University of Economics in Prague

Faculty of Informatics and Statistics

Department of Information Technology

Student : **Tomáš Feige**

Leader of the Thesis : **Ing. Libor Gála**

Opponent of the Thesis : **Ing. Daniel Kafka**

TOPIC OF THE THESIS

Critical success factors affecting business in browser games market

YEAR : 2009/10

Abstract

This bachelor thesis primarily focuses on formulation of critical success factors affecting the business segment of web browser games. To meet this objective are at first defined web browser games and their position on market of online games, then are described major evolution phases of this market segment on the world's scale and individually on local Czech scale. Another information source used in the thesis are findings brought by the analysis of contemporary web browser games' market – divided into two separate players' and producers' parts. The critical success factors in the last part of the thesis are then defined by combining all of the previously gathered information with great emphasis on differences between local and foreign web browser games' producers.

Keywords

critical success factor, CSF, web game, persistent browser based game, PBBG, market analysis

Obsah

1. Czech PBBG market analysis

One of the main components of this work is a practical analysis of the market of persistent browser based games (PBBG), which aims to map and assess its current status. Only then can one define critical success factors (CSF). For CSFs is reserved the last chapter of this thesis.

1.1. Form of processing and selecting the criteria for respondents

I have divided overall market analysis into two separate parts, one designed for players, the other for manufacturers. As a form of analysis I chose a questionnaire, which was distributed through the internet into two languages, English and Czech. As a contact medium for manufacturers' part I used email, for purposes of players' part of the study, I used combination of HTML, CSS, JavaScript, PHP and MySQL to generate a simple online questionnaire, which I published on my personal website http://tomas.feige.cz. Links to this questionnaire where then posted on forum of each PBBG on Czech market.

Note: Both questionnaires are included in this work (see Czech version).

1.2. Market analysis from a customer perspective

Players' part of the analysis was carried out between 15 February and 25 March 2010 and attended by a total of 1229 respondents from a variety of browser games. It is therefore a survey amongst contemporary web game players with aim to create a reference model reflecting the current state of the market. Proven results therefore may not be relevant in the search for potential new customers from among the still non-players.

Note: As a source list of web games was used thematically related information portal on-game.cz, which currently holds records about 157 titles currently operating in our market.

I further subdivided the actual questionnaire into 4 separate thematic groups - personal data, general information, preferences and financial information, while crucial for this work are mainly the last two named blocks.

1.2.1. Personal information

On the issue of gender vast majority of respondents (89.6%) answered *male*, while in terms of age distribution, the biggest share (40.4%) took the age group *21-30 years*, followed by a very close distance of 2% by group *15-20 years*. As a target group of browser games, we can therefore identify men aged 15-30 years.

Total age distribution amongst players closer demonstrates Tabulka 1.

	Amount	Share (%)
Less than 15 years	75	6,2
15-20 years	463	38,4
21-30 years	488	40,4
31-40 years	136	11,3
41-50 years	37	3,1
More than 50 years	8	0,7
Total	1207	100,1[1]

Tabulka 1 – Age distribution amongst browser games players (zdroj: autor)

In the field of actual state 61% of respondents answered *student*, followed by a group o *working* with 32.5% share. The highest reached education degree is *high school graduate* with the total 54.7%. More information in Tabulka 2.

	Amount	Share (%)
none	30	2,6
some school	265	23,3
high school	161	14,2
HS graduate	460	40,5
college	220	19,3
Total	1137	99,9

Tabulka 2 – Highest reached education degree (zdroj: autor)

Geographically, the set of respondents was fairly evenly stratified amongst cities of all sizes from small villages with fewer than 5,000 inhabitants to the cities over 1 million inhabitants. 95.9% of them also stated that they have broadband connection to the Internet from their home.

1.2.2. General information

Home is also the most common place where people are currently connected to the Internet from. This option checked a total of 92.2% of respondents. Second place then belongs with 5.9% to the *work*.

[1] Share of individual responses is rounded to 1 decimal place. There may therefore be a rounding error when the total sum is not equal to 100 (%). But that should have no effect on the overall result.

44.4% of people said they spend at the computer about *3-5 hours* a day, followed by 36.2% to spend at the computer *up to 12 hours*. 60.6% of respondents *more than half of that time* actively use the Internet and related services, which can certainly be linked to the fact that 76.9% of them are also currently members of *at least one online social network*. But to browser games themselves most of the community (67.1%) pays *no more than 2 hours a day* (see Tabulka 3).

	Amount	Share (%)
less than 1 hour	319	27,5
1-2 hours	458	39,6
3-5 hours	297	25,6
6-12 hours	68	5,9
more than 12 hours	12	1
Total	1158	99,6

Tabulka 3 – Daily time spent by playing browser games (zdroj: autor)

Quite interesting finding is that only 37.2% of respondents played *only one browser game* at a time. The remaining 62.8% was a member of *at least 2 different games* and mostly (38.7% of total) *active players*, not just passive members in multiple communities.

For purposes of determining popularity of game genres as the reference source was again used site on-game.cz. That in its database defines the following five items - a realistic, sci-fi, fantasy, manager and other. For more informative value of the first three categories I further subdivided them into two subcategories, and I renamed “manager” to “sports simulator”. The popularity of the genres is then relatively evenly divided amongst all of the categories with mild head position of the *fantasy* genre (25.5%), as further illustrates Tabulka 4.

	Amount	Share (%)
Space Sci-fi	237	19,3
Other Sci-fi	11	0,9
Tolkien-like Fantasy	130	10,6
Other Fantasy	183	14,9
Realistic – present	97	7,9
Realistic – historical	133	10,8
Sports simulator	263	21,4

	Amount	Share (%)
Other[2]	174	14,2
Total	1229	100

Tabulka 4 – Game genres preferences (zdroj: autor)

1.2.3. Preferences

To determine the preferences of individual players, 11 different questions were formulated always with the same answer options to evaluate the personal significance - *large, rather large, medium, small, rather small*. The questions were built according to commonly used evaluation criteria by thematic magazines and Internet portals. The only exceptions are a *recommendation from friends* and *advertisements* that are to reflect the two most commonly used methods of promotion - the reference links and banners.

Overall results of a user preferences' survey summarises Graf 1 at the end of this section.

Product name gained moderate (35.1%) and small (32.2%) significance, while *gaming genre* seems to be a key factor in the decision, because there absolutely dominates large (48.2%), or rather large (24.4%) importance.

Quite surprising finding is the relatively low preference for *game graphics*, which identified the importance of only 41.4% of respondents. The most common response (32.1%) was neutral medium option.

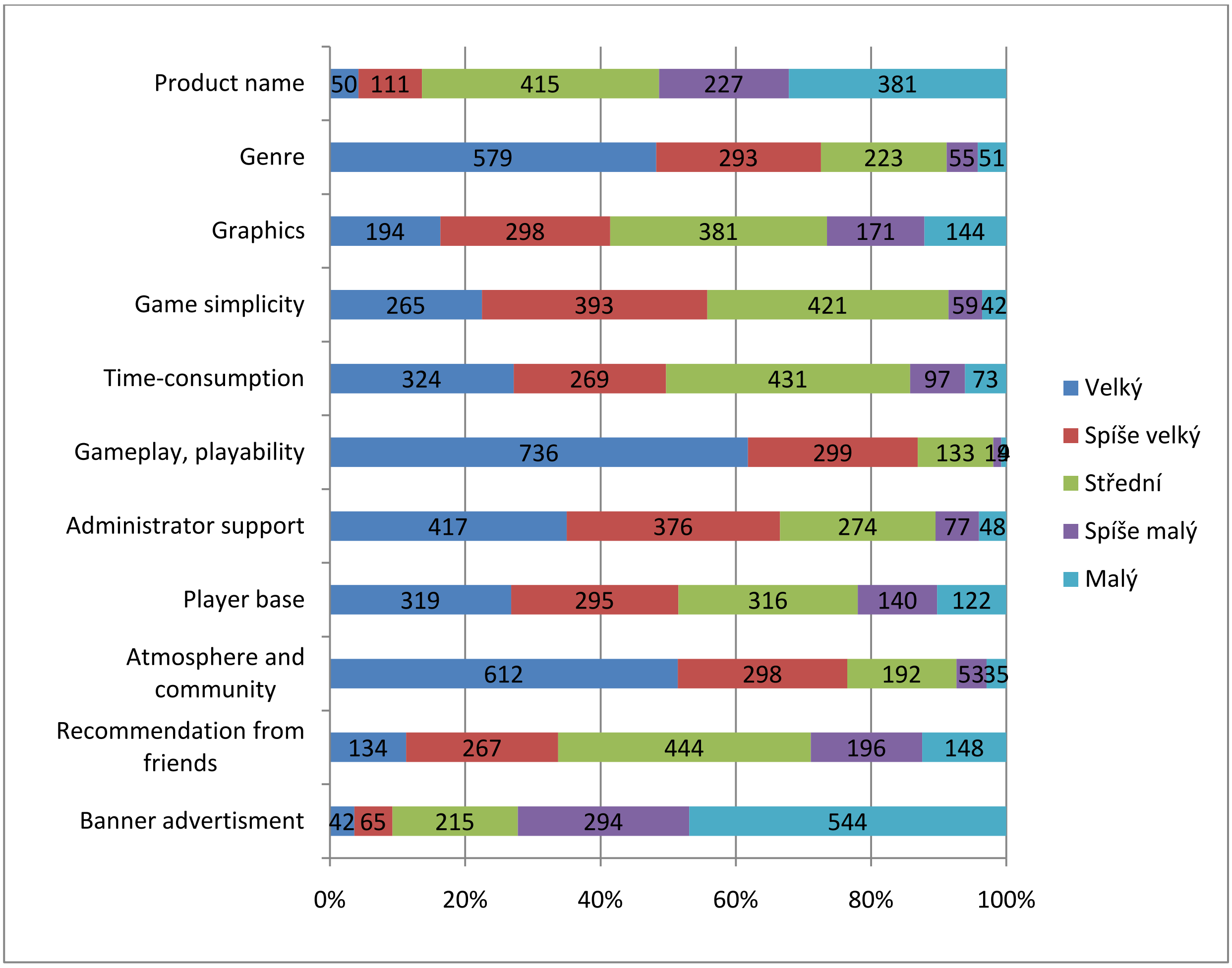
On the contrary on the *conceptual complexity* and *time-consuming* showed a clear trend of preference rather simpler and less time-intensive titles, which can also be characterized as one of the key findings of this analysis.

