper hand - often the time that we need for the production is very short, but impact may be huge if the targeting is done well. Moreover, it doesn't cost too much. TV advertising can be paid very often only by large corporate companies that want to keep the image and consolidate market position. According to print media, they are facing an increasingly lower readership, plus the effect of advertising is very difficult to measure. Again, mostly used to enhance the brand image, for example billboards are very effective for local products and events - for example concerts and festivals.

Tab. 2 Electronic media

Tools	Advantages	Disadvantages
<i>Electronic</i>		
TV	broad reach mass impact repeatability flexibility high prestige persuasiveness demonstration of product increase of image brand awareness product placement	temporariness high cost long time production limited content of message no operational change lack of selectivity restlessness of people
Radio	extent impact fast preparation process low cost selection mobility interactivity	sound only temporariness limited reach additional media limited content of message
Internet	worldwide reach continuous exposure high targeting flexibility and quickness low cost high credibility interactivity	the need for connection the required expertise
Cinema	selection flexibility repeatability persuasiveness demonstration of product brand awareness increase of image product placement	limited content of message no operational change long time production temporariness

Source: Hanzelková, 2009.

Tab. 3 Print media

Tools	Advantages	Disadvantages
<i>Print</i>		
Newspapers and magazines	flexibility selectivity reader affect the length of attention prestige	short life-time inattention when reading
Outdoor (billboard, display-case...)	fast communication long duration / regular high reach local support	brevity weather conditions difficult assessment

Source: Hanzelková, 2009.

Internet marketing

Powerful internet and mobile technologies have rapidly increased company efforts to market their products and build customer relationships through social media, websites, mobile apps, e-commerce, online promotions etc. There is a chance to create online presentation and find out the best way how to communicate with target audience in a cost-effective, quick and reliable way. However, firm should be aware of the various legal and ethical issues surrounding marketing communications, respect customer privacy and adhere to social norms and government regulations while building a powerful marketing communications mix for better organizational growth. [3]

Internet marketing tends to refer to external perspective of how the internet can be used in conjunction with traditional media to acquire and deliver services to customers. Internet marketing (also e-marketing) can be used to support these aims as follows: [3]

Identifying - can be used to marketing research

Anticipating - provides additional channel by which consumers can access information and make purchases

Satisfying - this is key success factor in e-marketing and company should adjust all activities to make consumers satisfied

Building long-term relationships with customers is essential for any business activity and this applies equally to online elements of business. Failure to build relationships can cause huge expenditures on customer acquisition. Over the last decade, relationship marketing, direct marketing and database marketing have combined to create a powerful new marketing paradigm. This paradigm is often referred to CRM = customer relationship management, which develop connections with particular customer segments or individuals. And because some forms of direct marketing are expensive, many companies are moving towards online environment, where they can easily find out consumers needs, answer their questions or draw inspiration for future development. We name it as e-CRM and it involves creating strategies and plans how digital technologies and data can support relationship with customers. [3]



Fig. 5 Internet marketing
Source: Advertising Networks, 2016.

Website

Web presentation is the cornerstone of the company in the internet area. There are usually published information about the company, its mission and field of activity, the list of business premises and last but not least offer of products and services plus their specifications. It's the easiest way how can company communicates what the customer needs to know. During web creation it is necessary to follow these basic rules: [7]

- Follow the rules of web design and web standards that ensure high levels of user-acceptable appearance, high usability and platform independence
- Respect the principles of unified visual style, that means to use a small set of similar design elements, the same color scheme, the same colors, logo, etc. In the long term it strengthens and builds brand image and has a positive impact not only on customers, but also to potential investors.
- To encourage web accessibility, to avoid penalizing disabled customers (whether auditory, visual or otherwise) and to be able to visit the website from mobile devices (adapt it for multiple formats) [7]

Social media

Social media are tools allowing people to create, share or exchange information. It is very strong tool because firm can easily communicate with people on informal

basis. Very big advantage is that consumers often don't recognize advertising there. They go to social media to have fun, share information and get in touch with events and news of their submitted fanpages. [21]

Social media fulfils a basic human need: to communicate. We are social animals that love communication with each other. Social media are helping us to communicate more easily, to more people, whenever we want. That is why social networks like Facebook, YouTube, Twitter and blogs are so successful. Social media lets customers communicate with each other and organizations communicate with their customers. It allows marketers to listen to customers and opinion formers (and other stakeholders), channel their feedback into suggestions and new product ideas, and even test out new concepts and brand names, while all the time engaging customers, developing higher levels of customer loyalty and nurturing brand ambassadors. [21]

Monitoring the frequency of blog posts, comments, discussions, reviews and firm profile updates helps to identify opportunities and also acts as early warning system to any future problems. Some companies ask customers for product rating or even post a product review as a standard part of their after sale strategy. A customer who doesn't care about the product tends to be less committed or less emotionally attached to the brand. On the other hand, a customer who is engaging is more emotionally connected to the brand. All marketers need to know about the opinion a customer has towards a brand. This is often expressed through repeated visits, ratings, reviews, discussions, comments and, ultimately, their likelihood to recommend a friend. [21]

Each application consists of social network - a set of nodes, that are its members. Members are connected by their relationships with each other. It is based on various affiliations (friendship, shared experiences, hobbies and interests). The most common social platforms are Facebook, Twitter, LinkedIn, YouTube and Instagram. [22]

Discussion Forums

There is an incredible amount of discussion forums on the internet, and it is up to the company, how it can deal with it. It's good to talk with customers, advise them and read both positive and negative responses to respective products or services.

Mobile apps

With the boom of smart phones we are often encountered with the development of applications that support the brand image and facilitate customers to conduct transactions, highlight special offers and offer added value in the form of entertainment.

RSS readers

The Internet is a huge space and with more than a billion existing pages there is a wealth of great sites offering fantastic content free of charge. But with such a massive content produced each and every day, it can often be tough to keep up with all your favorite websites. But RSS could be a solution. It is about simplifying the way to view and digest content on the internet. RSS aggregator, also known as feed reader, is a program that runs in the background and constantly waits for favorite sites we have chosen to post new content. When something new pops up on a site which people subscribed to, it instantaneously gets sent to their feed reader. It is good to keep in mind this gadget when new website is in construction. [52]

Online advertising

A few lines back we covered all platforms where the company can present and interact with customers. Part of the internet marketing mix, however, is the ad itself. The first type of online advertising is banner advertising. Banner advertising is a rectangular graphic display that is situated on the top or bottom of a website or down the right or left sidebar. Banner ads are based on image rather than text only and it is a popular form of website advertising. The purpose of banner advertising is to promote a brand and get visitors from host website to advertiser's website. [47]

Email marketing is one of the most powerful elements in digital marketing toolbox. It lets company easily communicate with customers on a personal level through universally accepted digital medium. And because competition is high, it is necessary to follow newest trends in email marketing and constantly surprise all receivers. The most common form of e-mail communication is sending news and interesting offers through the newsletter. And though it may be seemed as sending out of annoying spam messages to mailboxes, email marketing is still one of the strongest weapons of online marketing as a whole. [18]

Another type of propagation can be viral marketing - it is a business strategy that uses existing social networks to promote a product. Viral marketing is useful as a stand-alone marketing tool or as a part of a larger campaign that uses multiple kinds of marketing. It is especially attractive to smaller businesses or companies because viral marketing can be a cheaper alternative to traditional marketing efforts. [26]

Pay-per-click (PPC) is a method of purchasing targeted advertising space on Internet platforms that takes advantage of organic search terms (search engines are some of the most prolific providers of PPC space). Advertisers pay the owners of a web space, such as a search engine results page or a specific webpage, a certain amount of money each time an Internet user clicks on their specific advertisement. This takes many different forms and has evolved since the technology was first introduced at a 1998. In Czech republic PPC campaign take place mostly in Google, Seznam and Facebook. [26]

Strong content not only draws readers to a website, but also benefits a page's rankings on search engines. Content marketing is the practice of publishing fresh, relevant, and useful content to engage consumers, with the intention of attracting them to your company. Websites, blogs, magazines, newsletters, mobile apps, social media, progress reports, news articles, content aggregate sites, and many other venues can be great sources for content marketing. [26]

Another type of online advertising are Pop-up ads. It is a form where ads appear in a separate window that materializes on the screen seemingly out of nowhere when a selected web page is loading. [26]

Personal selling

Personal selling is effective way to manage personal customer relationship. The sales person acts on behalf of the organization. They are well trained in the approaches and techniques of personal selling. This type of communication is highly persuasive and is very often used in markets where personal choice figures strongly in the purchase (for example cosmetics). [24]

Sales Promotion

Sales promotions tend to be thought of as being all promotions apart from advertising, personal selling and PR. We can sort here coupons, money-off promotions, competitions, degustation etc. [24]

Public Relations

It is deliberate, planned and sustained effort to establish and maintain mutual understanding between organization and public. We can split PR activities into proactive - communications designed to build understanding and reactive - communications designed to counter misunderstandings. [24] Firm can use company news, promotional events, leaflets etc. along with other promotion tools to reach out to prospective customers. Such a campaign is very cost-effective while reaching out to a larger audience.

Direct marketing

This is a highly personalized communication tool that is addressed to a specific customer through platforms such as email, telephone or mobile messages, online media etc. It also allows for interaction with customer and is mostly used as a targeted marketing approach. [24]

Sponsorship

Sponsorship is where organization pays to be associated with particular image, cause or event. The attributes of sponsored event are then associated with sponsoring organization. It makes brand and image stronger and could be very efficient. [24]

Event marketing

Event marketing involves face-to-face contact between companies and their customers at special events like concerts, fairs, conferences etc. Companies use it to reach consumers through direct confrontation and disclosure of information. A successful event marketing campaign provides value beyond information about a product or service to people who attend. In contrast to traditional advertisement, which blasts many and many consumers with the same general television, radio or billboard message, event marketing targets specific individuals or groups at gathering spots, in hopes of making quality individual impressions. To this area we can assign also trade fairs and exhibitions. [24]

Trade fairs and exhibitions

The purpose of trade fairs and exhibitions is to increase awareness through face-to-face contact with customer. It is big opportunity for company to meet with both, the trade and the customer, for both to build relationship outside traditional sales meetings. This tool is heavily used in B2B sector, especially within technology and engineering based products. [24]

3.4 Marketing research

It is appropriate to begin with some definition. For example The European Society for Opinion and Marketing Research defines marketing research as follows: "*Marketing Research is a key element within the total field of marketing information. It links the consumer, customer and public to the marketer through information, which is used to identify and define marketing opportunities and problems.*"

The problems addressed by marketing research are as varied as the methods. Most common issues include forecasting, buyer analysis, segmentation, choice processes, information processing etc. It is also important to note, how marketing research differs in various situations. A consumer preference study regarding a new choice of soft drink can involve large sample surveys or experiments as well as employment of advanced statistical methods. On the other hand, a study understanding the buyer behavior related to soft drinks may involve a longitudinal study, which is carried out over a long period of time. [19]

3.4.1 Steps in marketing research project

Marketing research does not begin with a questionnaire or a focus group interview or any other research technique. It begins with carefully thought-out plan for the research that includes: [20]

- statement of the management problem or opportunity
- a set of research objectives
- statement of research methodology to be used in project

Marketing research project includes steps as follows: [20]

Defining the problem

The starting point in research project should be an attempt by user (researcher) and provider of information (management) to clearly define the problem. Mutual understanding and agreement are necessary at this point of research process. Failure of any party to understand or clearly define the major issue requiring information will surely lead to wasted effort. It is very important to establish understanding between the decision maker and the researcher as to the role the research will play in providing information for use in making decisions. First step is determining the role of research in solving the management problem is to identify decision alternatives. Second step is to determine decisional criteria - what are we seeking for. Researchers are responsible for ensuring that the research purpose fits not only decision criteria needs, but if it is consistent with timing and significance accorded the research and decision-making process. [20]

State research objectives

Research objectives consist of questions and hypotheses, while questions represent a decomposition of the problem into series of statements. Objectives serve to guide research results by providing direction, scope of given project, and serve as the basis for developing the methodology to be used in the project. The provider of information usually assumes the role of interpreting needs and developing questions that serve as a basis of negotiation for final research objectives. Hypotheses are speculations concerning specific findings of the research. They may be really helpful when their presence results in actions taken by the researcher that might not have occurred in the absence of hypothesis. If the presence of hypothesis is no way affects the research, then it is superfluous and does not need to be stated. [20]

Determination of research methodology

Once we have established research questions and hypothesis we must plan design, by which we will get answers to our questions and test our hypotheses. Researcher must be flexible in order to make changes to both the research questions/hypothesis and the design in the course of conducting the research. The research design will involve the use of one of more three broad categories: exploratory, descriptive, casual. Exploratory research is usually used when the management problem is vague or can be only broadly defined. This type of research may involve a variety of techniques (focus groups, in-depth interviews, case studies...) and is characterized by flexibility allowed to researchers in the exploration of relevant issues. Descriptive method is conducted when there is a need to measure the frequency with which a sampled population behaves, thinks, or is likely to act or determine the extent to which two variables covary. This type of research must be highly structured. Casual research is highly structured as well and includes exercise of control over variables in order to test cause-and-effect relationships between variables. Researcher must also identify specific methodology that will be used to collect the data. Decision include determining the extent to which the questions will be answered using secondary data (they have been already collected for other purposes), or using primary data which are collected explicitly for the research study at hand. Last but not least we should determine methods used to measure and analyze data. The major criterion is the nature of the analyzed data. Data analysis used to be most troublesome for many researchers. It is important to identify how information will be measured before data-collection instrument is developed. Researchers are trying to answer question: "How will we measure what we need to measure? The data collection instrument must accomplish more than merely generating measures, it must provide insights that lead to better decision making. The last part of preparation process is to define the population or universe of study. The universe includes all of the people, stores or places that posses some characteristic management is interested in measuring. It must be defined for each project and becomes the group from which a sample is drawn. The list of universe elements is sometimes referred to as the sampling frame. It is important that the sampling frame include all members of population. Sampling methods include determination of techniques and sample size. There are two broad categories of sampling techniques - probability and non-probability. For probability designs the objective is to draw sample that is representative and useful. For second alternative the objective is to select a useful sample even though it may not be representative of the population it comes from. Determining sample size which is needed to accomplish the research objectives requires both analysis and judgment. [20]

Data collection

Once the planning stage of research project has been carried out, the plan is now ready for execution. First stage of this execution is data collection. The timeframe may differ case to case. It can be collected few weeks, months as well as years. [20]

Analysis and interpretation of findings

Data should be analyzed by technique outlined in research plan. After this step, researcher must interpret the results of the findings in terms of the management problem for which data were collected. This means determining what the results imply about the solution of problem and recommendation of course of action to management. [20]

Presentation of results

Final step of marketing research is undoubtedly presentation of results. They should be beneficial for future development of company and serve as guideline for future plans developing and decision making processes. [20]

3.4.2 Methods of marketing research

a) By purpose

We do marketing research for several reasons. It may be a forecast of future development or description of current status. But it can be also divided on the basis of whether we describe the phenomenon, explain the causes and relationships or just monitor the environment. The various types of research summarizes the following figure according to Kozel (2006):

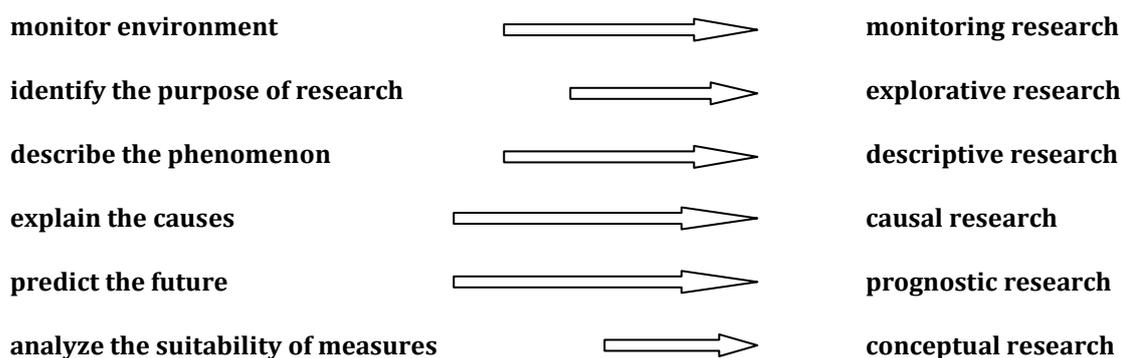


Fig. 6 Marketing research according to purpose
Source: Kozel, 2006

b) By source

We distinguish two types of research according to source - primary and secondary. Primary marketing research is a kind of research which is done by the business or company itself with the objective of gathering information that can be used to improve the products, services, and functions. Primary marketing research is also known as field research since it's research done from scratch, without using any information that is already made available through other sources. Primary marketing research is the most common and valuable type of a market research method. It is method which only answers specific questions and not irrelevant issues. [29]

As opposed to primary marketing research, secondary marketing research is a research technique that doesn't aim to gather information from scratch but relies on already available information from multiple sources. This research focuses on data or information that was collected in past by other people and is available for either free or paid use for others. Secondary marketing research takes into account many different sources for collection of useful information including government data, office data, newspapers, magazines, the internet, etc. One of the benefits of doing secondary market research is that it is mostly free and takes not too much time. [29]

c) By methodology

Qualitative marketing research is a kind of a research method which mainly takes into account the opinions and feelings of a customer as far as a business's products and services are concerned. This type of research tries to get behind the customer's mind to understand what they see lacking or whether they truly like the product or not. Some examples of qualitative research work include doing face to face interviews, being part of focus groups, etc. Quantitative marketing research is a kind of research that is based on hard facts and statistical data rather than the feelings and opinions of the customers or consumers. This type can prove useful both in terms of primary marketing research and secondary marketing research. Some of the examples of quantitative research include exit surveys, questionnaires, on-site fieldwork and the shopping bag survey. Another example of quantitative research includes exploring of the previously existing financial reports, and research papers. This type of research comes out with a wide range of statistics. [29]

3.4.3 Primary marketing research

Now it is time to explain some basic methods of collecting primary information that are most commonly used and applied.

