

Obtaining Market Advantage In The Case Of Non-Antagonistic Games Of Two Competitors

Dr. Zvonko Kremljak

Summary:

The company offers an online advertising portal on the advertising market, where it offers the possibility of presenting companies with or without a website, with the aim of improving their visibility and sales to individual advertisers. The company operates in the advertising industry, or the activities of advertising agencies. Competition in the industry is considerable. Competitors are both other advertising agencies and individual departments in companies that deal with marketing. The advantage of this type of advertising is that users of the online portal can find information that individual companies or societies offer in one place. how to gain an advantage in the market using the example of a non-antagonistic game, a game with two players.

Keywords: market, advertising, competition, non-antagonistic game, marketing, web portal

Date of Submission: 08-11-2025

Date of Acceptance: 18-11-2025

I. Introduction

The company has a registered advertising agency activity as its main activity. It takes care of and manages an online advertising portal that offers advertisers and daily news. The company publishes a monthly press with a circulation of 36,600 copies in the local area, thus covering approx. 122,000 inhabitants. The online portal and monthly press are the main activities of the company. In addition, it also offers the organization of various events, as well as comprehensive advertising for interested companies. The company plans a gradual entry into the market. With a free offer, it wants to create a database of companies and thus provide visitors to the online portal with the information they need. When the number of daily visitors is high enough, the company will advertise the online advertising portal on radio and television media. This will increase the visibility of the company and the online portal, and in all likelihood also increase the number of visitors to the online portal. All of this will contribute to greater visibility and thus the possibility of selling online advertising space. Greater visibility of the company will benefit both in selling online space and in other services that the company offers. The monthly print edition, which is published in the local environment every month, is a product specially prepared for companies that want to be recognizable and cannot afford such a large circulation themselves. In this case, the company has prepared several different packages that they sell to individual companies or individuals. In order to further attract the attention of the recipients of the print edition, they have decided that each issue of the print edition will also bring a nice prize, thus attracting the attention of the recipients even more. They have also decided to cooperate with radio stations. During the distribution, some local radio stations also drew our attention to the print edition and further focused the attention of the recipients.

The company offers its services exclusively to legal entities, i.e. companies and sole proprietors. Potential customers are all existing companies on the market, but the company is aware that many companies have already arranged advertising activities or do not need them in principle. On the other hand, there is also a certain number of companies, especially newly established ones, that do not yet have their marketing organized, and our company will primarily target such companies. For free access, the target companies are also those that have already arranged advertising, and with an increase in page visits, the goal of the companies will also be to be noticed on the website. Thus, we can divide customers into several segments. In the first segment, all companies are willing to be on the website for free. The second segment is companies that will be willing to add news, advertise via banner ads or company image or video material for a fee. The third segment will be companies that, in addition to the basic offer of free access, want to advertise via other media.

II. Market Scope And Trends

The size of the market can be estimated from the majority of companies that want to advertise. According to research, a certain percentage of companies advertise. We want to get the best companies on the website by individual region. This means that we must have at least three different companies from individual activities by region in the database. The selling prices of advertising on the website depend primarily on the

number of visits to the individual website. If we look at the actual competition, i.e. portals that offer a company website, we can see that the prices vary considerably. However, the prices largely depend on the number of visits to the individual website. So the company must primarily ensure that the website is well visited.

III. Competition

Competition can be divided into broad and narrow competition. Broad competition can be taken to include all websites that offer and enable advertising on their websites. Just like them, company A must ensure that the number of website visitors is as high as possible. Company A's biggest competitor is the website of company B. The website is visited by over 140,000 visitors per month, who make over 1,500,000 website views during this time. The company is aware that they will not be able to achieve such a number of visitors, but the realistic goal is certainly 20,000 visitors per month, which they want to achieve in 3 years. Company B's business directory also has a similar number of visitors, which is visited by close to 200,000 visitors per month. The advantage we have compared to other similar portals is greater flexibility in terms of presenting the company on the website. The company can present itself in more detail and in a different way on our website than, say, on other sites.

IV. Marketing Strategy And Prices

What steps are we planning to take to introduce our services to the market? In the initial phase, the company plans primarily to gradually advertise the company itself through offers. From the very beginning, we want to expand our visibility to the entire Slovenian territory and thus build a brand that offers comprehensive solutions in advertising and visibility for individual companies. Our purpose in selling advertising space is precisely to offer companies a service or product that will help the company sell or increase the visibility of their industry or service.

The company will offer several types of service packages. The basic advertising package, which includes a logo, contact information and a short presentation of the company, is offered free of charge. The company wants to present as wide a range of companies as possible on the web portal, so that website users can find information about the product or service they need and about the company that offers these services or products. The company also offers options for additional presentation on the website, which allows for a broader presentation with advertising banners, additional material such as images, videos and the possibility of adding company news (various promotions and news and messages to customers). The company also offers the possibility of comprehensive company advertising, organizing events and various projects.

In addition to the website, the company also offers advertising space in printed publications published in the Pomurje region and intended for all companies and individuals to present their offer to the general public. The printed publications offer advertising packages that are priced appropriately for those companies that cannot present their services or offers independently in such large numbers because it represents a financial burden for them.