Unequivocally positive results brought the issue of *players' community* and *atmosphere in the game*, which attaches importance to total 76.4% of respondents. A similar situation can be seen in the *gameplay*, which is considered as important by 86.9% of respondents. However informational value of this finding is not too big. Succinctly summarized the results are that only 2% of players are willing to play games that they do not find satisfying and fun to play.

A positive result also showed *in-game support from admin team* and the *size of the player base* that are important for 66.5% (or 51.5%) respondents. The close bond between games' developers (and administrators) with their users and the feedback they provide each other with can we mark as another key factor. Due to experience the lack of response of administrators to players' questions and needs is one of the frequent reasons for them to leave the game and go to the competition.

[2] Tato skupina je poměrně široká z toho důvodu, že zahrnuje nejen ostatní nespecifikované žánry, ale rovněž i obtížně zařaditelné hry.

In the area of game promotion by expectations dropped the issue of *banner advertising*, which gets conscious attention of only 9.2% of users[3]. We can also, quite surprisingly, identify the relatively weak results in the importance of *recommendations from friends*, which respondents find not that important (with the highest number of responses in the neutral medium option - 37.3%)[4], which could indicate a decreasing trend of the potential use of viral advertising[5] and referal links.



Graf 1 - Overall results of user preferences (zdroj: autor)

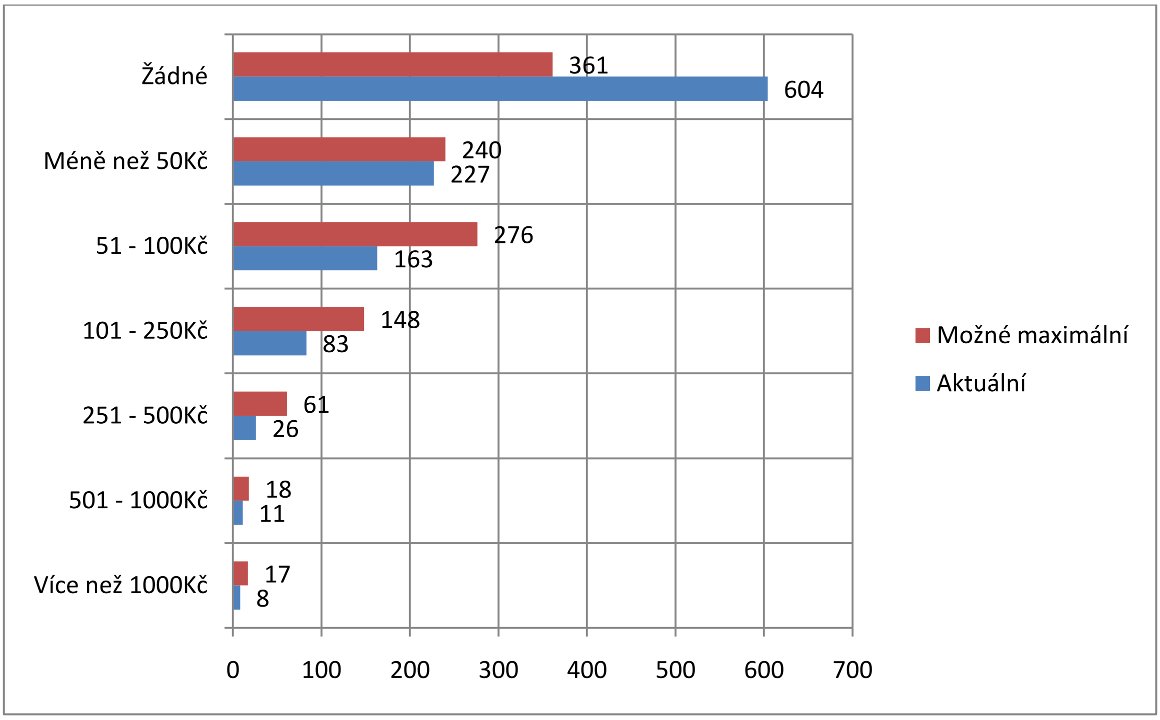
1.2.4. Financial information

This section of the questionnaire was included to determine the players' personal perspective on contemporary marketing methods currently used. The primary focus is now probably the most widely used method for free-to-play with paid extra services.

[3] Question is the amount of subconscious influence of advertisment banners. This topic was studied for instance in 1999 by Xavier Drèze and François-Xavier Hussherr in thein work Internet Advertising: Is Anybody Watching?
http://www.weima.org/download/internet%20advertising_is%20anybody%20watching.pdf
[4] Again there is a question of subconscious influence of such recommendation and its role in future game selection.
[5] Advertisment spreading amongst people in oral, written or other form without control by the product maker.

The use of paid extra services (at least as a test) admitted 66.3% of respondents, while almost one fifth (18.9%) pays premium services regularly. However of the 46.2% of users who are currently paying money for extra in-game content, most of them (34.7%) pay no more than CZK 100 per month.

In the question of how many would they be willing to pay for extra in-game content the share of non-payers group has decreased from 53.8% to 32.2%, while we observe a slight increase for all remaining groups with the highest absolute increase in the option *51 to 100 CZK* (about 113 votes, share increased from 14.5% to 24.6%) and the highest relative increase in the option *251 to 500 CZK* (about 134.8% from the original 26 votes to 61). This shift is summarized in Graf 2, a detailed disaggregation of financial preferences by individual age groups is then attached to the end of this analysis.



Graf 2 – Monthly spendings for playing browser games (zdroj: autor)

With the mere presence of paid benefits in the game then disagree only 18.6% of respondents, however, wholeheartedly this type of income tolerate only 16.3% of respondents. The remaining 62.3% accept the method of in-game benefits, but only if they do not add too much gaming bonuses, or even just make it easier to play and do not favor payers against non-payers.

By contrast, we got relatively negative results on the question of advertising banners in the game - a second frequently used method of financing the game. Although the aspect of user-acceptance has made a seemingly balanced bipolar outcome (44.8% of users think banners in the game are okay, 52.2% dislike them a others have no clear opinion), it does not necessarily mean real close to 50% support of this method of financing[6].

However, 18.1% of respondents admitted that they intentionally click the advertising banners from time to time and another 13.4% sometimes accidentally click on the banners. See more in Tabulka 5. This method certainly has some use, one just need to find a compromise between the amount of clicks and user satisfaction.