Observation

There are two major observation techniques used in primary research, and they are observation through interaction and communication with the subject and ob-

ervation through no interaction and communication with the subject. This form of research method comes under the quantitative primary research since through it; researchers evaluate the behavior of respondents in general. This is more of a personal approach in comparison to surveys and questionnaires. [29]

Experimentation

This method involves scientific tests where hypotheses and variables are used. This is a quantitative type of research which may either be controlled out in the field or within controlled environments. [29]

Types of experiment according to Kozel (2006):

Laboratory experiment takes place in artificial environment that was created specifically for the purpose of the experiment. Respondents are invited into the prepared environment and they carry out various tasks according to the instructions of the head of experiment. The validity of the experiment may be decreased because the participants know about the experiment generally and may behave unnaturally.

Field experiment is conducted in the natural real situations. Features of environment are unchanged and testers often do not know that they are part of the experiment and behave naturally. An example of such an experiment may be, for example testing of a new product in households.

Surveys and questionnaires

Another highly effective way to conduct primary research is through surveys and questionnaires. The term 'surveys' is a broad term that covers a lot of things such as survey questionnaires, survey interviews, customer satisfaction cards etc. One of the most common examples of this research method is the feedback paper given to customers at the time of billing at a restaurant. It is a straightforward technique of knowing whether or not the customer is satisfied with the business's existing services and products or what kind of changes would the consumer like to see. Surveys are also conducted in form of web questionnaires that enable businesses to collect a lot of opinions and then analyze it for further administration. [29]

Questionnaires represent the form (paper or electronic) with a series of questions to which respondents are answering. It is a way of written controlled interview with the difference that it is less time consuming and enables rapid data acquisition from a large number of respondents. Possible influence of interviewer on the respondent is excluded during the interview. Respondent answers anonymously, thus he is more open to issues that wouldn't be answered personally. Possible risk is that respondent may not fill the entire questionnaire or answer false / in-

correctly. Questioning is divided into personal, telephone, online and writing, where the first named has the highest response rate (around 90%). [29]

Significance of questionnaire consists of four fields: [29]

- gain information from respondents
- providing structure and streamlining the interview process
- ensuring a uniform standard nuts for writing data
- facilitation of data processing

Depth interview

It is qualitative approach of primary marketing research that takes into consideration the kinds of choices and preferences a respondent base has. Interviews involve interaction between one moderator and one respondent and several types of modes and methods may be used to conduct them. Interviews may not be always restricted to a set pattern of questions but can also be in the form of a conversation with the target customer base or audience. [29]

The depth interview seeks an in-depth understanding of a topic that the research informant is able to speak about. It is formal and often lengthy interview. Rather than superficial excavation of the respondent's knowledge about a topic or behavior, it tries to go more deeply into the subject as the interview proceeds. It is special type of conversation and differs from survey research where questions are fixed and in fixed order. This method uses something like protocol, that contains list of topics (instead standard list of questions). [1]

Focus groups

One of the main ways used to conduct primary research is through focus groups. It involves getting a group of people in a room or a place and asking them insightful questions regarding the product, its development, their preferences, and feedback etc. (web) Focus groups remain the most commonly used qualitative method in business. The reason for the popularity of focus groups include being relatively quick, easy and inexpensive to conduct. Well-conducted focus group can also result in free-form sharing of opinions if the moderator is able to nurture creative environment in which participants are accepting, there are no wrong answers, and diversity of opinion is healthy. The optimal number of participants for focus group is 6-12 people. [1]

4 Methodology

This thesis consist of two main parts - theoretical and practical. The theoretical part is a summary of literary knowledge using books and electronic sources. Part is divided into four basic areas - principles of circular economy, strategic management and marketing, communication strategy and marketing research.

The results of this work are presented in the practical part and are based on secondary and primary data. Secondary data are drawn from internal sources and website of INCIEN institution, the official website of the European Commission and press releases and documents in it, and last but not least from the report of Green-Biz Group research study, which describes attitude of companies to principles of circular economy. Based on the obtained results, primary data will be analyzed afterwards. They are gained from quantitative research as well as qualitative research.

The last section brings practical recommendations including proposal of communication strategy towards two target groups of circular economy - public and firms.

4.1 Quantitative research

The main objective of quantitative survey is to determine the attitude of the public towards circular economy. As most suitable method was chosen questionnaire in order to get as many respondents of general public as possible. In the beginning, after discussion with the supervisor there was set a minimum number of respondents = 300, which was fulfilled. Altogether 325 respondents participated in the survey living in the Czech Republic. The structure of respondents was set based on the age which means that quota sampling corresponds to age structure of population in Czech republic. The survey was conducted via software Survio.

The questionnaire survey was carried out during March 2016 in electronic and writing form. It was evaluated about 30 questionnaires in writing form, mainly from the respondents of the oldest age category.

4.1.1 Questionnaire composition

The questionnaire contains 20 questions and is divided into four parts according to the nature of the questions. At the beginning there is short presentation of the survey and acknowledgement for participating. The first part of the task is to identify the level of awareness and knowledge of circular economy sector. The second part examines the degree of public interest in sustainable economic system, ie. whether people met with a green approach when buying things, whether they recycle waste and whether they think there are well set conditions for recycling in Czech republic. The third part is the most important and related to the degree of use of communication channels and potential for communication with the public - whether it

is / is not interested, and so on. The fourth part is purely identifying where the respondents state basic information about themselves.

Questions are largely mandatory (total 17), the filter optional questions are only three (only for the relevant portion of respondents who answered the previous question "YES"). Interview combines questions closed, open, and the scale battery of questions accompanied 4-points scale (1 = not use; 5 = I use frequently). One of the scale questions assign the task to respondent - division of 100 % between two answers, with further scale questions respondent should assess by the scale range of 1-5 (1 = worst, 5 = best).

4.1.2 Pretest and distribution of questionnaire

Pretest is an important part of the research. Pretest took place before launching of questionnaire and it had 10 participants in total with representation of all age categories. After pretest some questions were supplemented or reformulated. Pretest ensured clarity of all respondents of all ages.

The questionnaire was distributed primarily electronically through social network Facebook, further was distributed among friends, work colleagues and acquaintances and colleagues of family members.

4.1.3 Hypotheses

Before data collection null hypotheses were determined which were further evaluated by contingency tables. The significance level alpha (α) was set on the level of $\alpha = 0.05$ (the result is 95% correct). Using the p-value of Pearson's chi-square and significance level null hypothesis were subsequently rejected or approved. For measuring the intensity of dependence was used contingency coefficient (e.g. resulting value from 0.1 to 0.3 indicates a weak correlation).

Following hypotheses were formulated:

- H_0 - Knowledge of the concept doesn't depend on the age
- H_0 - Knowledge of the concept doesn't depend on the education
- H_0 - The level of awareness doesn't depend on education
- H_0 - Interest in further education doesn't depend on gender
- H_0 - Using of online media doesn't depend on the age

4.1.4 Structure of respondents

As it was mentioned above, respondents were selected through quota sampling. As quotas was established one of the major characteristics - age. For the selected quo-

ta were searched in available statistical sources proportions of the various categories of population, and those proportions are also preserved in the actual selection of respondents. The questionnaire was being worked with all age categories. No minimum or maximum age limit has been determined, two categories have been merged, since the sample of respondents in this age category for the purposes of the questionnaire is quite the same (35-55 = middle aged people, economically active, with a similar approach to both online and offline media). Data concerning the age structure are from the Czech Statistical Office on the 2nd quarter of 2011 (the date of the last census). Comparison of sample and population can be seen in the table below.

Tab. 4 Distribution of respondents

	Absolute frequency	Relative frequency	Absolute number of respondents	Relative number of respondents (%)
0-24	2786546	26,50	84	25,80
25-34	1626986	15,50	51	15,70
35-54	2976152	28,20	101	31,10
55-64	1492710	14,10	43	13,20
64 and more	1658938	15,70	46	14,20

Source: Czech Statistical Office, 2011.

From a total amount of 325 respondents participated in the questionnaire survey of 195 women (60%) and 130 men (40%). It is supposed that this difference is due to the generally greater willingness of women to engage in opinion polls and the longer time spent on social networks (because of maternity leave, etc.). It is also due to the fact that Facebook is in the Czech Republic more used by women and main distribution of survey was carried out there.

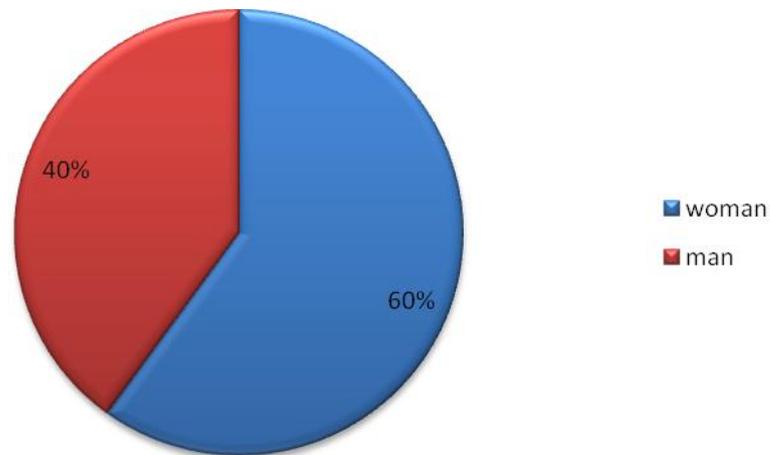


Fig. 7 Structure of respondents according to gender
Source: Quantitative research, n=325.

Over half of the respondents are people of university education (56%). In second place are the respondents with high school with diploma (36%). Furthermore, in the survey are involved persons who have reached higher professional education (5%), apprenticed people (2%) and the rest are people with completed primary education (1%).

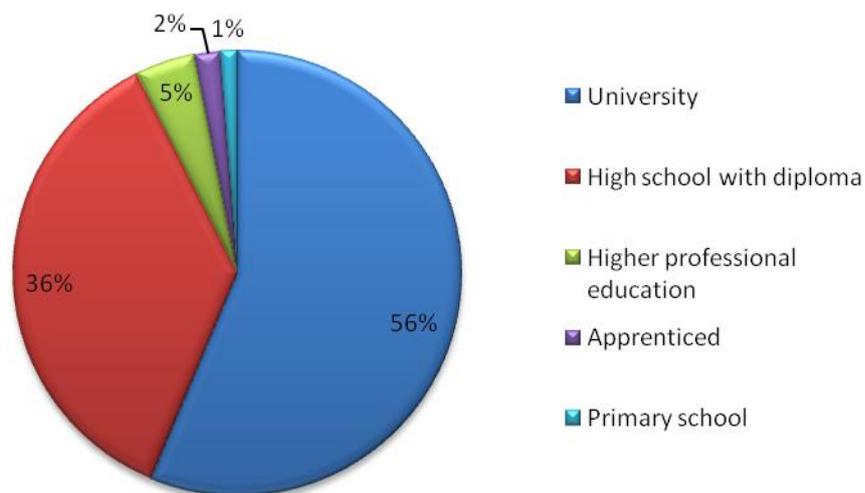


Fig. 8 Structure of respondents according to level of education
Source: Quantitative research, n=325.

Last identification question was the size of the municipality where the respondent lives. Most respondents (47%) live in municipalities with more than 100,000 inhabitants. The second largest group of respondents lives in a village of 5,000 people and this group is followed by respondents from the city about the size of 5000-50,000 inhabitants (21%). The smallest group create people from medium-sized cities (8%). Let's have a look on Figure 10.

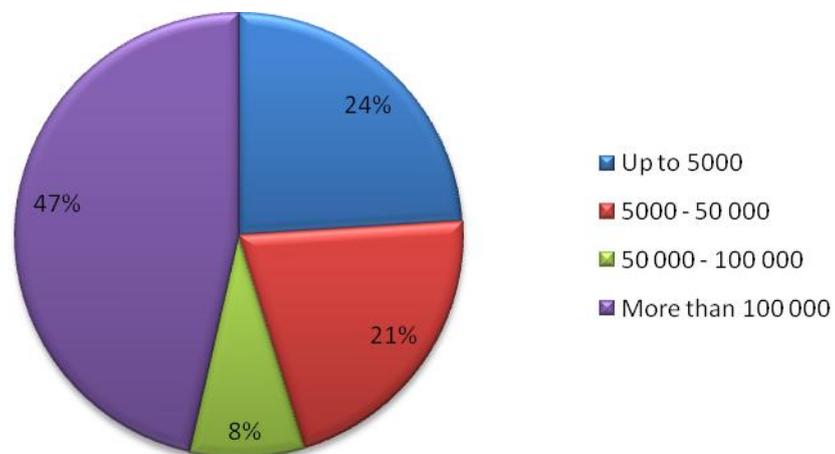


Fig. 9 Structure of respondents according to place of residence
Source: Quantitative research, n=325.

The final and complex structure of the sample for the quantitative survey is shown in the following Table 5.

Tab. 5 Structure of respondents of quantitative research

		Absolute frequency	Relative frequency (in %)
Gender	Women	195	60,00
	Men	130	40,00
Level of education	University	183	56,30
	High school with diploma	118	36,30
	Higher professional education	14	4,30
	Apprenticed	6	1,90
	Primary school	4	1,20
Place of residence	Up to 5000 inhabitants	78	24,00
	5000-50 000	151	46,50
	50 0000-100 000	69	21,20
	More than 100 000	27	8,30

Source: Quantitative research, n=325.

4.1.5 Data analysis

Data from the questionnaire will be evaluated by statistical program Statistica 12 and MS Office Excel. There were used following statistical methods to evaluate the data: mean, mode, median, standard deviation, absolute and relative frequency and Pearson chi-square test. The last method was used to evaluate strength of dependence between two variables.

Another analysis that will be used when working with data, is a cluster analysis. It is used in situations where it is necessary to classify the measured data and consolidate it into some larger objects based on mutual link and similarity. The key concept is thus similarity of objects. If it is able to determine how much the two objects are similar, there is nothing easier than to create clusters of similar objects. The measure of similarity is usually a distance in the space of the measured values. In this work it was chosen classic measure of distance that for two points in space determines the length of the shortest path from one point to another - "Euclidean distance". [9]

The results will be compared with secondary data and serve as a basis for marketing recommendations and communication strategy for the field circular economy towards the public.

4.2 Qualitative research

The main objective of the qualitative survey of this thesis is to determine the preferences, opinions and attitudes of second target group - companies. Under the thesis has been chosen companies that have already established cooperation with institu-

tion INCIEN (for example, participation in the conference). As the most appropriate method for this research was chosen depth interview. Altogether 7 companies participated in it, respectively 7 representatives of the company. The survey was conducted in April 2016. One interview lasted about 40-50 minutes. The depth interviews were processed after collection of data from questionnaire.

Depth interviews were conducted as semi-controlled, ie. substantial part of the questions were strictly the same for everyone and some questions emerged from the interview and the substance of the company. Some parts of the interview were removed because of no benefit for work (eg. How is it today? How are you? What are you currently working on?)

4.2.1 Performance of respondents

First questions were always related to the performance of both the interviewer and the respondent. Performance of the companies is mentioned in the methodology and the content of the conversation itself in the practical part.

Atregia provides comprehensive design and consultancy activities in the field garden and landscape architecture and geographic information systems, including the processing of applications for subsidies from the European Union and the subsequent grant management. Field of activity covers the entire territory of the Czech republic. The target group includes all entities that need professional green solutions - cities, municipalities, businesses and private individuals, architectural offices and studios, processors of local plans, building designers or realization gardening companies.

Sims Recycling Solutions s.r.o is daughter company of the global leader in the secure, sustainable and responsible recovery electronics and computers for reuse and recycling (USA). Sims cooperates with local, national, and global businesses in the responsible reuse of end-life electronics. It provides environmentally responsible solutions that ensure 100% digital data destruction.

ASIO. s.r.o is an engineering company operating on the czech and foreign market since 1993. Its vision is a proposal for implementation of technologies for purification and recycling of water and air purification. All this in order to improve the environment around. Asio develops and tests new technologies in its own research department since 2010. The company has wide experience to collaborate on interesting innovative projects.

The company JRK Waste Management s.r.o was founded by three young people who were not indifferent to the problem with increasing amount of waste. The company specializes in dealing with biological waste for large and individual customers. For individuals it offers a wide range of composting bins of various volumes and performance that fully meet all the requirements for functionality and quality.

AIVOTEC Company s.r.o is concerned with the research and development since 2011, especially in the field of energy production from renewable sources. We specialize in improving efficiency through technology development and innovation, especially in anaerobic fermentation. The main principles are: gain energy

and new materials from renewable resources, innovative technology and circular economy.

Renards is the leader of czech subsidy consulting for more than 10 years and covers the complete spectrum of subsidy areas. Renards is able to provide a complete service from initial analysis of the project plan, processing of grant applications, project documentation, energy assessments, economic-financial analysis, administration of the tender to payment of subsidies to account.

4.2.2 Data analysis

The interviews were recorded on a dictaphone and processed into written form. Significant data were retained, some data were excluded. Interviews were evaluated based on repetitive answers and interesting insights of respondents. After that they were suggested solutions on the basis of results from survey in chapter *Final recommendations*.

5 Practical part

5.1 Current state of circular economy

Before setting into the investigation in order to determine the perception of circular economy from the perspective of citizens and businesses, it is necessary to analyze the environment and analyze the current situation. A growing number of policies and initiatives now support transition towards the circular economy. However, some political, social, economic and technological barriers to wider implementation and take-up still persist. According to European commission publication any of them are pointed out: [37]

- companies often lack awareness, knowledge or capacity to pursue circular economy solutions
- investment in measures to improve efficiency, or innovative business models, remains insufficient as they are perceived as risky and complex
- demand for sustainable products and services may remain low, in particular if they involve behavioral change
- prices often don't reflect the real cost to society of resource and energy use.

European citizens are convinced of a strong positive link between jobs, growth and resource efficiency. Recently substantial majority of people think that the impact of more efficient resource use would have a positive effect on the quality of life in their country (86 %), on economic growth (80 %), as well as on employment opportunities (78 %). [37]

5.1.1 Implementation of CE in Czech republic

Concept of circular economy is slowly entering into the Czech Republic. However it is still a bit behind with more developed Western countries. The Czech Republic is addressing these issues through Institute of circular economy INCIEN. It is a non-governmental organization for the development of circular economy in conditions of Czech Republic. INCIEN combines science and the practical sphere through the organization of projects involving research institutions, universities and their students, entrepreneurs and other interested parties. Furthermore, it organizes national and international conferences for the exchange of knowledge and mutual inspiration or partnering on future projects leading to the implementation of circular economy principles into practice. The last main point of activity is the education of citizens, thereby raising awareness about the need of transformation of the current system of production and consumption in a sustainable form. [46]

What the organization offers?

- Platform for communication among all stakeholders, such as residents, business and government.
- Tools for implementing the circular economy principles into practice
- Assistance and mentoring during transformation into the new organizational structure [46]

How does INCIEN want to achieve it?

a) Education

INCIEN organizes training sessions for municipalities, businesses and schools. It also conducts the conferences, discussion forums and other types of meetings, which aim is to raise awareness about projects fit into the circular economy principles. [46]

b) Analysis of waste

Within municipalities conducts waste analysis, which are used to identify the current state of waste management. Eventually, on the basis of this evaluation suggests solutions to meet current legislative requirements. In the next stage monitors waste treatment and evaluates its effectiveness. [46]

c) Project activities

If the proposed solution may be financed with the support of grants from the state budget or other grant opportunities from the European Union, it carries out activities aimed to raise funds for its implementation. [46]

To develop public debate about changing socio-economic patterns in the Czech Republic is the fundamental situation in Western Europe. Great influence plays primarily the European Union and its policy to promote sustainable development. How concretely the EU plays the role in this area we will see in the next chapter.

5.1.2 Implementation of CE in EU

The EU is a significant supporter of circular economic approach. For example Generation Awake was the European Commission awareness raising campaign on resource efficiency. It was implemented between 2011 and 2015. The GA campaign targeted young European consumers and families with small children, and aimed to encourage them to use resources sustainably to minimize impacts on the environment. In recent years the European Commission has issued numerous public statements concerning plans in this area. For example, on July 2, 2014 was issued a

message entitled "Towards a circular economy: A zero waste program for Europe". The Commission explains in it how can we move towards economy of public producing zero waste volumes. According to the Commission's plans Europeans have until 2030 to recycle 70% of municipal waste and 80% of packaging waste. [35]

The Commission further notes: "Moving towards a more circular economy is essential to deliver the resource efficiency agenda established under the Europe 2020 Strategy for smart, sustainable and inclusive growth. Higher and sustained improvements of resource efficiency performance are within reach and can bring major economic benefits. It is estimated that resource efficiency improvements all along the value chains could reduce material inputs needs by 17%-24% by 2030 and a better use of resources could represent an overall savings potential of €630 billion per year for European industry. " According to further implementation of circular economy The Commission will analyze major market and governance failures which hamper the avoidance and reuse of material waste, taking account of the heterogeneity of material types and their uses, to contribute to an enabling policy framework for resource efficiency at EU level. Successful implementation of model can create more than 180 000 jobs in the EU by 2030, in addition to the estimated 400 000 jobs that will be created by the implementation of the waste legislation in force. [33]

As part of the process to develop the circular economy package, the Commission organized conference in Brussels on 25 June 2015, where around 700 stakeholders attended (participation in this conference was open to all stakeholders). The conference followed a 12-week public consultation from 28 May to 20 August 2015 which received over 1500 submissions. In addition, the Commissioners and their Cabinets held intensive and collaborative consultations with key stakeholders. [36]

And that was not enough. Since, in view of the vote, which took place in July 2015, European Parliament requires to significantly increase recycling and reduce landfill. MEPs want to burn after 2020 only non-recyclable materials and stop financing the construction of new incinerators from European funds. MEPs also called for increasing the recycling rate of municipal waste to 70% by 2030 (now EU- 40%, CR - 30%) and increase the rate of recycling containers to 80% by 2030 (now EU - 65%, CR - 70%). On 2nd December the Commission adopted an ambitious new Circular Economy Package to stimulate Europe's transition towards a circular economy which will boost global competitiveness, foster sustainable economic growth and generate new jobs. [34]

The proposed actions will contribute to "closing the loop" of product lifecycles through bigger recycling and re-use, and bring benefits for both the environment and the economy. The proposals cover the full lifecycle of products: from production over consumption to waste management and the market for secondary raw materials. This transformation will be supported financially by the European Structural & Investment Funds (ESIF), which include €5.5 billion for waste management and this support will be provided by €650 million under Horizon 2020

(the EU funding program for research and innovation) and investments in the circular economy at national level. [34]

How will the circular economy package reduce costs and create jobs? Waste prevention, eco-design, re-use and similar measures can bring net savings of €600 billion, or 8% of annual turnover, for businesses in the EU, while reducing total annual greenhouse gas emissions by 3 %. In the sectors of re-use, re-manufacturing and repair, for ex. mobile phones, the cost of remanufacturing mobile phones could be halved if it were easier to take them apart. If 95% of mobile phones were collected, this could generate savings on manufacturing material costs of more than €1 billion. A shift from recycling to refurbishing light commercial vehicles, where collection rates are already high, could save material inputs by €6.4 billion per year and €140 million in energy costs and reduce GHG emissions by 6.3 million tons. [36]

Currently Europe loses around 600 million tons of material contained in waste each year, which could potentially be recycled or re-used. Only around 40% of the waste which is produced by EU households is recycled, with recycling rates as high as 80% in some areas, and lower than 5% in others. Turning waste into a resource is an essential part of increasing resource efficiency and moving towards a more circular economy. [36]

The key elements of the revised proposal are: [36]

- Set a common EU target for recycling 65% of municipal waste by 2030;
- Set a common EU target for recycling 75% of packaging waste by 2030;
- Set a binding landfill target to reduce landfill to maximum of 10% of all waste by 2030;
- A ban on landfilling of separately collected waste;
- Simplify and improve waste definitions and harmonize calculation methods;
- Ensure that structural funds are used to support the objectives of the EU waste legislation and guided by the EU waste hierarchy
- Concrete measures to promote re-use and stimulate industrial symbiosis – turning one industry's by-product into another industry's raw material;
- Economic incentives for producers to put greener products on the market and support recovery and recycling schemes (e.g. for packaging, batteries, electric and electronic equipment, vehicles);
- Actions to reduce food waste including a common measurement methodology, improved date marking, and tools to meet the global Sustainable Development Goal to halve food waste by 2030.

5.2 Research - the future regarding the circular economy

GreenBiz Group conducted research in 2015 to gain a greater understanding of key aspects and concepts associated with the circular economy to identify trends that will help define success for this developing system of commerce. According to study among key insights belongs:

- The importance of the circular economy to business grows, doubling in importance from just two years ago
- Half of companies surveyed are implementing circular economy principles
- The need for a defensible business case is both the biggest barrier and biggest opportunity facing the success of the circular economy.
- Cost and convenience are the top incentives for both customers and consumers.

Today, a lot of factors (population growth, resource scarcity, climate change impacts...) are placing pressure on companies to move away from an industrialized make-use-dispose (linear) economic model to a more circular strategy. In the last five years, firms placed a greater emphasis on taking a life-cycle approach to understanding the total impact of their products and operations across their entire value chain. Although the term “circular economy” is not yet widespread among all executives, awareness and understanding of the this term is high among sustainability professionals and the old industrialized way of thinking is beginning to change. [40]

And now back to gained data. More than half of respondents’ companies have already implemented circular economy principles. Sixty-two percent of respondents said their organization provides a product that supports the circular economy, such as materials recycling, remanufacturing, take-back programs or other logistics solutions like repair or refurbishment. The percentage ratio was even higher for companies with revenues greater than \$1 billion. The concept of a circular economy is projected to continue to gain traction in the coming years, nearly doubling in magnitude from two years ago with 47 percent stating that circular economy principles were important to their organization, versus 86 percent who believe it will be important two years from now. [40]

GreenBiz Group also asked to identify the most important factors that will determine whether circular economy principles and practices will be widely adopted. Twenty-six percent of respondents defined the most important factor as customers and consumers demanding that products be recoverable, recyclable or refurbishable. The second crucial factor is also related to demand - 18 percent of respondents cited the need for a ready market for used products or recaptured materials and resources.

In order to create greater demand, respondents weighed in on strategies that could help increase participation in the circular economy. The top three incentives to ensure the return and reuse of consumer products are: [40]

- a rebate in the form of cash back (56 %),
- convenience of returning product at a brick-and-mortar location (47 %)
- an ability to return products using pre-paid shipping (42 %).

And what about B2B sector? The top three incentives to ensure the return and reuse of industrial products are:

- the producer or distributor physically reclaims products (59 %)
- the offering of a turnkey packaging and pickup service (51 %)
- a commitment by the manufacturer to refurbish products and return them for continued use (48 %).

Market demand must be sufficient in order to motivate business to build with waste and design for reuse. Circular economy principles would be integrated into the whole supply chain, including robust and efficient take-back models. [40]

Basic principles of circular economy doesn't ensure growth or profitability by themselves. The study argues, that for adoption of this concept by enterprises, they will have to be able to use it to solve existing problems and provide a higher profitability. Lack of profitability has been identified as the greatest obstacle to the effective implementation of a global circular economy. Respondents tagged as other key obstacles also: [40]

- logistics costs for transportation of goods (36%)
- lack of education / understanding at the management level (36%)
- lack of education / understanding with customers (36%)
- prioritizing other business goals (30%)

Sum up, the circular economy concept is becoming very important part of every business model. Regarding the Czech Republic and actual statistics, it has increased the number of Czech companies that are committed to the Green Company project by fifteen percent for 2015, which focuses on the collection and recycling of electrical appliances and batteries from households only.

Experts in the Czech Republic agree that more and more czech businesses classify friendlier approach to the environment in its corporate values and lead employees to environmentally more responsible behavior. In recent years, there was a fundamental change in the perception of ecology. While a few years ago running businesses were still dealing with the completion of mandatory minimum set by law and the opportunity to save costs, today's environmentally responsible waste treatment is perceived as one of the key indicators of maturity of the company. [39]

Interesting example of one of the czech project is Mosaic House. It is design hotel, where modern design and remarkable green technologies are married to comfort and eco-friendly style. The hotel has technical equipment that behaves

gently without participation of people. The system of measurement and control monitors the actual room occupancy, status of open windows, and then sets the optimum parameters of the internal environment of the room. The hotel has a wastewater recycling system, the so-called "gray" water from showers and sinks. According to the authors of reconstruction, it is one of the key technologies of the new hotel. The relatively clean water from showers and sinks is transferred to a special facility in the basement, which is filtered and purified. The recycled water is then reused for flushing the toilet or as utility water to cold water intake in cleaning chambers. [32]

And such projects increase in the Czech Republic rapidly. It exists for example the Green Energy project from CEZ, which financially supports projects of renewable sources development. And that they are not a few.

5.3 Waste sorting in Czech republic

Recently, waste sorting is for most people quite common, and hardly anybody throws paper or plastic bottles out into ordinary bins. But it doesn't mean that it has always been like this, during last 15 years, the area of recycling passed through a great development. According to statistics, 72% of the czech population recycle and the number is constantly increasing. This is mainly due to increasing awareness of the importance of recycling and the growing number of containers that are now available for almost everyone - an average of 140 people belongs to single collection site and the average walking distance is less than 100 meters. [27]

5.4 Communication of circular economy in the Czech republic

Only the Institute of circular economy (hereinafter INCIEN) spreads the education and awareness of the circular economy in the czech environment. This non-governmental organization was founded in 2015. The very idea arised three years back during the studies at prestigious University of Wageningen in the Netherlands by founder Ing. Soňa Jonášová. INCIEN is still only organization with that vision in Czech republic, so thesis focuses primarily on its activities when analyzing the current communication towards public. These information in this chapter are gained directly from founder of INCIEN Ing. Soňa Jonášová.