	Amount	**Share (%)**
Regularly	17	1,5
Sometimes	186	16,6
Sometimes accidentally	150	13,4
Not if he can avoid it[7]	281	25,1
Never	487	43,4
Total	1121	100

Tabulka 5 - (Not)clicking on advertisment banners (zdroj: autor)

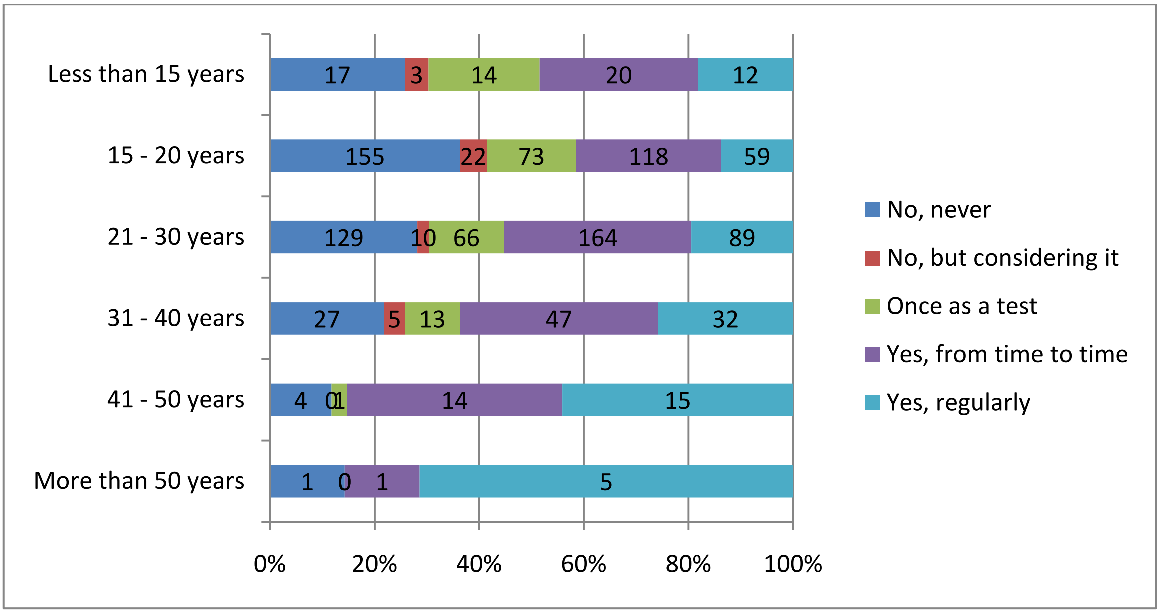
The following 3 tables show the aggregate answers to the questions of the *use of paid services* in the game, *actual expenditures* for these services and the *maximum potential expenditures* - all in a detailed form and divided by age ranges. This allows you to easily identify the target group and key success factors.

Note: The age range of 50 years consists of only 7 respondents and the results therefore may not be relevant. The main contribution of this interpretation of the data thus lies primarily in finding preferences for big age groups such as 15-20, 21-30 and 31-40 years.

The data in Graf 3 show a clear trend of more frequent use of paid services with increasing age with an exception of the lowest group of respondents *under 15 years*.

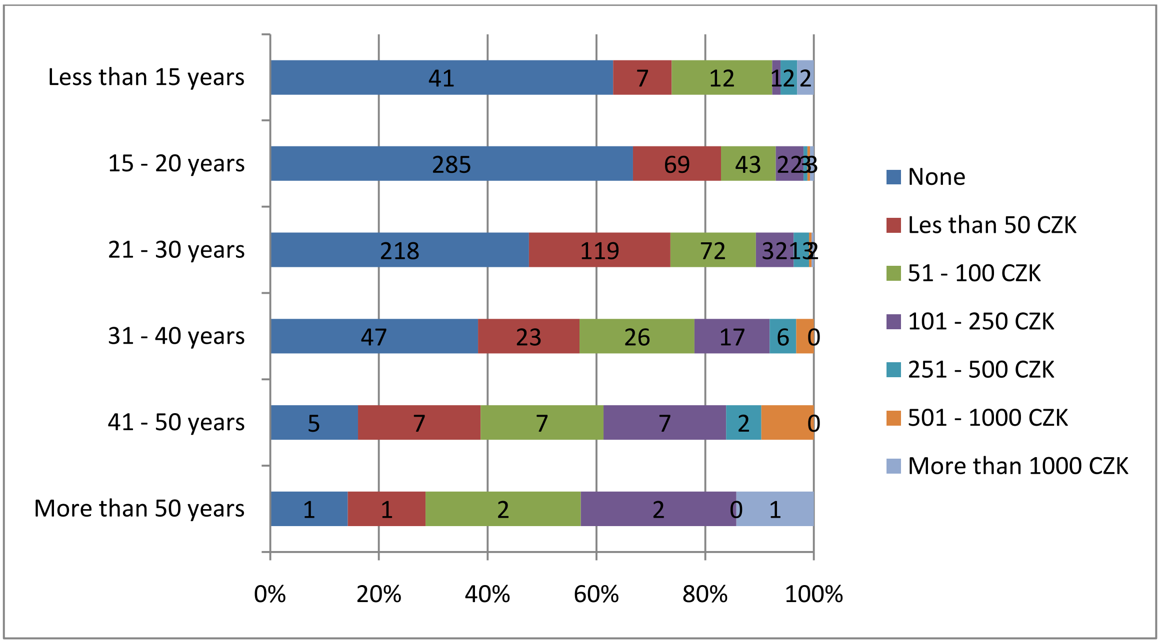
[6] There was quite often additional note to “Don’t mind the banners” answers stating, that respondent does not mind banners because his browser blocks them, so he is not annoyed by them. The percentage of users that really do not dislike banners will be therefore much lower.

[7] Some smaller games force their users into clicking on banners, which is off course against Pay-Per-Click License Agreements and therefore illegal, but still sometimes (yet seldom) used form of generating profit.

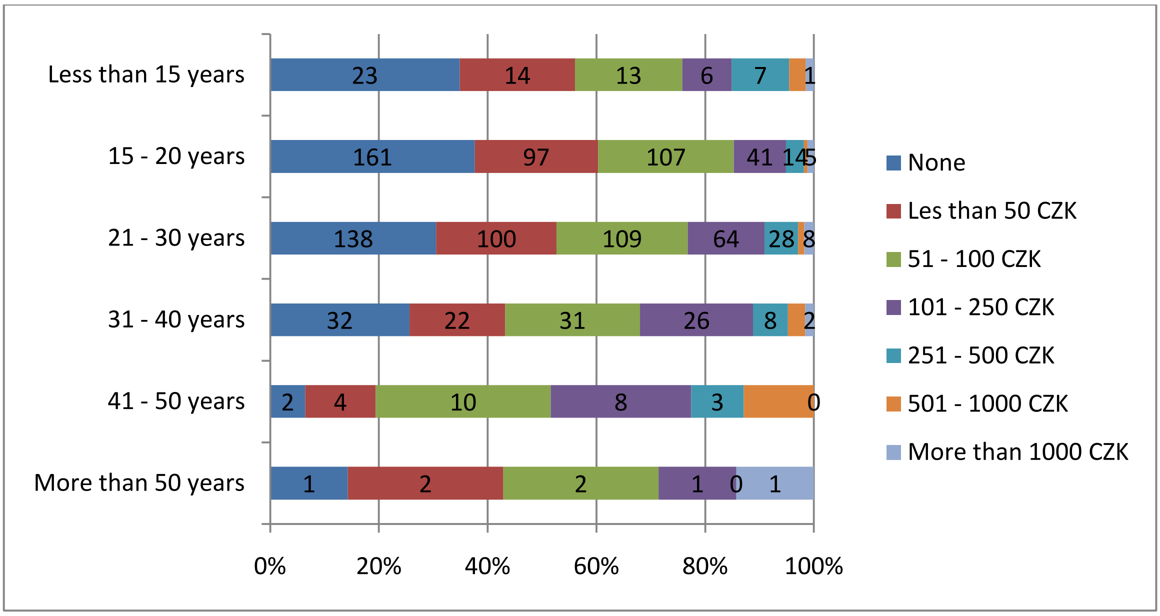


Graf 3 – Use of paid in-game benefits – divided into age groups (zdroj: autor)

We can observe a comparable trend in the area of *actual monthly expenditures* on in-game benefits (Graf 4) and also in the area of *potential maximal expenditures* for these paid services (Graf 5), where the total sum of money understandably rises with players' age. The only exception is again the youngest age group *under 15 years* which shows better results than the second group *15-20 years* and – in some ways – even the group *21-30 years*.



Graf 4 – Actual monthly expenditures – divided into age groups (zdroj: autor)



Graf 5 – Potential maximal monthly expenditures – divided into age groups (zdroj: autor)

From obtained data about in-game paid services, which shows Tabulka 6, one can come to the following conclusions:

Share of people using paid services increases proportionally with age, whilst the highest growth potential can be seen in the age range *15-20 years*, which has the largest difference between the values "currently paying" and "potentially paying" (absolute change of 124 people, a relative increase of 87.7%).

A similar situation applies to the total monthly expenditures for in-game paid services, but with the interest shifted to group under 15 years, which holds the leadership in absolute numbers with an increase by 52.1 CZK, while the group *15-20 years* still leading in the relative field with a relative increase in the amount of 107.7%. After conversion of the expenses to one game, however, the lead passes to group *21 to 30 years* with an absolute increase by 32.6 CZK.

Probably the most important data is in the last 4 rows of the table, where are listed weighted monthly expenses. As weights were used shares of each age group and the ratios of paying subscribers, with the biggest group (*21-30 years* with a total of 488 respondents), like the most paying category (*over 50 years* with a share of 85.7% currently paying and *41 - 50 years* with a share of 93.5% potentially paying), weighted as 1.

Suddenly it is clear that the most financially attractive target group is *21-30 years* with clear lead before the second most interesting (from the browser games' producer point of view) group of *15-20 years*. These are probably the key findings across the whole market analysis from a customer perspective.