Vision of INCIEN is to increase awareness, information and to organize such activities that will lead to a transition towards circular economy, which is seen as a concept developed by the company's material flows in functional cycles when resources are drawn in a sustainable manner and products are after their useful life cycle returned to the system through perfect recycling and cooperation between the various entities.

The first important element of its communication is education at all levels of age structure of populations. INCIEN conducts training sessions for municipalities, businesses and schools. Within municipalities there were organized about 60 sessions for local inhabitants during last year, where was discussed mainly topic of

home composting as the way to avoid waste. The project owner was the partner company JRK Waste Management that supplies home composting to households. An average of 50 people were attended on the sessions, by total of 3000 people. Furthermore there were educational events for the little ones, in kindergartens and primary schools (eg. ZŠ Blučina, basics of circular economy for about 100 children). It was lectured in high schools as well, each lecture for roughly 2 classes (60 students). Further INCIEN organizes discussion meetings, for example BUZZ Talks, whose aim is to raise awareness about projects inherently fit into the circular economy principles. To this day, there were about 7 meetings, attended on average 50 people and discussed with three speakers each event.

In terms of communication with the companies there was established the network of partner firms small and large size during one and half a year (the bigger companies include Ikea, CEZ, RWE, Veolia, Erste Bank). Workshops are held regularly on demand, eg. for a significant partner JRK Waste Management, INCIEN handles the establishment plan of circular economy principles to all business processes. Another major partner of the institute's Erste Bank, which has long time cooperated with on projects functioning on the basis of circular economy. INCIEN participates on 5-10 conferences per year from the position of the speaker. The own conference have been only one this year and its name was "Waste as source". It met with great success and it was attended by about 30 companies. In total, the Institute of circular economy has 25-30 companies in the partner network and the number is growing.

INCIEN also publishes articles on its own blog, participates in television discussion programs exceptionally and appears even in some professional publications within PR. It is very active on all popular social networks. Here is enclosed table for comparing changes in the number of fans (followers) before and after the research.

Tab. 6 Social media INCIEN followers

	8.2. 2016	29.4 2016
Facebook	420	538
Instagram	109	127
LinkedIn	28	43
Twitter	16	21
Youtube	2	4
Google+	1	1

Source: Enumerated social networks pages of INCIEN

5.5 Results of the quantitative survey

The following chapter summarizes the results of the survey, which took place in March 2016. The first series of questions concerned the findings of public awareness of the concept circular economy. First question is closed and asks respondent on the knowledge of the concept itself. As can be seen in Fig. 11, most people (62%), doesn't know this term. It is mainly due to the fact that in 2015 there was no organization in Czech republic that would spread awareness further as it does the new Institute of circular economy. Moreover, in the last year, significant changes have occurred (for example the package of circular economy EU) and companies have already begun to be interested in the concept of sustainability and they inform customers about it. However, in Western Europe, especially in Germany and the Netherlands, the circular economy is a universal phenomenon, and therefore in the Czech Republic there is still great potential to spread further awareness.

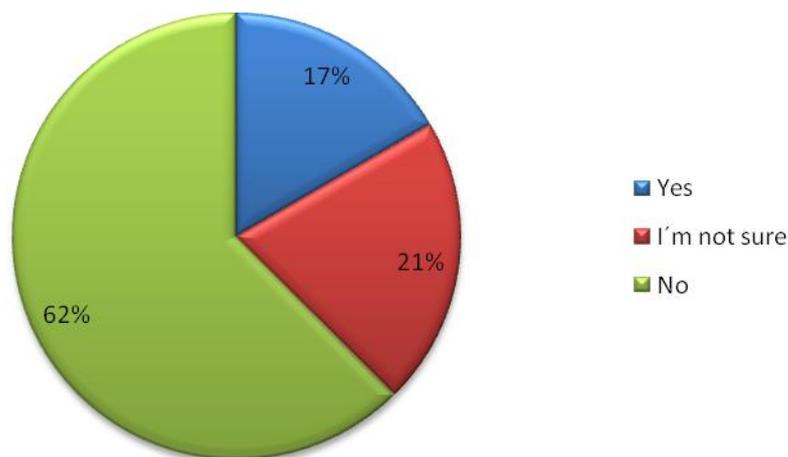


Fig. 10 Knowledge of concept circular economy
Source: Quantitative research, March 2016, n=325.

Turning now to evaluate set hypotheses. In the context of this question it was investigated relationship between knowledge of the concept and two identification variables - age first, then education. Both p-values appeared larger than the set (fixed) level of significance of 0,05, ie. null hypothesis is not rejected, and knowledge of the concept of circular economy therefore does not depend on age and education.

Tab. 7 Dependence between knowledge of concept and age of respondent

coefficient	value
Pearson's chí-sq.	0,54877
Conting. coeff.	0,1440622

Source: Quantitative research, March 2016, n=325.

First table shows dependence between knowledge of concept and age of respondent, second table shows the same situation, but instead of age was chosen education as another identification factor.

Tab. 8 Dependence between knowledge of concept and education of respondent

coefficient	value
Pearson's chí-sq.	0,12665
Conting. coeff.	0,1931367

Source: Quantitative research, March 2016, n=325.

Another question was opened and asked the respondent what the term represents. A lot of people joined properly word circulate = "obíhat" and more than half of the people replied thing about the "oběhové hospodářství". Roughly a third of people said they have no idea, and about 10% of people explained the concept wrong. The most frequent respondents' answers included, for example:

"The new economic model based on principles of sustainable development."

"Cradle to cradle system, waste as resource."

"Oběhová ekonomika."

" One approach to restraint waste production embedded in its further processing and re-inclusion into circulation. "

" Economy using circulation of resources."

" Circulation of products and resources."

The third question investigated whether people think that some organisation in Czech republic is actively engaged in concept. Half of the respondents said yes, 44% do not know and 6% of respondents said "No". Institute of circular economy runs officially since 2015, so it is not surprising that there is still a lot of people that have no idea. The results are shown in a Tab. 9.

Tab. 9 Opinion according to occurrence of circular economy institution

	Absolute frequency	Relative frequency (in %)
Yes	163	50,20
I don't know	144	44,30
No	18	5,50

Source: Quantitative research, March 2016, n=325.

Last question of first block was directed to those, who answered positively in the previous question. It investigated whether man knows the name of a particular organization, which is engaged in circular economy. But after seeing all the answers the question was evaluated as misleading, due to questionnaire introduction, which mentioned the name of the institute - INCIEN. Therefore, part of the respondents wrote INCIEN adding that the name was mentioned in the introductory part of the questionnaire. Due to this fact, the question was excluded from further evaluation.

Another part of questions was devoted to EU package of circular economy and recycling. The first question concerned whether people know about the new circular economy EU package. As we can see in the Fig. 11, the great majority of respondents answered "No" (90%), the remaining 10% know about the package. The source of information were mainly articles on the internet and newspapers (Fig. 12, ed. the vertical axis represents the number of people who responded well). This question made clear the fact that concept is not communicated well in broad sphere and people still have no idea what to expect and what are the pluses and minuses. This question was answered by 45 respondents.

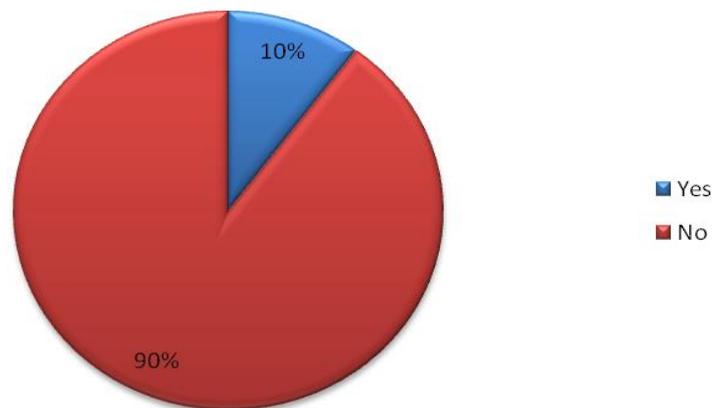


Fig. 11 Knowledge of circular economy EU package
 Source: Quantitative research, March 2016, n=325.

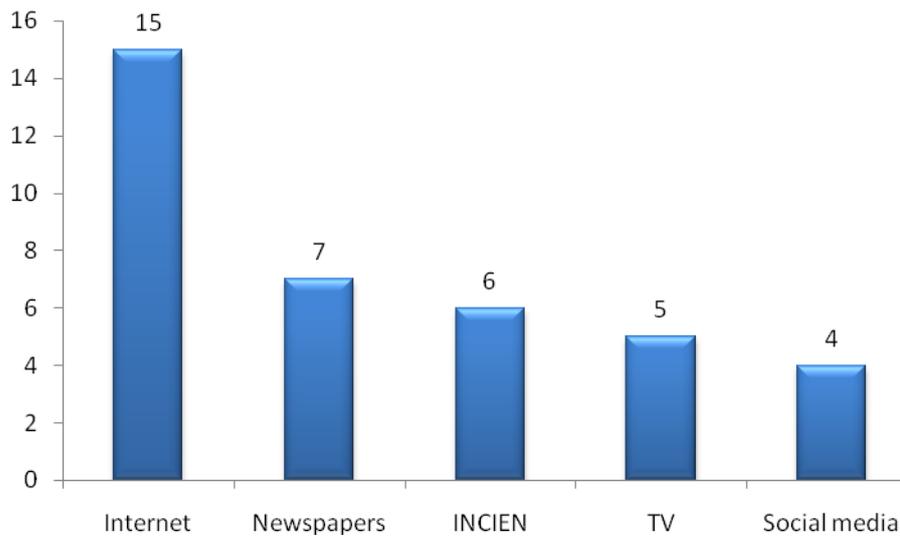


Fig. 12 Source of information about package

Source: Quantitative research, March 2016, n=45, most common answers.

As is the concept of sustainable development seen by private companies and their customers revealed other questions. How many respondents buyout firm's old product were offered to? Or did they meet with other support of recycling? How many respondents consider it as a great idea? A total of two hundred respondents (62%) responded that they have ever met with the approach, which is a very good number, and it indicates a promising future developments in the use of waste in the Czech Republic (see in Fig. 14). Even more friendly was the second answer whether customers like this green approach. Only nine people responded "No" (3%), the rest of the people consider that as a great step (97%). It's not only that the company process usable waste and use it further, it is also strengthen their image that is currently very important and companies must expend more and more effort to get it in the long time period.

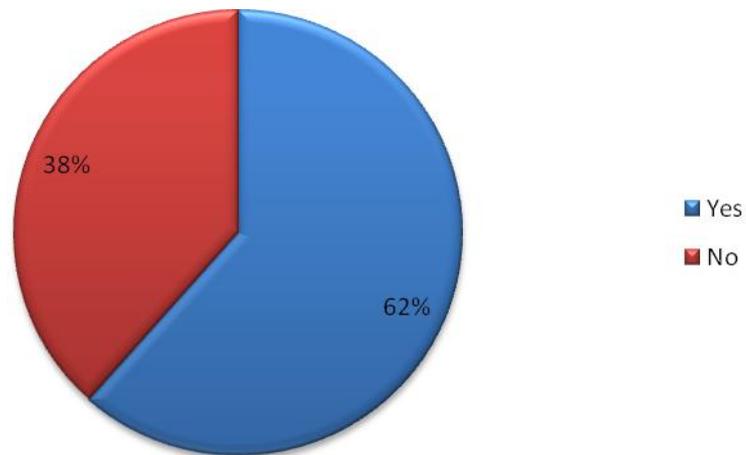


Fig. 13 People who ever met with green approach
Source: Quantitative research, March 2016, n=325.

Other results are also a pleasant surprise. To question, whether people sort waste, 87% of them answered "Yes" (see in Fig. 15). This confirms the fact that individuals aren't indifferent to waste recycling and that they are aware of a limited natural resource limits, which are increasingly scarcer.

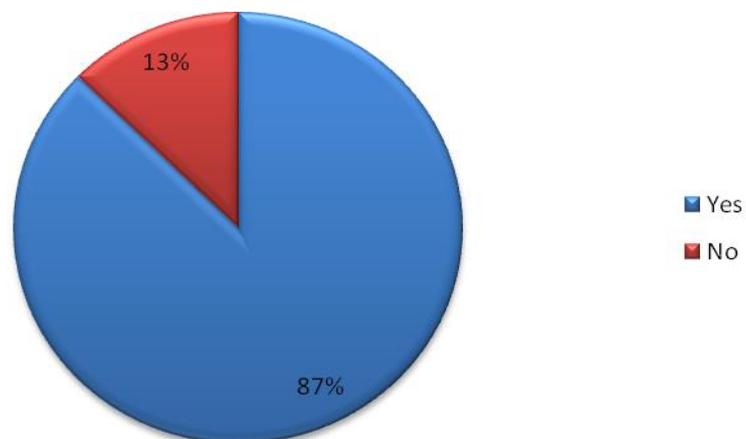


Fig. 14 People who recycle waste
Source: Quantitative research, March 2016, n=325.

Following filter open question was for those who actively sort waste. Respondents were asked to answer what they sort. In total there were 284 responses. Answers

were not very diverse. In most cases people agreed on the following three kinds of waste.

Tab. 10 Amount of people who recycle paper, plastic and glass

	Absolute frequency	Relative frequency (in %)
paper	271	95,40
plastic	257	90,50
glass	205	72,20

Source: Quantitative research, March 2016, n=284.

After comparison with the secondary data, similar results were obtained. People, according to recent surveys, most recycle plastic, paper and glass. Often civil works, electrical waste, bio-waste and aluminum occurred in the answers. Another question asked whether the respondents think that in Czech Republic is still difficult to sort waste due to lack of containers, low awareness, etc. A total of 187 respondents said that it is not, but the remaining 137 respondents answered that it is still difficult to sort. Municipalities try to put containers for various kinds of waste, but still not on that scale that would allow every citizen really sort of at least 4-5 kinds of waste. Moreover there are missing information, how waste is treated further, and people are apparently also very little informed about real environmental benefits (facts and numbers).

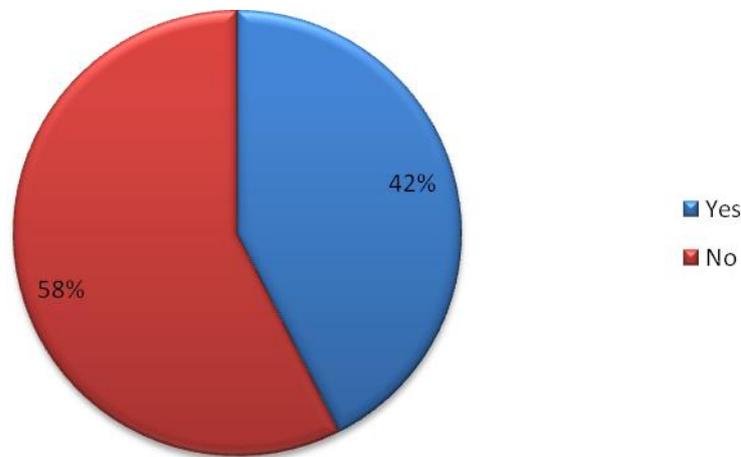


Fig. 15 Is in Czech republic bad recycling availability and awareness?

Source: Quantitative research, March 2016, n=325.