	< 15 let	15-20	21-30	31-40	41-50	> 50 let
Amount of respondents[8]	75 (66)	463 (427)	488 (458)	136 (124)	37 (34)	8 (7)
Share of respondents (%)	6,2	38,4	40,4	11,3	3,1	0,7
Average number of games played	2	1,6	1,5	1,8	2,1	2,7
Usage of *premium* services (%)	48,5	41,4	55,2	63,7	85,3	85,7
Share of actually paying (%)	36,9	33,3	52,4	62,1	83,9	85,7
Share of potentially paying (%)	65,2	62,5	69,5	74,4	93,5	85,7
Actual average expenses (CZK / month)	61,5	33,8	48,8	86,7	158,9	217,9
Max. average expenses (CZK / month)	113,6	70,2	97,6	123,4	205,6	196,4
Actual expenses per game (CZK / month)	30,8	21,1	32,5	48,2	75,7	80,7
Max. expenses per game (CZK / month)	56,8	43,9	65,1	68,6	97,9	72,8
Weighted actual average expenses (CZK / month)	4,1	12,5	29,8	17,6	11,9	3,8
Weighted max. average expenses (CZK / month)	12,2	44,6	72,6	27,5	15,8	3,1
Weighted actual expenses per game (CZK / month)	2	7,8	19,9	9,8	5,7	1,4
Weighted max. expenses per game (CZK / month)	6,1	27,9	48,4	15,3	7,5	1,2

Tabulka 6 – Key findings in the area of paid in-game services in browser games (zdroj: autor)

1.3. Market analysis from a producer perspective

Analysis of the market between browser games' producers took place between 1 January and 15 February 2010 and was attended by 22 of total interviewed 71 domestic operators (and 5 foreign, who are also active in our market). As a reference list was again used a database of titles on site on-game.cz.

Questionnaire, which I sent to each operator by email, was divided into 5 different categories - company, game, development, operation and marketing.

Note: Unlike an online questionnaire used in the user part of the analysis didn't have this one strictly set possible answer options. Each answer was therefore necessary to work with more individually. Furthermore, if the question had prescribed answers, respondents were allowed to mark more than just one as correct. Some respondents also completed a questionnaire more than once for each of their

[8] V závorce je uveden Amount respondentů, který odpovídal na finanční otázky.

products. For these reasons, therefore, the total amount of responses in some aggregate tables exceeded the total amount of survey participants.

1.3.1. Company

In the first part, I gathered the basic identification information about the various operators in the market of browser games. The most important finding might be seen in the fact that for 72.7% of Czech respondents, *browser games are not primary business objective*. Either it is merely a side-job (eg domestic supplier of computer games and equipment CENEGA and its former property - browser game Red Dragon), or is even just leisure time (according to the additional questions are most developers among Czechs students). As opposed to the *100% specialization of foreign producers*, which is also shown in Tabulka 7.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Yes	6	27,27	5	100	11	40,74
No	16	72,73	0	0	16	59,26
Total	22	100	5	100	27	100

Tabulka 7 – Are browser games the primary business objective? (zdroj: autor)

Results demonstrated by Tabulka 8 also imply, that the *Czech producers are mostly students-loners* (small groups tops) because at only 20% of respondents exceeds the amount of team members number 4. On the other hand at foreign competition is the most common answer *11-50 employees* (60%).

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
one	11	55	0	0	11	44
less than 5	5	25	1	20	6	24
5 to 10	2	10	1	20	3	12
11 to 50	2	10	3	60	5	20
51 to 250	0	0	0	0	0	0
more than 250	0	0	0	0	0	0
Total	20	100	5	100	25	100

Tabulka 8 – Number of employees / developer team members (zdroj: autor)

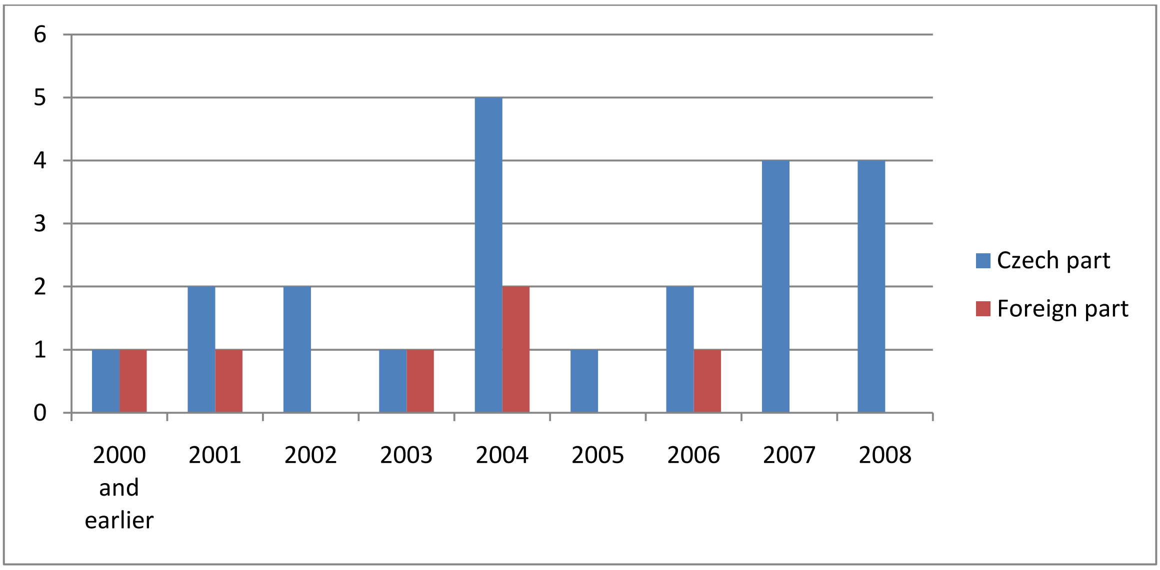
Last question, *length of existence on the market*, serves only as a support for the relevance of the whole survey. Despite the relatively low number of respondents, included companies actually represent *all historical periods of browser games' development* described in early chapters of this thesis - from the oldest big companies of late nineties to the present small producers with history not longer than 2 years. The detailed breakdown can be seen in Tabulka 9.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
1 year and less	0	0	0	0	0	0
2 years	2	9,09	0	0	2	7,41
3 years	3	13,64	0	0	3	11,11
4 years	4	18,18	1	20	5	18,52
5 years	2	9,09	0	0	2	7,41
6 years	5	22,73	1	20	6	22,22
7 years	2	9,09	1	20	3	11,11
8 years	2	9,09	0	0	2	7,41
9 years	2	9,09	0	0	2	7,41
10 or more years	0	0	2	40	2	7,41
Total	22	100	5	100	27	100,01[9]

Tabulka 9 – How long companies operate on browser games' market (zdroj: autor)

1.3.2. Game

In this section were investigated all relevant facts about individual products. Like in the previous part was also examined *age of the games*. And again was confirmed that this analysis truly includes representatives of all historical stages of development (see Chart 6). And it is the same cross-section across the entire market in terms of game genre.



Graf 6 – Starting year of each game (zdroj: autor)

Unsurprisingly, all researched games can be played in Czech (with the exception of one case of purely Slovak game), and that *all foreign titles*, without exception, *have multiple language versions*, with the most players registered in the English version. As a relatively important finding for understanding the

[9] Rounding error.

events on the Czech market, can we consider the fact that *most domestic games (63.6%) have no other language versions* and are therefore only a narrow specialization to our (relatively small and underdeveloped) market. If you can find local products with the choice of other language version, it is almost exclusively English in rare cases complemented by the Polish or Hungarian. We can therefore say that Czech games, if ever have the ambition to break through the boundaries of our country, choose either the English version for the “whole world” or are directed at potential players from Eastern European countries.

However, with such narrow “specialization” must they necessarily lose - at least in terms of player base - to their *foreign competitors, who often offer their products in more than fifteen language versions*. This is apparent from answers to question of actual player base. While the players base of Czech products in most cases (63.64%) does not exceed the limit for thousands of players, with foreign competitors are completely normal (and on the conditions of our market almost unattainable) 50,000 registered accounts. Detailed stratification shows Tabulka 10.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
less than 100	5	22,73	0	0	5	18,52
101 to 500	4	18,18	0	0	4	14,81
501 to 1000	5	22,73	0	0	5	18,52
1001 to 2000	3	13,64	0	0	3	11,11
2001 to 5000	0	0	0	0	0	0
5001 to 10000	1	4,55	1	20	2	7,41
10001 to 50000	3	13,64	1	20	4	14,81
more than 50000	1	4,55	3	60	4	14,81
Total	22	100,02	5	100	27	99,99

Tabulka 10 – Actual player base (zdroj: autor)

As interesting and useful can we identify the answers to the question of the *period to achieve the highest number of players*, where the respondents divide into two main groups. Either is the *player base still growing* and therefore follows the current maximum state. These include primarily foreign titles, as well as some bigger domestic games and off course new games operation on the market for not longer than 3 years, which could not yet prove to be a phenomenon characteristic of the second group. It contains all the other games (especially domestic) in which we can observe relatively clear trend of *escalating player base between the second and third year of operation* (as shown in Tabulka 11).

Simply you can say that a typical Czech browser game during the first year of operation builds a name, fixes the biggest programming mistakes and starts gradually grow. Its player base then reaches its peak after about two years, when interest begins to slowly recede and players start to migrate to other – fresh and new - games.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
1st year	0	0	0	0	0	0
2nd year	7	33,33	0	0	7	28
3rd year	3	14,29	0	0	3	12
4th year	3	14,29	1	25	4	16
5th year	1	4,76	0	0	1	4
6th year	1	4,76	0	0	1	4
7th year	0	0	0	0	0	0
Still growing	6	28,57	3	75	9	36
Total	21	100	4	100	25	100

Tabulka 11 – Year of operation, where the peak of player base was reached (zdroj: autor)

Other information collected included the rate of use of methods of *making money through paid premium services* and further variations of this model. While the foreign producers use this method very often (providing premium services in their games admitted 83.33% of respondents), the Czech operators still have much to improve. Contemporary the best in the world and a long functioning model of *paid in-game extras uses only half of the surveyed domestic titles* and not even in its original form. Unlike foreign counterparts in the majority (72.7%) Czech operators of browser games allow their players to obtain the premium benefits by an alternative way in the game without having to pay. It is therefore a sort of half-hearted step we can partially identify as buck-passing, where Czech producers would like to get paid for their products and therefore they set up extra bonuses and services, but they also don't want to stir up thrifty Czech player and so they offer the alternative option to get the benefits in the game for free (see Tabulka 12).

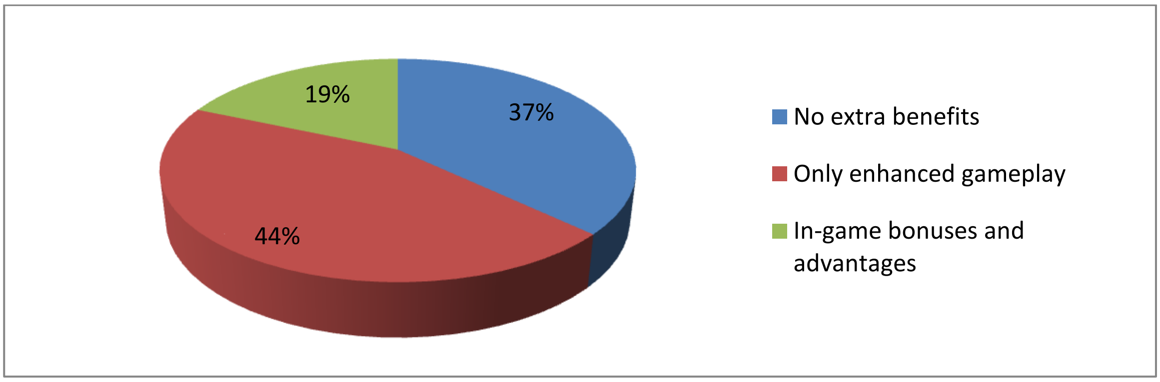
Whether this is purely the fault of producers, or rather it is evidence of backwardness and under-development of the Czech Republic in comparison with the outside world, because *our domestic Internet users probably still haven't got used to pay for their services yet*, that is a question beyond the focus of this work.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Paid only	3	27,27	5	100	8	50
Paid or free	8	72,72	0	0	8	50
Total	11	99,99	5	100	16	100

Tabulka 12 – Way of providing extra benefits and services (zdroj: autor)

In the question of range of paid services and the extent of their influence to the game, there are basically used only two versions – in the first case the *game is fully playable* without these advantages, which only add additional features and make the actual gameplay more fun, but do not ensure the success of its users, and then there is the second version which in addition to enhanced functionality also *provides its users with additional benefits and improvements* to the game, thanks to which paying users are potentially stronger than not-paying ones.

Shares of these different options are shown in Graf 7.



Graf 7 – Shares of individual versions of in-game benefits (zdroj: autor)

1.3.3. Development

In this section were collected the information on the development of games, namely *the length and cost of development* itself, *amount of people involved* in the process, *the decisive criteria* in choosing a genre, and *the way the programming and graphic part of the product was implemented*.

In terms of length of development was to find out, after what time was the initial version of the game made available to public and whether that version continued to evolve, or whether it has been (with the exception of minor changes) final. Detailed data are provided byTabulka 13, while the established facts could be summarized as follows: *66.7% of the games' development lasted longer than 1 year* with 29.6% still developing and are thus a sort of perpetual beta-versions.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Less than 1/4 of the year	1	4,55	0	0	1	3,7
Less than 1/2 of the year	1	4,55	1	20	2	7,41
Less than 1 year	6	27,27	0	0	6	22,22
1 to 2 years	7	31,82	0	0	7	25,93
More than 2 years	7	31,82	4	80	11	40,74
Total	22	100,01	5	100	27	100
Development still in progress	8	36,36	0	0	8	29,63

Tabulka 13 – The length of development (zdroj: autor)

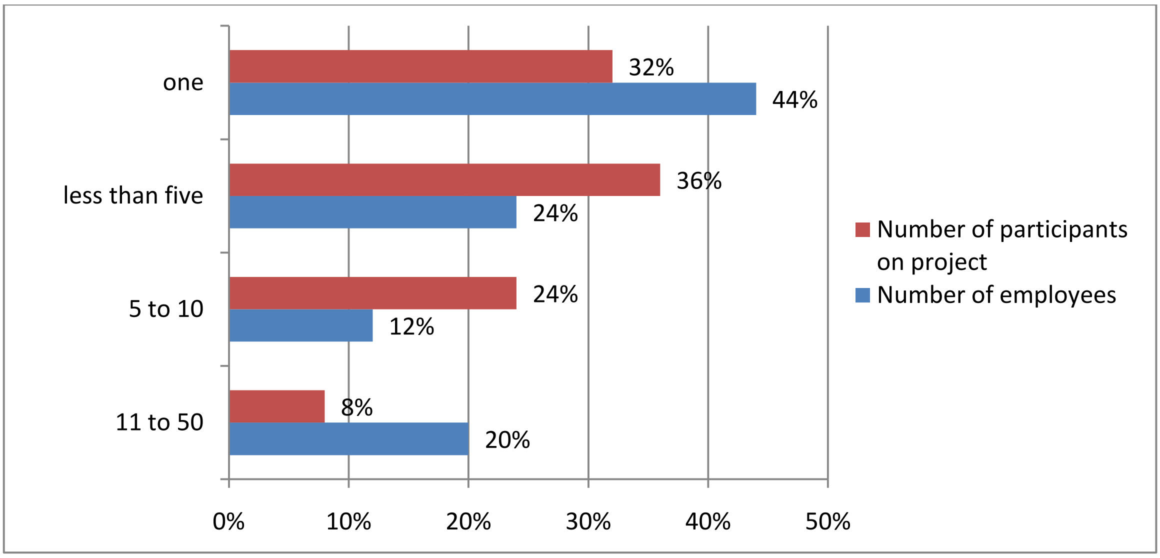
Price of the whole development then varies with each developer. The decisive factor seems to be a profession of manufacturers - that is, whether he is a student (hence the group of students) and the creation of games is only a hobby, or whether it is a professional company. The details are then displayed in Tabulka 14.

	Czech part		**Foreign part**		**Total**	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Less than 10.000 CZK	11	61,11	1	25	12	54,55
10.001 to 50.000 CZK	1	5,56	0	0	1	4,55
50.001 to 100.000 CZK	0	0	0	0	0	0
100.001 to 250.000 CZK	3	16,67	0	0	3	13,64
250.001 to 500.000 CZK	2	11,11	0	0	2	9,09
500.001 to 1.000.000 CZK	0	0	0	0	0	0
More than 1.000.000 CZK	1	5,56	3	75	4	18,18
Total	18	100,01	4	100	22	100,01

Tabulka 14 – Price of the development (zdroj: autor)

Note: In virtually all cases where was the designated amount other than the smallest option offered, the response was accompanied by a note that it is the cumulative sum for the whole period of development. It is therefore not a one-off investment, but rather a series of smaller expenses more or less evenly distributed in time.

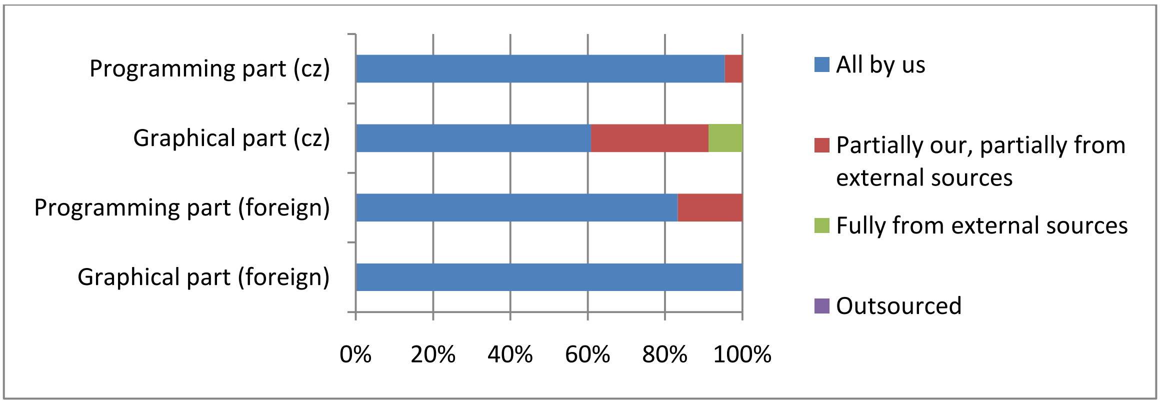
The question of the number of people who participated on the development, we can clearly see partial shift from individuals to small groups of up to five people. This option also has the largest representation of all possible responses (36%). In the case of Czech products we can on the basis of these results (and through my own experience in the field) name as the most widely used and therefore the standard way to develop a game when the whole process is backed and financed by one man (hence a small group), but on the actual development participates several other volunteers. This shift is evident from comparsion in Graf 8.