The last part of the questionnaire focuses on communication itself, what media people use to get information, how much are they informed about the issue and how much are they interested in the new information regarding this field. In the

first question respondent should assess the level of awareness by the number of stars (1-5, 1 = Least, 5 = the most). The results were not surprising. Most respondents judged the level of awareness by one star (139 respondents), two stars were conferred by 89 respondents, three stars belong to 73 respondents, 19 respondents clicked four stars and only five respondents are perfectly informed. Standard descriptive statistics are given in Tab. 11:

Tab. 11 Level of awareness about circular economy

Average	Modus	Median	Standard deviation
1,96	1	2	1,013

Source: Quantitative research, March 2016, n=325

As it can be seen in Tab. 10, the average value is less than two stars. The most frequent value (modus) is 1, the median is 2 and the standard deviation is very low because the variance between the answers was very low.

Turning now to test the hypothesis that were set before the research. The relationship between the degree of awareness and education is investigated. In this case, it was p-value lower than the fixed level of significance (0,05), ie. null hypothesis was rejected. Thus there is a correlation between the degree of awareness and education. According contingent coefficient there is only moderate dependence. The result is quite logical. Educated people are interested generally more, they pursue new trends and have a more general overview. Therefore the test confirmed the supposed result. The individual values of the coefficients are shown in Tab. 12.

Tab. 12 Dependence between level of awareness and education of respondent

coefficient	value
Pearson's chí-sq.	0,02539
Conting. coeff.	0,2852653

Source: Quantitative research, March 2016, n=325

Another question should determine the level of interest in the education in area of circular economy. According to the results, 192 respondents are interested in participation in seminars, educational events and subscription of informational newsletters and reading of professional articles. The remaining 133 participants have no interest (41% of all research participants).

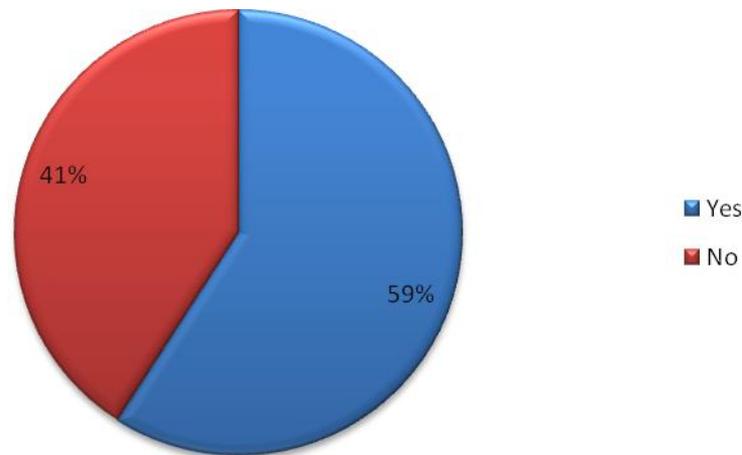


Fig. 16 Interest in further information from the field circular economy
Source: Quantitative research, March 2016, n=325.

Another hypothesis was established that has to examine the relationship between an interest in education and gender. Due to the very low p-value, which amounts to 0,00658, the null hypothesis is rejected and there is a correlation between gender and interest in further education. In this case, a larger proportion of positive responses came from the women's section of the respondents, 127 of the 195 women showed interest, which is the majority. Only 65 of 130 men showed interest, which is exactly half. According to conting. coefficient, which investigates strength of dependence, there is weak dependence between variables. Analysis confirmed the fact that women are more active in self-education, but not considerably.

Tab. 13 Dependence between interest in further information (education) and gender of respondent

coefficient	value
Pearson's chí-sq.	0,00658
Conting. coeff.	0,1490465

Source: Quantitative research, March 2016, n=325

The task of the questionnaire was to find out, besides other things, the importance attached to online and offline information channels. Therefore, respondents were asked in which proportion would divide 100 points between offline and online. The results were not surprising, online clearly leads.

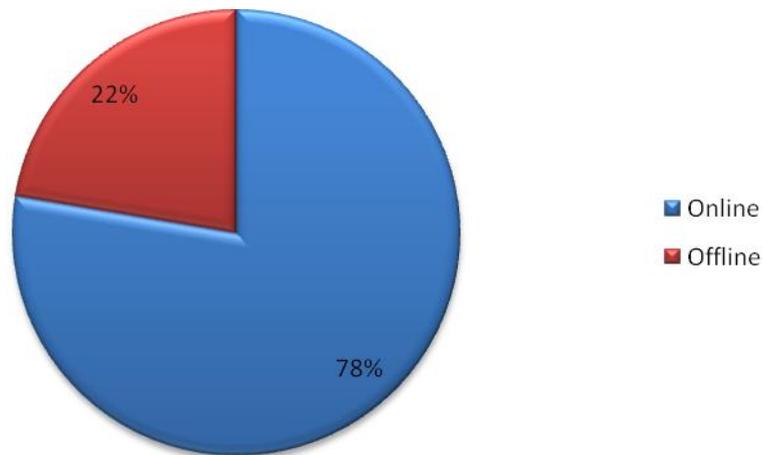


Fig. 17 Average ratio online x offline media
 Source: Quantitative research, March 2016, n=325.

It was also investigated the relationship between the using of online channels and age. The assumption was, that with increasing age preponderance of online channels decreases and it starts to reflect interest in the offline information sources. This assumption was confirmed, since the p-value was released less than the significance level of 0,05, so the null hypothesis was rejected. Dependence between the two variables according to contingent coeff. is very strong. Age plays in today's online world a big role. Young people are generally knowledgeable and technically more advanced, that is why online significantly exceeds offline by youngs. For older people, it's vice versa, but the overall trend is very clear - to communicate online in 80%, to take offline activities as a supplement and adapt to customer's age (for example, older people more appreciate leaflets and lectures, young people likely live streams of conferences, discussion forums, web articles etc.).

Tab. 14 Dependence between using of online media and age of respondent

coefficient	value
Pearson's chí-sq.	0,04896
Conting. coeff.	0,6727949

Source: Quantitative research, March 2016, n=325.

For further analysis of the scale question can be used descriptive statistics which are shown in Tab. 15. The responses are in points.

Tab. 15 Descriptive statistics online x offline media

	Average	Modus	Median	Standard deviation
Online	77,70	80,00	90,00	16,7887
Offline	22,30	20,00	10,00	16,7887

Source: Quantitative research, March 2016, n=325.

Another question was directed to specific media that czech population uses. A total of 11 types of media were selected + "Others" answer. The aim of this battery question was to find out to what extent the media are used and if they are used at all. This question is the most important starting point in drawing up a communication strategy. The respondent was supposed to answer to each source, how much is it used. After that individual responses were counted and summarized in the following table. Important communication channels with high significance (High ratio of "very" response) are highlighted in red bold. Other communication channels that have very low ratio of "never" response are highlighted in red.

Tab. 16 Sources of information - intensity of using

	very	sometimes	rarely	never
Facebook	175	77	40	33
Twitter	12	19	42	252
LinkedIn	12	33	77	203
Instagram	35	32	35	223
Google+	43	48	70	164
Online news (iDnes, novinky.cz etc.)	155	129	33	8
Search engines (Google, Seznam...)	260	49	12	4
Fairs and exhibitions	10	74	154	87
Conferences and seminars	8	93	133	91
Professional books and magazines	38	102	129	56
Youtube	54	117	89	65
Others	13	57	65	190

Source: Quantitative research, March 2016, n=325.

The biggest surprise is recorded in the case of Twitter, which is often used only by 12 respondents. It was never used by total of 252 respondents (78 %). This social network is experiencing high slump and survey only confirmed this fact. On that account this channel is not advisable to rely on, even though it is considered as the largest portal of shared real-time events, where user gets the current information and messages in the form of short tweets. The biggest fall between two extreme answers is in the option of search engines. They are used often by almost 80% of

the respondents, only 4 respondents said that they do not use it at all. The second most used medium has become, according to result of this investigation, Facebook, with a total of 175 votes for "Often". LinkedIn hasn't got much better results than Twitter, 62% of respondents indicated that they do not use it for gaining new information at all. Instagram is a social network that is booming. Instagram has currently over 30 million users and its popularity continues to grow. A few months back, even Instagram established advertising, while its settings can be made in Power Editor interface on Facebook. This network, however, is useful only as a supplementary, the best results have companies that post quality product photographs, set the correct hashtags to products, run competitions and respond to pictures of fans related to their products. This network is more for fun, some extensive information appears there rarely and that's why it can be used only as a supplement and redirect the user to another source. This may be not only Facebook but popular Youtube as well. It is doing relatively well, 36% of respondents use this channel sometimes. Online news are also an important information channel, which was confirmed by the results of survey. Offline activities, such as conferences, seminars, fairs etc. are doing about the same and are used more rarely or sometimes.

Another analysis, that helps to describe examined data, is sorting the channels based on descriptive statistics. Based on point range 1-4 (rate of use, 1 = least, 4 = most) were calculated mean, modus, median, standard deviation and modus frequency. The data are sorted in descending order from highest average value to lowest.

Tab. 17 Descriptive statistics information sources

	Average	Modus	Median	Modus frequency	Standard deviation
Search engines (Google, Seznam...)	3,738462	4	4	260	0,584705
Online news (iDnes, novinky.cz etc.)	3,326154	4	3	155	0,756510
Facebook	3,212308	4	4	175	1,012805
Youtube	2,492308	3	3	117	0,992613
Professional books and magazines	2,375385	2	2	129	0,903018
Conferences and seminars	2,055385	2	2	133	0,814610
Fairs and exhibitions	2,021538	2	2	154	0,787340
Google+	1,907692	1	1	164	1,084730
Others	1,670769	1	1	190	0,902282
Instagram	1,627692	1	1	223	1,039276
LinkedIn	1,550769	1	1	203	0,821043
Twitter	1,356923	1	1	252	0,754814

Source: Quantitative research, March 2016, n=325.

And also here it can be seen that the best result achieved search engines, online news and Facebook. Offline activities are performing very similarly - modus and median is 2, with an average higher than 2. The worst channel in the analysis is Twitter, which is a big surprise, because it was always considered as the largest competitor of Facebook (as for the new events).

Last analysis of the sources of information for this work is cluster analysis. The result are recorded in a single dendrogram. On the right side there is cluster of three sources, which stand completely out from all the others. The closest are online news and search engines, then there is closest connection with Facebook. Facebook is a specific source of information that has been developed mainly for sharing experiences, photos and entertainment. However, nowadays it can be considered as valuable information channel. For example, server iDNES.cz has page on it, reaches there over 100,000 fans and share there up to 15 articles a day. If someone wants to find specific information about something, he could move to the page manually by using the search engine. Otherwise, he can meet articles in feed randomly according to the Facebook algorithm (organic posts) or by advertising algorithm (sponsored posts). Facebook provides also interesting insights in groups (public, secret, closed) or on timeline of friends. Another cluster consists Insta-

gram, Twitter and LinkedIn. These social networks are not similar in substantive terms, but as a source of information for users appears to be quite similar - impractical. The third major cluster are offline information sources whose likeness has been proven in previous analyzes, so this similarity is just confirmed. Left branch of cluster is refilled by Google+ and Youtube.

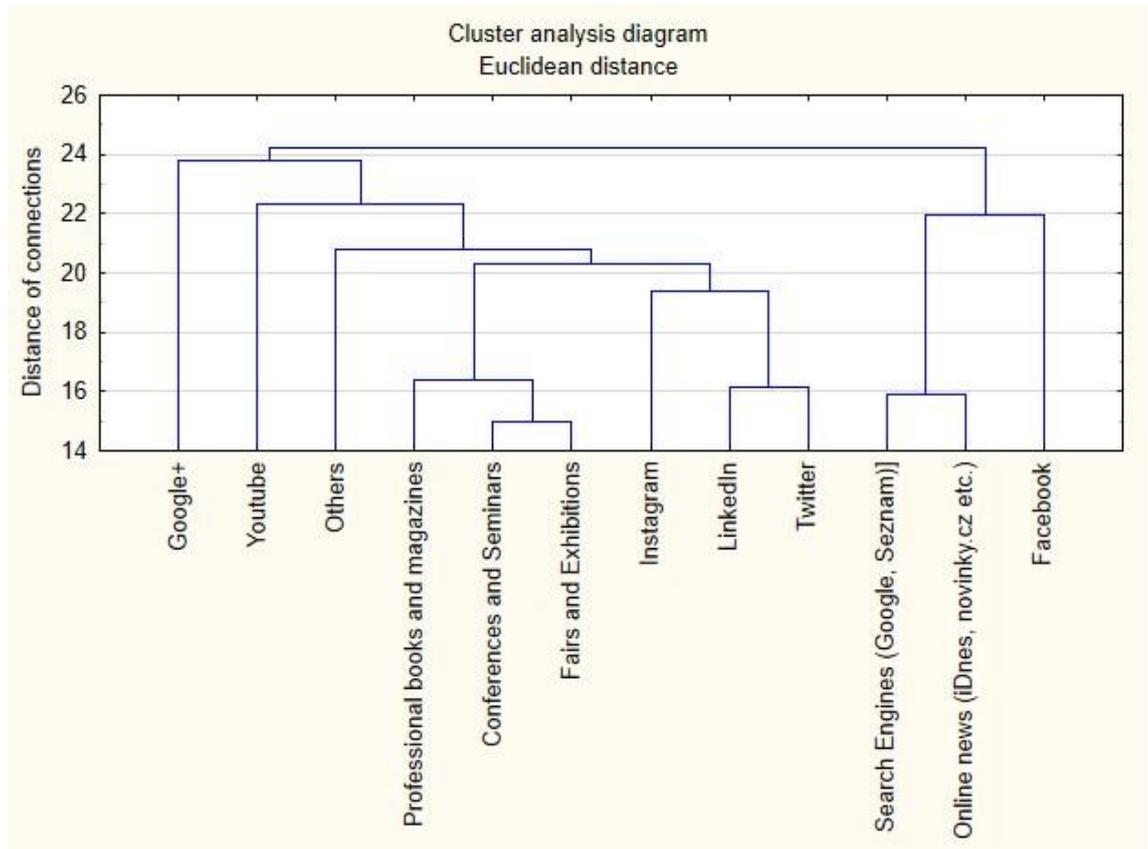


Fig. 18 Cluster analysis diagram
 Source: Quantitative research, March 2016, n=325.

A final question regarding the sources of information is an addition to the previous one and is directed at those respondents who use any other source of information beyond mentioned. The question was opened and the most frequent responses are summarized in the following graph.

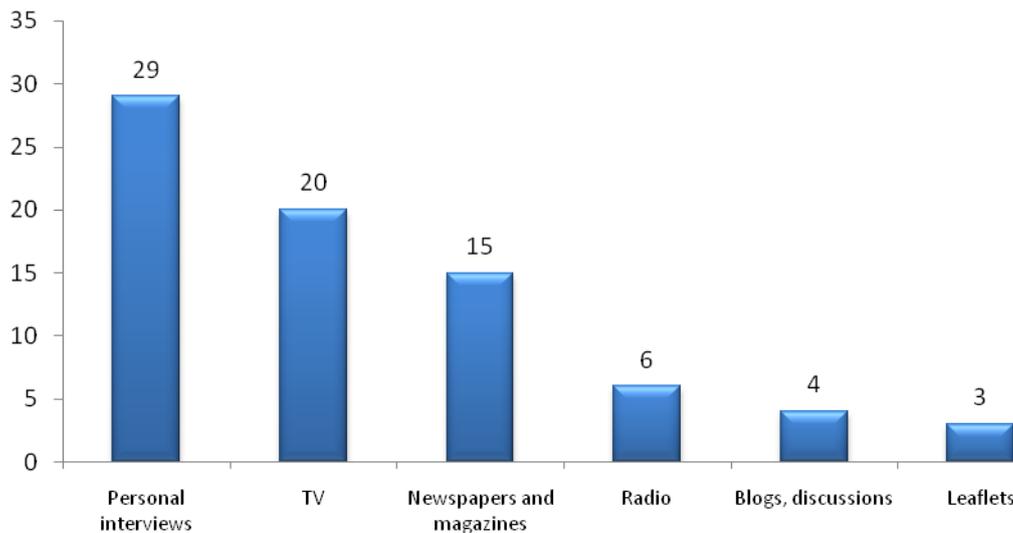


Fig. 19 Other information sources - most common answers
Source: Quantitative research, March 2016, n=86.