Graf 8 – Comparsion between number of emplyees and project participants (zdroj: autor)

In terms of execution the *programming part* of the development is the most common *fully custom solution* (92.9%), than using some freely available libraries (eg InnoGames company uses for its games JavaScript framework MooTools). We can however quite often see implementation of the external forum, which operates out of the game itself and runs on any of the freely available solutions.

The situation is somewhat different in *graphical part* of development, where is fairly common practice (on Czech market) *total or partial use of freely available graphic designs and templates*, accompanied by pictures from thematically related web galleries. Among the domestic respondents uses this method 39.1%, while in foreign market we will find only one answer - all by ourselves. Shares and details are shown in Graf 9.



Graf 9 – Realisation of programming and graphical part of development (zdroj: autor)

Perhaps the worst for the developers were findings in area of *decisive criteria which led to the choice of genre of games* (see Tabulka 15). Only in less than one tenth (9.68%) cases was carried out a detailed analysis of market and position of competition. The other 16.13% of games preceded at least informal survey of the current representation of the genres on the market with the aim to identify and fill the empty space. But at the vast majority of titles (74.19%) the only (or at least the main and decisive) criterion were personal preferences of developers. Thus, *most of the games are created with no link to the current market situation and requirements of potential clients*. And that can be identified as probably the most important finding across the developer part of market analysis, since the lack of interaction between makers and players may be one of the key factors behind the current miserable situation of domestic products on our market. As was already stated in the players' part of analysis, *the genre and support of the operator are one of the main parameters that influence players' decisions*.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Personal preferences	18	78,26	5	62,5	23	74,19
Informal market analysis	3	13,04	2	25	5	16,13
Detailed market analysis	2	8,7	1	12,5	3	9,68
Other approach	0	0	0	0	0	0
Total	23	100	8	100	31	100

Tabulka 15 – Decisive criterion on choosing the game genre (zdroj: autor)

1.3.4. Operation

In addition to determining the *annual cost of operating* of each title, where answers are split on opposite poles of the financial spectrum (78.26% of games are below the annual cost of CZK 50,000, while in 17.39% the total sum exceeds 1 million CZK), the main points of this section are *ways of promotion and financing* of the games.

In the question about method of funding have been offered as answers all historically recorded and used methods, as described in previous parts of the thesis - operation subsidized by the operator, a grant from the sponsor, voluntary contribution from the players, in-game advertising, paid premium services, pay-to-play and possibly other, yet unrecorded way.

From gained data, which collectively shows Tabulka 16, can one identify two main groups of developers - each with its own strategy. The largest group (only for domestic producers, where it includes about half of all subjects) *subsidizes the operations from its own resources* and partly offsets the loss with in-game advertising. Among the representatives of this group can we find for instance browser game Fight for the Czech Crown, where advertising revenue covers about 15% of the total annual cost. The remaining amount is subsidized by the operator.

The second group consists of products which *include in its portfolio mentioned paid extra in-game benefits*. This model is used in virtually all major world products (ie games that have multiple language versions and are not limited to only the local market, but operate on a global scale) and thus this method can be described as functional and certified. On the Czech market uses paid premium services nearly half of titles, but as stated earlier in the analysis, it is not a clean implementation of this method, because in most cases, players are able to achieve the same bonuses for free.

These two main systems are then individually supported with other methods mentioned at the beginning of this block.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Subsidized by operator	13	34,21	0	0	13	26,53
Sponsorship	5	13,16	1	9,09	6	12,24
Contribution from volunteers	6	15,79	0	0	6	12,24
In-game advertising	7	18,42	5	45,45	12	24,49
Paid in-game benefits	7	18,42	5	45,45	12	24,49
Pay-to-play	0	0	0	0	0	0
Other	0	0	0	0	0	0
Total	38	100	11	99,99	49	99,99

Tabulka 16 – Methods of financing the operation (zdroj: autor)

In the field of promotion of the game as possible answers were offered various historically used methods supplemented with additional options that are used by contemporary e-companies (companies operating on the Internet) from other segments of the Internet. *The most commonly used method of promotion is clearly enlisting the product into free internet catalogues* (from local organizations lets name Seznam.cz or Centrum.cz) *and search engines* (Google.cz or Jyxo.cz) and subsequently *relying on viral advertising*. This method is then (for Czech products) often supplemented by the use of *online exchange advertising* either in the form of a simple exchange of individual icons between befriended sites, or by use of one of the specialized banner exchange systems (such as local portal BillBoard.cz). Detailed summary of responses shows Tabulka 17.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Paid Internet advertisement	4	14,81	3	42,86	7	20,59
Exchange of ads / icons	8	29,63	0	0	8	23,53
Ads on TV / Radio	0	0	0	0	0	0
Ads in magazines / newspaper	0	0	0	0	0	0
Free catalogues, viral advertising	15	55,56	3	42,86	18	52,94
Other	0	0	1[10]	14,29	1	2,94
Total	27	100	7	100,01	34	100

Tabulka 17 – Ways of promotion (zdroj: autor)

[10] In one case the supplement form of promotion was “cooperation with local partners” (eg game developers and media companies).

1.3.5. Market

The last part of the questionnaire was included for the sole purpose of determining the current level of awareness among the operators of browser games on their competitors and overall market situation. Respondents were first to assess themselves and their product and then the overall strength of their competition.

Both areas came as expected and revealed no significant findings. Individual producers rated themselves relatively consistent with the effective size and significance of their products (taken by current and maximum base of players, the prevalence of games and number of language versions), 77.27% then rated the competition on the market of browser games as great or rather great.

Detailed data are provided by Tabulka 18 and Tabulka 19.

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Dominant player with majority	0	0	0	0	0	0
Part of the group of dominant players	1	5,56	4	80	5	21,74
Player of moderate significance	5	27,78	1	20	6	26,09
Player of rather small significance	4	22,22	0	0	4	17,39
Drop in the sea	8	44,44	0	0	8	34,78
Total	18	100	5	100	23	100

Tabulka 18 – Position of the company on the market (zdroj: autor)

	Czech part		Foreign part		Total	
	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
Great	8	44,44	2	50	10	45,45
Rather great	6	33,33	1	25	7	31,82
Medium	1	5,56	1	25	2	9,09
Rather small	2	11,11	0	0	2	9,09
Small	0	0	0	0	0	0
No competition	1	5,56	0	0	1	4,55
Total	18	100	4	100	22	100

Tabulka 19 – Competition on the market as a whole (zdroj: autor)

1.4. Summary of the results

Both parts of the analysis were carried out without major complications and problems and delivered desired results, which can be further used for the actual formulation of critical success factors affecting business in the segment of browser games.

Research of the players market provided data for relatively precise *definition of the target group* for browser games, while delivering important information about habits, preferences and financial possibilities of the various age groups of users.

Developer part of the analysis then not only completed the image of the current situation in the market, but also *highlighted the greatest differences between local and foreign producers* and so helped to reveal fundamental deficiencies of domestic operators of browser games. Together with knowledge of the history and development of browser games' market spoken of in previous chapters of the thesis, the gathered data is absolutely essential for the final chapter where the critical success factors are being formulated.

2. Formulation of critical success factors

To be the formulation of critical success factors affecting business in the segment of browser games recognized as a relevant and sufficiently objective, it includes knowledge gathered in all of the previous parts of this work. Specifically, it is the following:

• Basic characteristics and definitiv of browser games in compare with other kinds of online games (see Chapter 2 in Czech version)

• historical development of browser games in the world (see Chapter 3 in Czech version)

• the development of local major titles (see Chapter 4 in Czech version)

• market analysis from the perspective of current players (see Chapter 1.2)

• analysis of current state of the producers market (see Chapter 1.3)

Only through this multidimensional approach and combined usage of information both from the past and present can one sufficiently ensure objektivity and finally identify the individual factors.

2.1. Definition of critical success factors

For basic definition of critical success factors can we use following quote from (BOYNTON, 1984):

“Critical success factors are those few things that must go well to ensure success for a manager or an organization, and, therefore, they represent those managerial or enterprise areas that must be given special and continual attention to bring about high performance. CSFs include issues vital to an organization’s current operating activities and to its future success.”

In context with this thesis we can then define CSFs as those few things that are vital to ensure success in business activities on browser games market.

2.2. Identification of critical success factors

I have created a model (see) based on the findings of the previous parts of this work, that shows all identified critical success factors and their interaction and interdependence.

Based on this model, we can recognize total 13 different CSFs, which can be further divided into three main groups - *basic* (representing the pillars of the whole business), *input* (used only once at the start of product development) and *permanent* (forming a cycle throughout the lifetime of the product).

Obrázek 1 – Business model representing critical success factors (zdroj: autor)

2.2.1. Basic CSFs

Producer

Producer represents the heart of the business. As a key element in the development and subsequent operation of the product, if not functioning properly and efficiently on the internall basis, must necessarily compromise the entire result.

While abroad we can commonly find professional development studios with dozens of people, in our country are most games operated by amateur individuals or small groups of volunteers. Foreign companies therefore have a lead before our domestic producerseven before the start of developement even began.

Profit

The key output of the whole business process (not only in browser games market) is profit, which is relatively clear mean of measure of the success of individual products. Form of the game can be improved, player base can grow, but if the whole business is running at a loss, in the long run it is unsustainable situation, which ultimately must end in failure.

2.2.2. Input CSF

Market analysis

As already mentioned (see chapter 1.3.3), only less than ten percent of developers performed a detailed market analysis when starting a business. The vast majority of domestic games is then made with no direct link to the current requirements and preferences of customers, without a clearly defined target group and with no (or only minimal) awareness of competing products.

Market analysis should, however, conduct any manufacturer before making the product itself. Its output should be the identification of empty space on the market, hence the target group. This makes it possible to develop a product targeted precisely to the market segment still free and lucrative.

Target group

This factor is closely related to the preceding CSF - market analysis. Many games on our market are made with no clear idea of their orientation. It is not uncommon that the actuall target group is detected after the launch of product based on data collected at registration or in various polls (succinctly said: Who actually plays this game?). Such findings are of course no harm, since they fulfill a confirmation role, whether the product actually attracts those people that were targeted. In no case, however, does this replace an initial analysis and clear definition of target group.

If the manufacturer does not know whether is his product aimed at a student who has lots of free time, is flexible and easily adaptable to any game changes, but on the other hand is not willing to invest in playing too much money; or economically strong working man who spends with playing no more than 15 minutes a day and expects a professional consistent product, selecting a proper game concept, genre, graphic design and advertising campaign will be just a wild guess..

Life-cycle model

The general framework of processes related to software life cycle including the terminology is defined by ISO / IEC 12207. For purposes of this work as a reference source of the most commonly used life cycle models served publication (BUCHALCEVOVÁ, 2009), which describes six different models - create and fix, waterfall, spiral, incremental, evolutionary, and V-model. As follows from the preceding parts of the work and experiences from the field, in the segment of browser games are almost exclusively used only three models: create and fix, waterfall and evolutionary, so to the rest will not be given further attention.

A brief comparison of the main strengths and weaknesses of each model shows Tabulka 20.

Model	Silné stránky	Slabé stránky
create and fix	• simplicity	• difficult to use on large projects
waterfall	• divides the development into phases • gives good idea of the range of result	• needs detailed specification ofdemands and target at start • reduced feedback from customer • late integration and potential problem discovery • difficult realization of changes
evolutionary (iterative)	• frequent feedback from customer • demands specification at start of every phase – possible to realize changes • incremental use of sources • early and frequent integration	• bad idea of the range of the whole result • difficult to follow on projects with fixed price and budget • high demands on customer accessibility – ideally daily • installation and acceptance of each version can be costly

Tabulka 20 – Strengths and weaknesses of life-cycle models (zdroj: BUCHALCEVOVÁ, 2009)

None of these models is downright bad, everyone is applied in a different situation, but the truth is that while the motto of domestic developers is the first – create and fix model, whose greatest strength is its simplicity, foreign professional studies often find the other two more sophisticated models more suited for the development of larger products.

As one of the most important decision to make when creating a successful product appears to be the choice of an appropriate model that will fit the scope of the project.

Modern technologies

This area includes both the programming part of the game, as well as graphics. Basic development stages in this area have been outlined in previous parts of this work (see Czech version), currently we can find two main approaches on the market, which proved to be successful in long run.

As a representative of the first approach we might call Gameforge, which produces standard semi-realtime browser based games in XHTML and AJAX, accompanied by static graphics.

As a counterpoint stands to the company Bigpoint, which holds a virtual monopoly in the field of realtime web games built on the latest version of Flash, which offers its users an interactive graphical environment approaching with quality to standard desktop applications.

Initial investment

Although the initial investment is not really necessary for starting a business in the field of browser games, because one can use volunteers in product development, for opearation of the free hostings (eg domestic Webzdarma.cz) and for promotion one of free-exchange programs. But if one has ambition of breaking through to the dominant market players, initial investment is, however, an absolutely necessary condition without which it is nearly impossible to circumvent. Sufficient funding is an important component of permanent CSF (see Finance).

2.2.3. Permanent CSFs

Portfolio of products

If we look at any of the big (and successful) foreign companies, for long-term success in the segment of browser games the key seems to be in creation, maintenance and further expansion of not one game but the entire product portfolio, that will cover various game genres and attract different target groups. Probably only then can one effectively cover the largest part of the market and achieve long-term gains.

This approach also opens up many possibilities for cross-referencing of each product (using cross-game advertising) and there is also an optical effect of increased overall player base (as already stated in players' part of analysis, most people play more than just one game, so the number of game accounts grows faster than actuall number of real players) and hence accelerate the achievement of critical mass (see Critical Mass).

Business model

All main business models used during the evolution phases of browser games were described in previous parts of the thesis (see Czech version). Here is just a simple list as a summary:

- **Income from in-game advertising**
  It is a widely used method worldwide. While foreign producers often combine advertising with other models, for most domestic operators it is the only source of income, which however cannot cover all operating costs and so is product at loss (eg mentioned game Fight for the Czech Crown in Chapter 1.3.4).
- **Cooperation with partnes and befriended companies**
  In this case we mean the various forms of affiliate advertising programs, where producers offer on the sites of their games thematically related products of partner companies who then pay the operator a commission from their sales. This option is nowadays offered by most e-shops and is uses by number of (mainly domestic) browser game developers.
- **Pay-to-play**

Historically used model that proved to be long-defunct (for example, caused the downfall of both foreign Planetarionu and domestic Red Dragon), and today we can find it in no known major browser game (this model is however very successfully used in MMO games like World of Warcraft). It is included in the list only for completeness.

- **Paid in-game benefits**

  The most widely used and probably also the only long-term operating model. In principle it is a strategy in which the product itself is provided for free to its users, but additional paid benefits and services are then offered in the game, expanding the overall functionality or even bringing otherwise unreachable gaming bonuses.

  In Czech republic, this model is used in a modified form compared to the version used worldwide, where players are able to obtain individual benefits free of charge too.

Financial funds

The business in the field of browser games on the professional level entails financial costs need to be covered by either the initial investment, donations or earnings generated by the implemented business model. Simply, these costs can be divided into three main parts:

- **Cost of development**

  As revealed in the developers' analysis, with the domestic professional products one speaks about investment of tens to hundreds of thousands CZK, while with foreign competition the total amount often exceeds one million CZK.

- **Cost of operation**

  These costs can be further divided into four smaller parts – domain, hosting, support and maintenance.

  - Domain – Prices for domains flows somewhere around hundreds of crowns a year.
  - Hosting – Hosting prices vary significantly according to the services offered. You can buy a basic version of PHP and MySQL for 30CZK per month, better services often reach the price 500 CZK per month and above. Large companies even buy their own servers, where the investment exceeds tens of thousands crowns.
  - Support – Communication with customers, teaching new users to play, fixing damages from errors, enforcement of game rules, etc. are often (in Czech almost exclusively) carried out by volunteers from among the long-playing people who perform this function either free or for an in-game advantage (for instance receive a free deluxe package with above-standard services that others can buy). Costs are therefore no or minimal.
  - Maintenance – Into this category fall other activities associated with the operation, such as additional product development, program renovation and debugging, but this must be carried out by properly trained people. Costs for this part is different from the

chosen approach and forms of development (hence operation) - whether the operator employs its own programmers and administrators, or if the development (and operation) is carried out in cooperation with an external specialist company, etc.

- **Cost of promotion**

  An important part of total costs is this - in Czech somewhat neglected - component (see Promotion). The amount of advertising costs differs depending on the chosen strategy and the extent of advertising campaigns. Worldwide widely used Google AdWords for example allows a relatively precise adjustment of the budget and daily limits, so it is up to the advertiser, how many will he actually invest into the campaign.

  For large companies like Gameforge or Bigpoint, whose banners can be found literally almost all over the Internet, can one assume that the monthly expenditure on advertising exceeds several million crowns[11].

And it is off course not just about covering costs, but also about generating profit which represents the ultimate goal of the whole business.

Promotion

As mentioned above, promotion is one of the highly underestimated areas of interest for Czech developers. While they still rely only on free e-catalogues, search engines and icon exchange, their foreign competitors literally flood the Internet with paid and well aimed banners luring off more and more people.