Mostly in the responses occurred personal interviews, whether it is information from colleagues, friends or consultations with specialists etc. In addition, people are informed through television, newspapers and magazines. Radios are also seen as a source of information, but not significantly. The other often repeated sources are blogs, discussion and leaflets.

5.6 Results of the qualitative survey

The second part of the research is qualitative research. The depth interview was determined as the best option for purposes of this thesis. As it was already mentioned in the methodology, it was a semi-structured interview with fixed questions and questions that emerged from the interview or simply complement the main core of the interview. That's why not all questions are answered by all respondents. The main purpose was to find some kind of intersection of demand of the companies - each has different requirements, suggestions, in what may INCIEN help all at the same time? What is the way in creating of cooperation INCIEN with all its stakeholders? Many companies are members of various associations and societies, therefore one part of the questions will be directed at the way how they would like to be interconnected as a members of the company and communicate with each other.

At the beginning of each interview, the respondent was briefly acquainted with the reason of the meeting, to know that the results of the interview is only for internal purposes and will contribute to the enhancement of cooperation with partner companies of INCIEN. Furthermore, he was asked to brief introduction of

the company he represents. Questions are edited and abbreviated keeping the whole essence and ideas.

1) When did cooperation with INCIEN start?

Aivotec: Our company does research and development of technologies with application in renewable. The technology fits into a renewable economy and within routine study what happens in the circular economy, I found a conference *Waste as resource* that Incien organized and then I have met Soňa Jonášová (founder of Institut of circular economy).

Renards: My friend, who is engaged in subsidies for circular economy was Soňa's classmate and he got in touch me with her when I worked at the department of the environment. Since then we have worked on a few projects and we are still in contact.

ASHPA: I have found you on Facebook, I was pretty interested, then I attended a conference *Waste as Resource*, where I have met with Mrs. Jonášová and we are waiting now until we will talk about the possibilities of cooperation.

2) What is your personal attitude toward circular economy (hereinafter CE) principles and in what do you see the potential?

Sims: I think this is the direction of more and more companies and it has potential for sure. It's the only way how we can continue to produce and also have place where to take from. In the Czech republic it is still quite mistrustful of people, lots of people have prejudices. However, once a business owner comes from Western Europe, there are understandings of the principles and firms put principles into their programs and budgets.

Asio: Certainly I support the direction, this is something that should Czech republic and all business entities actively pursue.

Aivotec: The driving force is the business. I deal with CE for a long time and I also have a website (www.obehove-biohospodarstvi.cz), so yes, I'm actively engaged in CE for 12 years, it's part of my job, and I definitely want to spread awareness about it more and more.

Renards: CE is especially important in terms of resources and environmental protection. The concept is still far from widespread, almost no one knows what CE means. But it is good that green approach is becoming more widespread among people - for example, they know that waste should be sorted etc. In fact, I think we go slowly but surely forward.

ASHPA: We're basically something like your smaller competitors who do something similar for municipalities (the implementation of these principles in the field of waste) and deal with this for quite long time, 2-3 years. In those days, it was not CE officially, but reduction of the amount of municipal waste in municipalities. I think that the awareness in czech environment is not yet perfect and much better it is in Western Europe. It is because of the fact that till the revolution everything was whisked into landfills, nobody cared about it practically, while western world was developed continuously. The progress in the public interest is caused by EU and its new legislation as well.

3) In what should be the platform useful?

Atregia: It concerns an interesting topic that will grow in the future. Our company is interested in new trends and how the field will be developed. Furthermore, for our company could be interesting to develop new business opportunities and contacts for cooperation with companies that deal with the environment and have the same target group.

Sims: It depends how it will be set, but I expect easier communication outwards, because we are company that actively supports and applies the principles of the CE but has no capacity to fully devote it.

Asio: From my point of view, I see the main benefit in connection and networking with other companies. I can find out valuable information from them and establish cooperation. I would also appreciate some tangible basis for our projects - how to improve the recycling process from the CE perspective (facts and figures, return). It is also very helpful that INCIEN can lobby for the concept and ministry and state authorities will know that there are enough companies behind INCIEN, which is a significant force in the negotiations.

Renards: Bringing together businesses with similar interests.

4) The aim of INCIEN is also close communication with the ministries. It is in legislation something that closely relates to your business?

Atregia: It will, more in the negative direction. Till 2020 is the second and last programming period for the czech greenery in the European Union. After 2020, we have to trade without subsidies. And as in the previous programming period it was drawn a lot of money to the public places, so we expect that 2020 will accelerate our business, which is in turn positive. After 2020, we will seek business opportunities ourselves, they remain only municipalities as customers that have the landscape beautification given by legislation.

Asio: Under pressure from the EU, we have committed themselves to meeting the limits, such as the amount of pollution runoff from the sewage disposal plant.

This means that we still need to develop more efficient technology. We do also training sessions where we explain the legislation to designers and companies to avoid paying fines (about 50 seminars per year). Furthermore, I can mention "program Drought" when we were directly involved in the creation of legislation to make use of treated wastewater for irrigation of communities.

5) How does your company get information, which communication channels are used to identify new trends, changes in legislation etc. on a regular basis?

Atregia: Our assistant is looking for information in a field that we do. In other areas (such as CE in general) not yet, that's why I see positives in the platform that we would learn something else. Further we follow *Dotační.Info* and various publications. We would like to transform corporate website into a information portal in future. It would provide new information from the field of greenery. We use social networks a little, but we want to. In the future we plan to present our new PR materials (including videos and visual material) on them.

Sims: We use mother company located in the USA a lot. It has the know-how and departments specialized in circular economy and recycling. Communication takes place within the internal portal. Our marketing assistant was looking for documentation to create our brochures a few months back and found INCIEN website and since then we draw information from it and maintain cooperation. Finally, we use the internet getting articles via keywords on search engines.

Asio: I like for example SLAG, which are discussion forums sorted by category, it is used abroad a lot and is used often for communication instead of email. Furthermore, if there will be some interesting event associated with water purification, we will come and we can also participate financially. Furthermore we dedicate a large part of the budget for international conferences, we have an average of 15 research projects each year. We collect new information on trade fairs abroad, for example in China. Further we use LinkedIn or participate in various competitions and surveys. Furthermore, occasionally we collaborate with South Moravian Innovation Centre (hereinafter JIC) - some time ago the collaboration was on high level, not it is weaker.

JRK Waste Management: Uncle Google :) We also monitor *Hospodářské noviny* and other online news portals, as well as participate in trade fairs, exhibitions and conferences. We do not use social networks too much, anyway, not against the use, if there would be a group on the topic of circular economy. Unfortunately I did not find much information there till now.

Aivotec: Till now we used mainly the Internet, Google. At the conference I go very rarely and rather as a speaker.

Renards: We are company concerning subsidies, so we're looking for a lot of subsidy providers websites (each person monitors a particular area). Furthermore, we are interested in the different thematic workshops and exhibitions. Furthermore we buy journals and monitor sites of ministries and non-profit organisations dealing with circular economy. We come to know a lot of current things also in communication with our clients. Sometimes we attend seminars organized by JIC.

ASHPA: I mention the classic Google, social networks we use occasionally, articles on the internet + information from practice, because we are moving around waste companies on the municipalities. When some change is introduced, so we have it directly from them. Last but not least we read journals as well.

6) Where it would be nice to collect information from under the platform?

Atregia: Online portal to obtain information anytime, anywhere. The information could be in larger volume - interconnect multiple disciplines that deal with CE principles. It would be easier than just receive newsletters to a mailbox. I would supplement this by conferences every six months. A great example of this was the last conference *Waste as resource*, where was also mentioned development abroad, which was very interesting. I seek inspiration in our industry abroad.

Sims: The most convenient form would be Newsletter for me, which would contain the main topics, and then sampling notifications from the website via RSS. Notifications can go wherever you set it - to email, the browser, anywhere ... Occasionally I visit Facebook page, however, I do not spend too much time to watch the feed, rather I would really welcome any group where I can read posts that interest me. It would be also a good idea to create an online portal, where would I walked notification and had in it all the information from the most recent.

Asio: Considering how firms have little time today, it would be good to send a regular newsletter, and once in a while (1x per year) to organize a seminar or conference, where firms could meet and discuss various topics with experts. INCIEN's advantage is that it knows the companies well and when I would turn on INCIEN in purpose to reach any firm to work on a project, I know it will give me the relevant information.

JRK Waste Management: One of the possibilities is certainly conference and networking of companies, and I would certainly welcome a newsletter in written form, if it was with a 1-3 month frequency and would be there summarized useful information, changes in legislation (eg. change the law on waste - if is it prepared, at what stage is it ...), news from the world, what other companies are working on etc. A third source of information, I would like to see, is a web page where firms share information, news, projects etc.

Aivotec: From my point of view it would be already mentioned online platform. I do not use social networks and I welcome interesting conference once in a while. I'd like to receive newsletter.

Renards: I would definitely follow social networks, especially Facebook. I would also like to receive 1x a month Newsletter where 5-6 main news were summed and it would be possible to click through to a website. I would like some website that would be a marketplace of information relating to CE. It would save a lot of time searching information through various sources. It could be interconnection with Facebook as well. And some tip - we inform our clients by short sms message which is not common, but I think it would be appropriate in this case. Certainly it would be useful to organize once a month a seminar on a specific topic (eg. compost treatment) with some experts and refreshments.

ASHPA: Certainly information in electronic form, whether it's Newsletter (1x per month), The Facebook closed user group, or even a website dedicated to the platform directly.

7) Do you have any proven channel for communication with your target group (eg. municipalities)? Have you need for the establishment of an association?

Atregia: So far we have the most proven Face-to-face communication and recommendations. Therefore, we would like to continue this trend.

8) Online platform - how much is it interesting?

Atregia: Surely we would reserve some time to watch this online portal, but we did not follow it on a daily basis, rather week. And I can imagine possibility of distribution of shared information by sector - eg. greenery, so we would follow and contribute actively.

Sims: It is certainly a very useful complement of networking, companies could mutually share news and experiences online and I would definitely go with it.

Asio: It would certainly facilitate the work and time, and given that we use SLAG, we sympathize with everything, where we can discuss these topics and establish cooperation.

JRK Waste Management: It is beneficial that it brings together information and you don't have to look at a lot of sources. It is enough to look just at one.

Aivotec: Centralize information - what is new etc. - is certainly correct. European websites already exist, in the czech environment I would be happy to use it finally.

Renards: It is important to be updated and interesting information to be occurred, I'll watch it. It could also work a closed group on Facebook.

ASHPA: I would need to know first how it will look like, what type of information would have been there. But I suppose if it will be useful and interesting, so it would be great.

9) How often would you like to have a meeting of companies that are also involved in CE and would be part of the platform - eg. conference?

Sims: More-day conference could be every six months, other events (workshops...), I would choose according to the current topic. For example, they are quite interesting business models and practical examples. Therefore, I was quite inspired on conference *Waste as resource* and certainly I will visit similar ones again.

Asio: Roughly 1-2x per year.

JRK Waste Management: It would depends where it is, how many companies participate, but the optimum frequency is once per six months. I like being able to establish cooperation with other companies.

Aivotec: I'm not a big supporter of the view that the conference is about information. Rather, it is a personal meeting. I would go every week for interesting workshops, that would suit me best.

Renards: It would be good to have conferences once a year, but more days. To have possibility to network in the evening.

ASHPA: Those conferences that might be worth it, are not often. For example *Waste as resource* was very interesting conference and we can participate on similars 2x per year. It depends a lot on the program of event and it should be easily accessible and should there be a accommodation.

10) What is your opinion about the possibilities of individual cooperation and consultation with INCIEN?

Atregia: For companies it is certainly interesting, but our company is a limited by american parent company, so I would welcome a broader collaboration.

5.7 Final recommendations

As is apparent from previous quantitative and qualitative research, the view of the public and businesses on circular economy is a bit different. Companies engaged in circular economy (eg. INCIEN in czech environment) must interact with public and with companies in different way. Companies will appreciate the enhanced cooperation on the basis of consultations and conferences where they can network among themselves and share experiences, while people more appreciate communication on social networks and through public media. The communication strategy for these two target groups will vary. How specifically clear up the following chapters.

5.7.1 Communication towards the public

Based on the questionnaire it was found out that nearly two thirds of people have no idea what the circular economy is independently on age, education. In addition, half of all people said there is no actively engaged organization in this field in the Czech republic. Therefore, the need to spread awareness about the concept and the Institute is pretty big. People are badly informed but not indifferent, therefore, they are willing to absorb new information. Stated communication proposal doesn't apply to any particular campaign, they are only recommendations in the context of a long-term horizon for companies spreading awareness about the circular economy - in this case for the czech Institute of circular economy. Derived from primary and secondary data are drawn the following recommendations.

Offline communication activities

First it should be worked on raising of awareness through long-term cooperation with magazines focusing on ecology. Among the most famous journals in this field we can include traditional monthly magazine Nika. The magazine is focused on environmental enlightenment more than 30 years and on raising of public awareness of environmental issues in the context of the integration of the Czech Republic into the European Union.

It would be also useful to establish long-term cooperation with the largest media group in the Czech Republic Mafra. This company owns several the most widely read serious newspapers - we can appoint MF Dnes and Lidové noviny. It also publishes news-social weekly magazine Téma and free daily newspapers Metro, which is published weekdays in Prague and other 50 cities across the country. In a relatively short period Metro has created a decent base of nearly 500 thousand readers. The second title is a free weekly magazine 5plus2, which is published every Friday for free, in costs of nearly 820,000 published pieces, is one of the biggest weekly magazines on the czech market.

Classic PR article could be included once per six months to non-regional periodical, before some big event (eg. conference) would be appropriate to create an invitation and incorporate it into a regional periodical. If the article is good, useful,

well-aimed and relevant, so the cost is often very low or zero. It is not a traditional advertising, but a full-fledged article/interview.

Institute of circular economy is only organization that deals with the spread of enlightenment in the Czech Republic. Other companies have these activities only marginally. Therefore it would be appropriate to issue time to time its own brochure/magazine in limited press run, which would summarize the activities in a given period, news and trends and invite the public to the following events. Then it would be available to get on INCIEN's events for public.

Event marketing belongs to the ideas of marketing specialists, which seek to attract attention and gain the interest of the people without the use of standard advertising media or articles. Successful events can cause mental and emotional stimuli that promote brand image, and thus business plans. Among the most frequent organizers of such events fall nonprofit organizations, unfortunately, they usually dispose of lack financial sources to be fully demonstrated. Therefore, there are usually used other sources of finance, especially the sponsors, foundations, regional budgets, EU funds and others that should INCIEN fully utilize. Moreover, according to the questionnaire survey, people are opened for new information, for example through various seminars or meetings. Among such actions belong already established discussion meetings Buzz Talks, where discuss speakers from the industry and is attended by both businesses and the general public (capacity 20-30 people). The institute should continue in lecturing on municipalities and especially in kindergartens and schools, because it is very important to start with education, how to properly dispose of waste and what is impact on the environment, as soon as possible, the best since the preschool years. Regarding education in schools, it would be good to start a campaign that targets at czech elementary schools and kindergartens and then all-day meetings would took a place in registered institutions, where would be discussed the issue of waste separation and principles of circular economy as such. The involvement of companies in partner network would be the option as well. Another possibility is to hold competition concerning recycling for schools once for a while - for example, each class can make various objects from sorted plastic/paper/..., such as large chains or balls and compete for the biggest object. Or the selected classes could go to the streets and collect as much free lying waste and sort it. Again, class or group with the largest amount of sorted waste would win. A prize could be donations from sponsors or other educational experience held by INCIEN. These can include for example an excursion to the collection yards, landfills and incinerators or visit the firms, where the principles of circular economy works.

Big commotion might create a one-hour document that would map out waste treatment till now and possible pitfalls in the future. It would point out dangers of careless manipulation of waste and call attention to some examples of good practice. For example, how it works in companies where recycling and sustainability principle is number one. The document would be screened in cooperation with cinemas across the country for students and the general public. A good place is for example university cinema Scala with a capacity of less than 800 seats. After the

broadcast could continue discussion, depending on the specific event. If successful, it could be a document included in the broadcast of public television or just mentioned in the discussion or in the news.

The next essential step would be to deepen the cooperation with state authorities - such as ministries. State authorities should stand up for the idea and present the Czech Republic as a country that has a green approach and circular economy in its preferences for the next 15 years, and these things start to communicate externally as soon as possible. Another subject for cooperation should be science and research institution, to negotiate such conditions that the concept will be gradually assigned to a teaching materials for primary, secondary and high schools.

Online communication activities

As is evident from the results of research, online activities are nowadays the most important component of communication perhaps of each company. The first fundamental pillar for communication is the website. It allow firm to reach easier a broad spectrum of people, to present the brand and build its image. Further it is possible to insert actual articles, trends and invitations to events. It is advisable to interconnect it with other social networks to support getting people on them not only from search engines or directly. It would be essential to perform SEO analysis, including an analysis of keywords associated with the field, linkbuilding, and, if possible, use relevant keywords in the content. Website of Institute of circular economy appears to twelfth position in search engines when typing the word "oběhové hospodářství". The website itself is then processed well as an clarity and content are concerned. Blog is great thing to have quality content and it would be not a bad thing to establish a discussion section where people could publicly discuss topics of the issue. Additionally, if they enter the email address, they would be targeted via newsletter, of course only when invitations to the event once in a while. Website is not translated into English, in this case it is not a necessity. The Institute works especially for czech speaking citizens and investments to translation of all activities would be pointless.

Social networks Google+, LinkedIn, and Twitter does not need to be updated every week as a response to them was evaluated as almost zero. Instagram can continue, but only as a supplement, not as an information medium.

Online news have great potential in accordance with the public. Recommended is already mentioned collaboration with the MAFRA media group, which owns newspapers and online articles issuing - eg. iDNES. It publishes them on its website on social networks as well, so the reach is really huge. Another suitable partner can be online server from the field ekolist.cz or enviweb.cz. There are published interesting articles from field of ecology, while the average number of views the article is about 70-80 people.

Appropriate social network that has potential and that should be used regularly is Facebook. People like watching the short videos, photos, or they like to compete. Page of Institute of circular economy has 538 fans to date 29th April 2016. Since people watch often Facebook feed and they like it, it would be appro-

priate to try to increase the subscriber base of INCIEN page. First of all it is need to do an analysis of visitor activity using Page Insights. Using Page Insights each editor can display all posts and determine which ones have the most likes, sharing and the least negative feedback. To assure that our posts are visible for as much our fans as possible, it is necessary to use Facebook Ads and promote some important posts. It is suitable to respond to all comments from fans entered on the Timeline. People must know that there is always for them somebody continuously 24 hours a day. INCIEN uses cover and profile picture to promote events. These two pictures are the first thing a person sees when opening a page. That is why should be obvious what administrator expresses by them. Another thing that might work is to share short guerilla video with the topic of recycling. Video that will be short and describe accurately the situation that would come to pass if people were indifferent. In the case of videos, it is advisable to upload them directly to Facebook, so they have a greater reach. Behind the scenes video would have great success too. For example record the preparations of conference, personal invitation of experts to the workshop, how were past events going on, for example *Uklid'me Česko* with Incien etc. The competition has success as well, while the best are the ones where people share a picture or a vote between two pictures. Once in a while it would be good to ask people a simple question that motivates them: *What do you recycle? Who of you sort at least ... write your name in the comments!* etc. The reward could be free ticket for the workshop. Last but not least, INCIEN should cooperate with professionally similar pages in the form of barter, for example, ask them to share events and Facebook page and offer anything else for consideration.

Videos on Youtube could start in the form of a education broadcast - for example, every week / month to release a short documentary regarding circular economy. Youtube should not be only supplement to all existing social networks, but it should be something special. Videos from backstage, from events etc. is suitable to post on Facebook. YouTube should be held from the other side. As an information channel for those who want to learn something new and it would operate on a regular basis.

5.7.2 Communication towards the businesses

All stakeholders are interconnected with the Institute of circular economy and work on common projects and goals. Almost all representatives of companies engage circular economy (hereinafter CE) for years and came into contact through a common project or the first conference organized by the *INCIEN Waste as resource*. Conference had very positive feedback from all participants. Communication with companies is carried out on the basis of individual meetings, through social networks and the website. However, once the amount of partners is growing, capacities for individual solutions are on the decrease and INCIEN needs to take another, more comprehensive way - create a platform bringing together companies that actively support the implementation of the principles of CE in all spheres of business and will stand by INCIEN in negotiation of better conditions in czech industry, science and research and other spheres. Institute of circular economy should its

members constantly inform about news in this field, changes in legislation and new projects. For the greater part, communication should take place on the internet (in the opinion of all respondents). Once in a while, however, 100% of respondents would welcome networking, so communication will be divided again into offline and online section.

Offline communication activities

Among the classical form of presentation Institute of CE should include the trade fairs, whether domestic or foreign. As two of the most important in this field are regarded FOR WASTE & WATER and IFAT. FOR WASTE & WATER offers space for performances, not only conventional products and traditional technologies, but also innovations in the areas of communal services, waste management, recycling, further processing and production of products made from recycled materials, as well as in all areas of water technology, including the field of sewage treatment plants, drinking water treatment, plumbing, and also in the cleaning and ecology and environmental protection. Accompanying program allows visitors to attend lectures, seminars and conferences where INCIEN should perform. The fair is held in September in Prague. It is possible to apply till the beginning of September. Till the end of May are offered discounted prices on rental. Since June there is last price phase and prices are higher. Another traditional trade fair is IFAT, which belongs among the most important specialized world fairs in the field of environmental technology. All the important manufacturing and trading companies and unions will come to Munich for the world's largest trade fair, which is also a meeting place for representatives of environmental politics in industry of waste disposal. The fair is held every year in June.

Other activities should be desired seminars on the respective issue, which would be held each month in Prague or Brno. Members of the platform should enter the seminar for free, the others would sign up using the online form and pay the entry fee. Number of persons would be limited to 20 persons.

Two-thirds of respondents would welcome every six months more-day conference. *Waste as resource* was the first and last conference organized by INCIEN. The organization was excellent, but there was worse accessibility to the place and accommodation with small capacity, that's why many companies did not stay overnight. Conference should take place on place which will be provided with accommodation, catering and everything what guests would need. Fees will be collected at registration to cover speakers, food, drink and accommodation. Part of conference (the best at the beginning) could always be a small presentation of what INCIEN reached the last half year. Conference should be attended by representatives of all the members of the platform + other people (for a total of 60-80 visitors). Over time, the conference could grow by interest.

INCIEN should participate in a larger conferences time to time, for example *Waste to Energy*. This is an international conference which takes place in Clarion Congress Hotel Prague. It is attended by not only representatives of trade unions,

companies, but also by minister of state (environment), representatives of banks, directors of research institutes and other stakeholders. There are interesting projects, changes in legislation and various technology trends solved.

Online communication activities

After summarizing the results of depth interviews related to online information channels, total communication among members of platform should be built on three pillars - a web portal, Facebook and newsletter. The basic pillar would be a web interface, which would be linked to existing pages of INCIEN, there would be links to all social networks and a login window for members of the platform. Because of exclusiveness of membership in the platform and member fees, the benefit would be another content after logging - conscientiously monitored trends in Czech republic and abroad, as well as event list, where will be invitations to upcoming events, as well as reports of past events. Members should have chance to vote and attend little surveys - eg. to evaluate the conference, suggest speakers, topics, places of seminars and conferences.

There will be also a section with representatives from all member companies + their contacts and areas in which they are specialized. Members will be able to network among themselves through discussion forum, which will be divided into sections according to the sector and further into sections: Events, Questions, Comments, Common general. Next section will contain photos from events and finally the last section will summarize important changes in legislation. The entire online platform will be supported by regular newsletter 1x per month that will sum up the important news and links to the web. Second supporting tool for communication will be specially created group for the platform, where will be discussion as well and possibility to share documents. Many companies are missing that Facebook group where they can solve what they are interested in. Members should be also able to receive news from the web portal via RSS aggregator, which will support this portal. And last but not least for the strengthening of B2B relationships can serve LinkedIn, which is tool with much more potential in the business sphere.

6 Discussion

This thesis provides new insights regarding the perception of circular economy of czech public and companies. To meet the objectives of the thesis they were used secondary and primary data. It was quite difficult to get data from the secondary survey, since none of the surveys in the Czech Republic is dealing with partial objectives set by this work. Affordable and comprehensive studies were carried out abroad, as the most suitable exploration for this work was set the one from company GreenBiz Group. It is evident from it that the importance of the circular economy to business grows, doubling in importance from just two years ago, which was confirmed by primary research. People recycle and are interested, but given the fact that in the Czech republic only one nonprofit organization deals with this field, awareness is not as high as in western Europe. In western Europe more than half of respondents' companies have already implemented circular economy principles, such as materials recycling, remanufacturing, take-back programs etc. Also, two-thirds of respondents in primary research said that they had met at companies with these principles. Additionally, press releases gathered by server FeedIt says that more and more czech businesses classify friendlier approach to the environment in its corporate values and lead employees to environmentally more responsible behavior. Before the questionnaire there was recorded number of fans of INCIEN on social networks and compared with the situation after research (end of April). It confirmed the importance of the Facebook as a communication medium that has been established by respondent's answers. Results of primary and secondary research were not released in anything. All this gives a clear signal that the trend of perception of a responsible attitude of the people is growing and has the potential even in the czech environment.

The main source of primary data consisted of a questionnaire survey, which was attended by 325 respondents. It is clear that the explanatory power of the questionnaire would be greater if getting more respondents. During data collection it was seeked to obtain a sample as close as possible to the age distribution of the population according to the CSU from the last census. This has been achieved. Questionnaire was attended by 60% of women, therefore, the sample not strictly corresponds to the gender distribution in the entire czech population. The questionnaire was distributed mainly in electronic form and written form of the questionnaire was served to older people who do not have internet access or take this form as convenient. Results may be distorted by the oldest age group population. Older people do not use the internet as communication channel and they are not typical target group of INCIEN. It is targeting on younger people who are not indifferent to the future of our planet in a matter of decades. This causes that results could probably vary after the elimination of the oldest group of respondents. However, the survey was finding out public opinion, so they were ultimately retained all ages. The weakness of depth interviews was the number of respondents. Those were only 7. It was enough for the purposes of the investigation, but a larger num-

ber of respondents would mean a greater number of new ideas and suggestions, and thus final recommendations could be proposed even better.

This diploma thesis examined only the current state of awareness and communication. Final recommendations are prepared in text form, not in numbers. It is for the reason that awareness is a long-distance run, and it is not possible to determine in advance either return or cost. INCIEN takes a lot of money in the form of grants through its activities and contracts. In short, by their own operations. Rental of commercial space is also different from the usual offerings, such as Prague 7 provides significantly better lease terms to INCIEN than to other entities. Everything is about the negotiation. For an idea of letting the university Scala cinema is 1300 CZK/hour, 9 000 CZK/8 hours. However, this may also vary when launching the campaign/document to promote and spread a good thing that have an educational character as well. It is the same with PR articles in newspapers. There are cases when the editors will not take a publishing fee for publishing the article or interview (for example, the interview with the owner of one of the important startup in Brno). INCIEN wouldn't like to have paid advertising, moreover it's expensive. Regarding the proposal for cooperation with companies, everything will be financed from member charges, which will not be set high, so that it could be afforded by the vast majority of companies.

Diploma thesis will not help only those who would like to learn something new and see how it is the Czech public and businesses with attitude to a sustainable system. It will serve to the Institute of circular economy itself, which may apply some outcomes in practice and which contributed a lot to the successful completion of this work.

7 Conclusion

The main objective of diploma thesis was to determine the level of awareness of the concept of circular economy among the czech public and entrepreneurs and propose how to communicate with these two groups.

To achieve this goal it was necessary to make indicative analysis and subsequent primary survey - the questionnaire and depth interviews. The questionnaire survey was conducted in March 2016 and 325 respondents participated. The sample of respondents corresponds to the age distribution of the czech population, in order to assure the lowest distortion of the results. Data were collected mainly in the electronic version with the help of research software Survio. People with limited access to the internet fulfilled printed version. Primary data were processed in the programs Statistica 12 and Microsoft Office Excel. This was followed by comparison of found secondary data.

The results of the survey show that most people (62%) does not know the term of circular economy. By question whether people know about the new circular economy of the EU package, 90% of respondents answered "No". Conversely, 87% of people sort waste. This means that people are not indifferent to the way of waste treatment, but they don't get this issue with the issue of circular economy, they don't know what it means because of lack of information in czech media. People often use internet to gain new information (on average up to 80%). The most common communication channels are Facebook, online news and search engines. According to the results, more than half of the respondents is opened to new information from this field and are interested to learn something new. There is great potential in social networks, eg. Facebook and Youtube. People like to read newspapers often, either in printed or electronic version. The ratio of the use of online and offline communication channels is strongly dependent on the age of respondents, as shown by contingency analysis. However, the trend is clear. Even the people of the two oldest age groups often indicated online media predominate over offline media.

Depth interviews were conducted in April 2016 with seven representatives of companies that apply the principles of circular economy or support just support this concept. Most respondents said the web portal as the best form of cooperation and communication with other companies that would be part of the upcoming platform of INCIEN. More than half of representatives stated Newsletter and Facebook group as appropriate support of web portal. Regarding the personal meeting, representatives recalled the conference *Waste as resource* and would like to attend conference like this again. Based on information gathered it was made a proposal of the organization of platform itself in the chapter Final Recommendations.

At the very end there was a discussion of the collected data and control whether all targets that were set at the beginning have been met. The objectives were met and the work has provided a comprehensive view on the issue of circular economy, which can serve to anyone who will be interested in this field in the future.

8 References

- [1] BELK, R W., FISCHER, E., KOZINETS, R V. *Qualitative consumer & marketing research*. London: SAGE, 2013. 234 s. ISBN 978-0-85702-767-2.
- [2] BRAUNGART, M. -- MCDONOUGH, W. *Cradle to cradle - Remaking the way we make things*. New York: North Point Press, 2002. 195 s. ISBN 978-0-86547-587-8.
- [3] CHAFFEY, D. ELLIS-CHADWICK, F. *Digital marketing*. Pearson Education, 2015. 728 s. ISBN 978-12-920-7761-1.
- [4] DAVID PICKTON, Amanda Broderick. *Integrated marketing communications*. 2. ed. Upper Saddle River, N.J: Prentice Hall Financial Times, 2005. ISBN 0273676458.
- [5] EAGLE, L. DAHL, S. CZARNECKA, B. LLOYD, J. *Marketing Communications*. New York: Routledge, 2014. 444 s. ISBN 978-13-176-9774-9.
- [6] EGAN, J. *Marketing communications*. London: SAGE, 2014. 440 s. ISBN 978-147-390-863-5
- [7] FORET, Miroslav. *Marketingová komunikace*. Brno: Computer Press, 2006. 443 s. ISBN 80-251-1041-9.
- [8] HANZELKOVÁ, Alena. *Strategický marketing: teorie pro praxi*. Praha: C.H. Beck, 2009. C.H. Beck pro praxi. ISBN 978-80-7400-120-8.
- [9] H. CHARLES ROMESBURG. *Cluster analysis for researchers*. [Repr.]. Lulu Pr: Lulu Press, 2004. ISBN 9781411606173.
- [10] JAKUBÍKOVÁ, Dagmar. *Strategický marketing: [strategie a trendy]*. Praha: Grada, 2008. ISBN 978-80-247-2690-8.
- [11] JOSHI, M. *Essentials of marketing*. Ventus Publishing, 2012. 65 s. ISBN 978-87-403-0206-6.
- [12] KAYODE, O. *Marketing Communications*. 1. ed. Bookboon, 2014. 305 s. ISBN 978-87-403-0674-3.
- [13] KOTLER, P., ARMSTRONG, G. *Principles of marketing*. 15. ed. Harlow: Pearson, 2014. 716 s. ISBN 978-0-273-78699-3.
- [14] KOTLER, Philip, KELLER, Kevin Lane. *Marketing management*. 14. ed. Grada Publishing, 2013. 814 s. ISBN 80-247-4150-4.