As shown in the previous parts of this work, currently most used promotion methods are following:

- **Enlisting into e-catalogues and search engines**

  Various e-catalogs and portals allow free option of enlisting new site or product. Thus everyone is provided with relatively simple and inexpensive way to at least minimally promote his work. This method, however, doesn't have a very high efficiency, especially since these catalogues, portals and search engines also offer paid and privileged positions, which are off course offered to potential users first.

  Despite its low efficiency is this way of promotion (as shown by the analysis of domestic producers) the most used among Czech producers.

- **Viral marketing**

  Method using reference links and relying on viral advertising was, including its most famous users, described in detail in Chapter 3.3 (see Czech version). It is cheap, but relatively difficult

[11] Assumption comes from unofficial report on server Business Insider stating that developer company Zynga (main producer of Flash multiplayer games aimed primarily at social network Facebook) spends monthly for advertising purposes 6 million dollars (BUSINESS INSIDER, 2009).

to control way of product promotion, which can in extreme cases even turn against his promoter and start throwing a bad name on the entire brand.[12]

- **Exchange advertising, icons exchange**

  This covers a variety of advertising exchange systems and rotary link bars. We can also include into this group individual icon- and banner-exchange between the partner sites (ie cross-site advertising).

  Given the zero cost is this method also widely used with us, especially amongst amateur developers. Substantial contribution of this method is however questionable.

- **Paid advertisment**

  Paid contextual or banner advertising are among the most frequently used methods of promotion, especially with foreign operators who - as already mentioned in the section of funds – not rarely spend on promotion over a million crowns per month (the exact number is off course unknown). Paid advertising options are numerous, starting with mentioned Google AdWords, followed by individual collaborations with various portals and blogs and ending with paid extra positions in catalogues and search engines.

- **Cooperation with partners**

  This group includes mainly the use of cooperation at the level of partnership or even sponsorship what we could have seen in the game Dark Elf. Here it was namely a co-operation with the portal Atlas, who not only sponsored the game and shielded its operation, but also adequately promoted it to its visitors.

  Somewhat different kind of cooperation can also be found for example in domestic browser game The Witcher, which cooperates with the Polish studio CD PROJECT RED publisher of computer game The Witcher. Operators of browser game gained an official permit to use all Witcher related trademarks and to utilize the reputation of well-known brand names in their favor, in exchange for advertising and promotion of CD PROJECT's products.

- **Using the social networks**

  Currently the largest Internet social network Facebook which, according to a survey on O'Reilly Radar site, encompassed more than 190 million people from all around the world last year (O'Reilly, 2009) and, according to the official Facebook website, has got more than 400 million registered users (FACEBOOK , 2010), allows not only interaction of individual users, but also creates an excellent platform for various producer for promoting their products. Operators of browser games have yet another way to reach potential new customers and remain in touch with existing ones.

[12] As mentioned in Chapter 3.3 (see Czech version), overcrowding of public discussion boards with Travian referral links created something like general aversion against not only this form of promotion, but against the Travian itself.

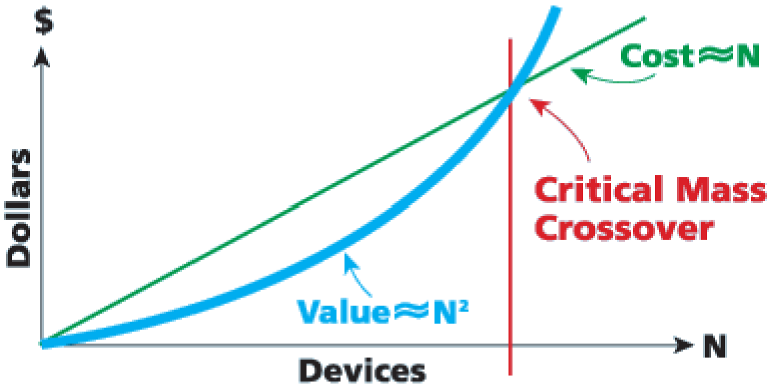
Although it is possible to pay for extra services, including targeted advertising campaigns, the fundamental possibility of presentations (albeit with limited functionality) is provided free of charge and is therefore another cost-effective method of advertising.

Without investment however, the situation is quite similar to the one with the e-catalogs – not-paying advertisers are completely overshadowed and marginalized by those paying. For instance, Zynga, which specializes in the development of games purely for social networks, according to unofficial report published on the server The Business Insider, pays for targeted advertisment on Facebook over 6 million dollars a month (see Financial funds).

Note: The topic of social networks and their potential use for business is way beyond the focus of this work. Information provided above is therefore to be taken only as a brief outline of the possibilities. This option is provided only for completeness.

Critical Mass

The term Critical Mass is part of the so-called Metcalfe's Law, which can be paraphrased so that *while the overall cost of running the network grows linearly with each new unit attached, the total value of the network grows exponentially* (Forbes, 2007). Critical Mass then represents such amount of units where the value of network equals its costs (this situation graphically illustrates Obrázek 2).



Obrázek 2 – Metcalfe's Law (zdroj: FORBES, 2007)

About validity of this law in other business sectors other than networks spoke the author himself on the server Forbes (Forbes, 2007). In local materials (JANDOŠ, 2009) can we find following example of the applicability of the law in relation to e-business: *"Once you reach a critical mass of users of the network (Internet) or a critical mass of market customers (e-commerce, e-marketplace), their numbers quickly increase (exponentially to the number of current participants). "*

Similarly we can say that once a browser game reaches its critical mass, amount of its users (and thus the total value of the game, including total revenue) will grow exponentially. To achieve this critical mass should therefore be among the priority objectives of all operators of browser games.

World community of Internet users

Important here is the word *World*. Only the minimum of domestic games have multiple languages and are therefore only focused on our local market, which however seems to be too small to provide high earnings. That is also probably the reason, why is vast majority of current Czech titles - compared to their global competitors – in long-term at loss.

All successful foreign titles, without exception, have multiple language versions and attack the global market as a whole, not only its small part. Thanks to that their player base grows much faster reducing the time required to reach Critical Mass (see Critical Mass). This has naturally also a positive impact on total revenue of these companies, who can then afford to invest large amounts to expand into new market segments[13].

2.3. Discussion to gathered results

This work does not in any way intend to serve as an exhaustive list of all historical and current browser games. I have deliberately chosen only those titles that either significantly enriched the whole genre of browser games or by other means ensured its further development.

Also, the analytical part of work (namely the one from players' perspective) does not represent the entire market of Internet users, but it is only a survey amongst current clients of browser games. Extending this analysis to the market of not playing users is one of the possible topics for potential future work with a similar theme.

In the description of the characteristics of the market and its development was also for preserving the integrity of the text deliberately neglected the impact of evolving technologies that improved possibilities of Internet and lowered the prices of Internet connection. Although the widespread availability of Internet was definitely one of the factors that significantly influenced the shaping of the browser games market into its present form. This issue however goes beyond the focus of the whole work and for that reason was completely removed and left as another possible ideas for future-work.

The last major component which was after careful deliberation also ignored is that of social networks and their possible use in the business segment of browser games. Some approaches were briefly outlined in the section devoted to individual CSFs, but that is really only an half uncovered extensive range of options that probably currently the most dynamically evolving area of the Internet offers.

Apart from these shortcomings, from the information obtained it is clear that if the situation on our market should ever turn in favor to our local producers, it is essential that they significantly rethought their approach to the whole business in this segment.

[13] See Chapter 3 – History and development of browser games in Czech version.

Basically this means mainly to ensure that the game is developed under carefully chosen suitable life cycle model with a clearly defined target groups and implemented business model, focusing not only locally but operating on a global level using modern technologies and marketing channels.

This thesis can then serve as a reference source of possible approaches to help domestic producers of browser games to combat their foreign competition.

3. Conclusion

The aim of this work was the *formulation of critical success factors affecting business in the segment of browser games*. To achieve this objective I had to take some important steps.

In the first section I defined the segment of browser games and described the historical development games have undergone in the fifteen years of their existence. Then I dealt with major Czech producers that operated or still operate in our market, and defined their main strengths and weaknesses, so I could complete the basic characteristics of the market as a whole.

The second part of my work consists of a custom market analysis of the current state of browser games Czech market. I have divided this analysis into two separate parts - the player and developer. The first of these examines the characteristics, habits and preferences of today's browser games' players. The most important and most beneficial for this work are the *preferential* and *financial* passages. Developer part then acts as a probe between contemporary producers and operators of browser games, highlighting some important differences in approaches and chosen methods between domestic and foreign developers.

The final part is then devoted to the actual identification of key success factors affecting business in the segment of browser games. Here I used not only the data gathered in previous chapters, but also my personal 10 years of experience in the field. Thanks to that I managed to formulate total sum of thirteen factors which - I believe – are the key to the success of current leaders in the field of browser games.

From my point of view the objective of this work was met, while the main contribution of this paper lies in the service to current (and potential new) browser games producers as a reference source of successful approaches, and therefore as a springboard, which could help them make their position on the market and possibly to penetrate between the world's current elite.

Presented findings are also useful for possible further work similarly aimed at browser game market - whether it would be a specific case study or an additional extension analysis and research.

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