- [15] KOZEL, Roman. *Moderní marketingový výzkum: nové trendy, kvantitativní a kvalitativní metody a techniky, průběh a organizace, aplikace v praxi, přínosy a možnosti*. Praha: Grada, 2006. ISBN 80-247-0966-X.
- [16] PŘIKRYLOVÁ, Jana a Hana JAHODOVÁ. *Moderní marketingová komunikace*. Praha: Grada, 2010. Expert (Grada). ISBN 978-80-247-3622-8.
- [17] RITSON, N. *Strategic management*. 2. ed. Bookboon, 2013. 117 s. ISBN 978-87-403-0506-7.
- [18] RYAN, Damian. a Calvin. JONES. *Understanding digital marketing: marketing strategies for engaging the digital generation*. Philadelphia: Kogan Page, 2009. ISBN 0749453893.
- [19] SHUKLA, P. *Essentials of marketing research*. 1. ed. Bookboon, 2008. 116 s. ISBN 978-87-7681-411-3.
- [20] SILVER, L. a kol. *The essentials of marketing research*. 3. ed. New York: Routledge, 2013. 362 s. ISBN 978-0-415-89928-4.
- [21] SMITH, P. R. a Ze. ZOOK. *Marketing communications: integrating offline and online with social media*. 5. ed. Philadelphia, PA: Kogan Page, 2011. ISBN 0749461942.
- [22] SOLOMON, M R. *Consumer behavior : buying, having, and being*. 1. ed. Boston [u.a.]: Pearson, 2013. 639 s. ISBN 978-0-273-76731-2.
- [23] SOLOMON, Michael R. *Marketing: real people, real decisions*. Harlow: Prentice Hall Financial Times, 2009. ISBN 0273727788
- [24] WHALLEY, A. *Strategic marketing*. 1. ed. Bookboon, 2010. 116 s. ISBN 978-87-7681-643-8.
- [25] WILLIAM CHITTY, Nigel Barker. *Integrated marketing communications*. 2. Asia Pacific ed. South Melbourne, Vic: Cengage Learning Australia, 2008. ISBN 9780170136679.

Electronic sources

- [26] BOUNDLESS. *Informative, Persuasive, and Reminder Advertising* [online]. Boundless Marketing, 2015. [cit. 2015-12-09]. Available: <https://www.boundless.com/marketing/textbooks/boundless-marketing-textbook/advertising-and-public-relations-13/the-advertising-campaign-88/informative-persuasive-and-reminder-advertising-438-219/>

- [27] BROŽKOVÁ, J. *Tříděný odpad* [online]. 2016, [cit. 2016-04-18]. Available: <http://www.bydlet.cz/398033-trideny-odpad-jak-umi-cesi-tridit-odpad>
- [28] C2C TAIWAN. *Cradle to Cradle* [online]. Taiwan, 2015 [cit. 2016-03-17]. Dostupné z: <http://www.c2cplatform.tw/en/c2c.php?Key=1>
- [29] CLEVERISM. *Market Research Techniques: Primary and Secondary Market Research* [online]. May 2015 [cit. 2016-02-17]. Available: <https://www.cleverism.com/market-research-techniques-primary-secondary/>
- [30] ČESKÝ STATISTICKÝ ÚŘAD *Věková struktura obyvatel ČR* [online]. 2011 [cit. 2016-02-17]. Available: https://www.czso.cz/csu/czso/obyvatelstvo_lide
- [31] DOWLATSHAHI, Shad. *Interface*. International Journal of the Institute for Operations Research and the Management Sciences 30 [online]. 2000 [cit. 2016-03-17]. Available: https://saylordotorg.github.io/text_sustainability-innovation-and-entrepreneurship/s10-01-green-supply-chains.html
- [32] EKOLIST. „Zelený“ hotel Mosaic House samotné hosty k šetrnosti nenutí [online]. 2010, [cit. 2016-02-17]. Available: <http://ekolist.cz/cz/zpravodajstvi/zpravy/zeleny-hotel-mosaic-house-samotne-hosty-k-ekologii-nenuti>
- [33] EUR-LEX. *Communication from the Commission to the European Parliament, the Council, the European economic and social committee and the Committee of regions towards a circular economy: A zero waste programme for Europe* [online]. 2014, [cit. 2016-02-17]. Available: <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52014DC0398>
- [34] EUROPEAN COMMISSION. *Circular Economy Package: Questions & Answers* [online]. December 2015, [cit. 2016-02-17]. Available: http://europa.eu/rapid/press-release_MEMO-15-6204_en.htm
- [35] EUROPEAN COMMISSION. *Generation Awake* [online]. April 2015, [cit. 2016-02-17]. Available: <http://ec.europa.eu/environment/generationawake/>
- [36] EUROPEAN COMMISSION. *Press release about new package of circular economy* [online]. December 2015, [cit. 2016-02-17]. Available: http://europa.eu/rapid/press-release_IP-15-6203_en.htm
- [37] EUROPEAN COMMISSION. *The circular economy: connecting, creating and conserving value* [online]. 2014, [cit. 2016-02-17]. Available: <http://www.eesc.europa.eu/resources/docs/the-circular-economy.pdf> DOI: 10.2779/80121 ISBN: 978-92-79-37810-2.

- [38] EVROPSKÁ DATABANKA. *Třídění odpadu je pro 72% Čechů běžná záležitost* [online]. 2016, [cit. 2016-04-14]. Available: <http://www.edb.cz/clanek-5975-trideni-odpadu-je-pro-72-cechu-bezna-zalezitost>
- [39] FEEDIT. *Počet Zelených firem letos v Česku vzrostl o 13 %. Vytřídí třikrát více elektroodpadu než je republikový průměr* [online]. December 2015, [cit. 2016-02-17]. Available: <http://www.feedit.cz/wordpress/2015/12/22/pocet-zelenych-firem-letos-v-cesku-vzrostl-o-13-vytridi-trikrat-vice-elektroodpadu-nez-je-republikovy-prumer/>
- [40] GREENBIZ GROUP. *The growth of the circular economy* [online]. UPS/GreenBiz Group research study, December 2015, [cit. 2016-02-17]. Available: http://sustainability.ups.com/media/UPS_GreenBiz%20Whitepaper.pdf
- [41] GECHEVSKI, Dario, Atanas KOCHOV, Sanja POPOVSKA--VASILEVSKA, Radmil POLENAKOVIK a Vanco DONEV. *Reverse logistics and green logistics way to improving the environmental*. Acta Technica Corvininensis - Bulletin of Engineering [online]. 2016, 9(1), 63-70 [cit. 2016-05-12]. ISSN 20673809.
- [42] GHISELLINI, Patrizia, Catia CIALANI a Sergio ULGIATI. *A review on circular economy: the expected transition to a balanced interplay of environmental and economic systems*. Journal of Cleaner Production [online]. 2016, 114, 11-32 [cit. 2016-05-12]. DOI: 10.1016/j.jclepro.2015.09.007. ISSN 09596526.
- [43] GILMORE, Dan. *Top Ten Supply Chain Trends of 2006* [online]. Supply Chain Digest, January 2006 [cit. 2016-03-17]. Available: <http://www.scdigest.com/assets/FirstThoughts/07-01-04.cfm?cid=871&ctype=content>
- [44] HALAJ, Peter. *Cirkulární ekonomika jako celosvětový trend ve firmách*. Byznys pro společnost [online]. 2016, [cit. 2016-04-17]. Available: <http://byznysprospolecnost.cz/cirkularni-ekonomika-jako-celosvetovy-trend-ve-firmach-2/>
- [45] HOBSON, Kersty. *Closing the loop or squaring the circle? Locating generative spaces for the circular economy*. Progress in Human Geography [online]. 2016, 40(1), 88-104 [cit. 2016-05-12]. DOI: 10.1177/0309132514566342. ISSN 03091325.
- [46] INSTITUT CIRULÁRNÍ EKONOMIKY. *Cirkulární ekonomika - Co je to?* [online]. WordPress, 2015 [cit. 2016-05-17]. Available: <http://incien.org/cirkularni-ekonomika/>

- [47] INVESTOPEDIA. Banner Advertising [online]. 2016, [cit. 2016-01-17]. Available:
<http://www.investopedia.com/terms/b/banneradvertising.asp#ixzz434sLGacP>
- [48] KOKOSZCZYŃSKI, Krzysztof. *Circular Economy: The future of Europe?* EurActiv [online]. 2015 [cit. 2016-03-17]. Available:
<http://www.euractiv.com/section/sustainable-dev/news/circular-economy-the-future-of-europe/>
- [49] LIEDER, Michael a Amir RASHID. *Review: Towards circular economy implementation.* Journal of Cleaner Production [online]. 2016, 115, 36-51 [cit. 2016-05-12]. DOI: 10.1016/j.jclepro.2015.12.042. ISSN 09596526.
- [50] McARTHUR, Ellen. *Growth within: A circular economy vision for a competitive Europe* [online]. July 2015, [cit. 2016-03-17]. Available:
https://www.ellenmacarthurfoundation.org/assets/downloads/publications/Elle nMacArthurFoundation_Growth-Within_July15.pdf
- [51] McARTHUR, Ellen. *Towards a circular economy: Business rationale for an accelerated transition* [online]. November 2015, [cit. 2016-03-17]. Available:
https://www.ellenmacarthurfoundation.org/assets/downloads/publications/TCE _Ellen-MacArthur-Foundation_26-Nov-2015.pdf
- [52] McNAMARA, C., *Basic Definitions: Advertising, Marketing, Promotion, Public Relations and Publicity, and Sales* [online]. Free Management Library, 2016 [cit. 2016-03-17]. Available:
<http://managementhelp.org/marketing/advertising/defined.htm>
- [53] PRINDLE, D. BOURQUE, B. *A really simple guide to really simple syndication.* Digital trends [online]. March 2015, [cit. 2016-04-17]. Available:
<http://www.digitaltrends.com/computing/how-to-use-rss/>

9 List of figures

Fig. 1	Biological and technical cycle	18
Fig. 2	A simple model of marketing process	21
Fig. 3	Steps in strategic planning	23
Fig. 4	Layers of organizational objectives	26
Fig. 5	Internet marketing	32
Fig. 6	Marketing research according to purpose	39
Fig. 7	Structure of respondents according to gender	46
Fig. 8	Structure of respondents according to level of education	47
Fig. 9	Structure of respondents according to place of residence	47
Fig. 10	Knowledge of concept circular economy	59
Fig. 11	Knowledge of circular economy EU package	61
Fig. 12	Source of information about package	62
Fig. 13	People who ever met with green approach	63
Fig. 14	People who recycle waste	63
Fig. 15	Is in Czech republic bad recycling availability and awareness?	64
Fig. 16	Interest in further information from the field circular economy	66
Fig. 17	Average ratio online x offline media	67
Fig. 18	Cluster analysis diagram	71
Fig. 19	Other information sources - most common answers	72

10 List of tables

Tab. 1	Difference between marketing and selling	22
Tab. 2	Electronic media	30
Tab. 3	Print media	30
Tab. 4	Distribution of respondents	45
Tab. 5	Structure of respondents of quantitative research	48
Tab. 6	Social media INCIEN followers	58
Tab. 7	Dependence between knowledge of concept and age of respondent	60
Tab. 8	Dependence between knowledge of concept and education of respondent	60
Tab. 9	Opinion according to occurrence of circular economy institution	61
Tab. 10	Amount of people who recycle paper, plastic and glass	64
Tab. 11	Level of awareness about circular economy	65
Tab. 12	Dependence between level of awareness and education of respondent	65
Tab. 13	Dependence between interest in further information (education) and gender of respondent	66
Tab. 14	Dependence between using of online media and age of respondent	67
Tab. 15	Descriptive statistics online x offline media	68
Tab. 16	Sources of information - intensity of using	68
Tab. 17	Descriptive statistics information sources	70

Appendix

A Quantitative survey (questionnaire via Survio software)



Postoj veřejnosti k recyklaci a cirkulární ekonomice

Dobrý den,

Jménem Institutu cirkulární ekonomiky (INCIEN) bych Vás ráda poprosila o vyplnění tohoto krátkého dotazníku, který má za úkol zjistit úroveň povědomí o cirkulární ekonomice v České republice. Dotazník zabere maximálně 3 minuty a je anonymní.

Dotazník bude sloužit jako podklad ke studii nevládní neziskové organizace INCIEN, která se zaměřuje na inovativní environmentální management a dále pro diplomovou práci, jejímž výstupem bude návrh komunikační strategie k cílovým skupinám INCIENU.

Předem děkuji mnohokrát za vyplnění!

Bc. Lucie Frýbortová

Říká Vám něco pojem "Cirkulární ekonomika"?

Ano

Nejsem si jistý/á

Ne

Co si pod tímto pojmem představujete?

Zbyvá 250 znaků

Myslíte, že se tímto oborem zabývá v ČR nějaká organizace?

- Ano
- Ne
- Nevím

Pokud ANO, víte která?

 Napište větu

Zbývá 250 znaků

Evropská unie schválila v prosinci 2015 balíček k oběhovému hospodářství, který má přispět k účinnějšímu využívání zdrojů, lepší recyklaci a trvale udržitelnému rozvoji a bude tak mít významný dopad nejen na firmy, ale i spotřebitele. Víte o něm?

- Ano
- Ne

Pokud ANO, kde jste se o balíčku dozvěděli?

 Napište větu

Zbývá 250 znaků

Už jste se někdy setkali s tzv. zeleným přístupem firem, které nabízely protihodnotu za vrácení jejich produktu na konci životnosti?

Ano

Ne

Líbí se vám tento přístup?

Ano

Ne

Třídíte odpad?

Ano

Ne

Pokud ANO, co třídíte?

Zbývá 250 znaků

Zdá se Vám, že je v Česku stále obtížné třídit odpad z důvodu nedostatku kontejnerů, malé informovanosti apod.?

Ano

Ne

Jak moc jste informováni o problematice cirkulární ekonomiky, zelených produktech, způsobech využívání zdrojů apod.? (1=nejméně, 5=nejvíce)



0/5

Zajímá Vás tato problematika z hlediska budoucnosti a chtěli byste se o ní dozvědět více? (chodit na bezplatné semináře, vzdělávání, odebírat novinky atd.)

Ano

Ne

V jakém poměru (procentuelně) využíváte online a offline informační kanály?

Rozdělte 100 bodů

Online (sociální sítě, weby, zpravodajské servery...)

Offline (noviny, letáčky, časopisy...)

0 100 0 100

Jak moc využíváte následující média k získání nových informací?

	hodně	občas	málokdy	vůbec
Facebook	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Twitter	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
LinkedIn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Instagram	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Google+	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Zpravodajské servery (iDnes, novinky.cz apod.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Vyhledávače (Google, Seznam)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Veřejné a výstavy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Konference a semináře	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Oborové knihy a časopisy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jiné	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Youtube	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

V případě, že jste někdy využil/a jako zdroj informací "Jiné", o jaký zdroj šlo?

Zbývá 250 znaků

Jaký je Váš věk?

- 0-24
- 25-34
- 35-54
- 55-64
- 64 a více

Jaké je Vaše pohlaví?

- Muž
- Žena

Jaké je Vaše nejvyšší dosažené vzdělání?

- Základní
- Vyučený/á
- Středoškolské s maturitou
- Vyšší odborné
- Vysokoškolské

Jaká je velikost obce, ve které bydlíte?

- Do 5000
- 5000 - 50 tis.
- 50 tis. - 100 tis.
- Nad 100 tis.

ODESLAT DOTAZNÍK 