V. How To Secure An Advantage, Based On The Example Of A Non-Antagonistic Game Games with generally sum with two players

Games with generally sum we call also **non-antagonistic games**. Famous examples of this kind games they are dilemma two memories and quarrel honey gender. We will discuss games with generally sum with two players, and otherwise uncooperative and cooperative games. Games with general sum are regarding on games with zero sum with two to the players, in whose is profit one player at the same time loss another actor, more realistic, more interesting and more difficult for analysis. Games with zero sum they are almost always only approximation reality, ideal, who in practice there is no completely feasible. At games with zero sum players they don't have common interest. At completely cooperative games with general sum but players they have only such interest. Games with zero sum and cooperative games with generally sum they are extreme games; especially we are dealing with are uncooperative games with spluff sum; others games but they have properties of the games discussed. Games with cooperative as uncooperative elements they are in in general more complex and more interesting. in everyday life them we play more often than we play completely cooperative or completely uncooperative games. This kind games they are on example negotiations for sale personal car, determination price petroleum products, taking over bank and use individual species weapons in war. games with generally sum with two players they have both actor, R and C , profit (benefit). Therefore is necessary in payable matrix to write down profit both, and otherwise so, yes on first city let's write down profit player R , on other but profit player C .

First:

Companies are buying radio advertising time, who him radio hypha sale for morning or afternoon schedule. in morning easy listens this radio station 30 % listeners, the others 70 % but yes listens in

afternoon time. Characteristics of mornings listeners they are such, yes would product each companies bought 30 % of listeners , if would companies carbonaševali in the same periods of the day. but if would advertised in various periods, would uncertainty listeners grown, therefore would product of each company bought only 20 % of listeners . Features afternoon listeners they are such, yes would product each companies bought 10 % listening, if would companies advertised in the same periods of the day. If but would advertised in various periods, listeners no would knew for other company, therefore would product bought 20 % of listeners . In spreadsheets 4.5a is for this one marketing example written down payout matrix. In each parentheses is on the first city written percentage listeners, who would bought product companies R, and on second city percentage listeners, who would bought product companies C. In spreadsheets 4.5b is written down payout matrix companies R and in prepositions 4.5c payout matrices companies C.

Table 4.5a: Payout matrix for marketing example.

c R	Advertising in the morning	Advertising afternoon
Advertising in the morning	(9.9)	(6.14)
Advertising afternoon	(14.6)	(7.7)

Table 4.5b: Payout matrix for company R.

	t1	t2
s1	9	6
s2	14	7

Table 4.5c: Payout matrix for company C.

	t1	t2
s1	9	14
s2	6	7

Advertising companies R in the morning let's mark with 1 , advertising companies R afternoon but with S2. Similar let's mark with t1 advertising companies c in the morning, afternoon but with t2 . With help spreadsheets 4.5b can let's find out, yes s2 D s1, with using a spreadsheet 4.5c well, yes t2 D t1 • With examination spreadsheets 4.5a can let's find out next paradox: if companies use each your own dominant choice, this is s2 and t2 , is their loot (7, 7) and is smaller, as if would used each your own dominated choice, this is with 1 and t1 ; then is their loot (9, 9). Elimination dominated choices is useful at games with zero sum, soot is rational with individual attitudes. At games with general sum but dominated choices no we eliminate, soot can with them we get better results.

VI. Balance Sheet Simulation

Sources of financing the investment in EUR amount share in %

1. Resources 15,000 60
TOTAL ASSETS 15,000 60

At banks 10,000 40

LOANS 10,000 0
together 25,000 60

Definition of investment

Estimated investment costs Amount Share in %
1. Machinery and equipment 2,000 100.00
TOTAL 2,000 100

Key investment indicators

Productivity indicator REVENUES
time spent
60,000
2008 365 164.38 units/year

90,000

2009 365 246.58 units/year

100,000

2010 365 273.97 units/year

105,000

2011 365 287.67 units/year

Economy indicator REVENUES
costs

60,000

2008 50,300 1,193

90,000

2009 74,700 1,205

100,000

2010 81,600 1,225

105,000

2011 86,100 1,220

Profitability indicator PROFIT
resources used

9,700

2008 14,000 0.693

15,300

2009 13,850 1,105

18,400

2010 13,830 1,330

18,900

2011 14,050 1,345

VII. Assessment Of The Company's Future Operations

Balance sheet of the assessed company

2018 2019 2020 2021

LONG-TERM ASSETS 14,000 13,850 13,830 14,050

Intangible long-term assets 0 0 0 0

Tangible fixed assets 14,000 13,850 13,830 14,050

- equipment 14,000 13,850 13,830 14,050

- land 0 0 0 0

- buildings 0 0 0 0

Long- term financial investments

long-term ACR

SHORT-TERM ASSETS 7,500 13,000 16,300 17,500

Stocks

Btaining Market Advantage In The Case Of Non-Antgonomic Games Of Two Competitors

Trade receivables	5000	10000	12000	13000		
- long-term	0	0	0	0		
- short-term	5000	10000	12000	13000		
Short-term financial investments			0	0	0	0
Good.at banks, checks, cash .			2500	3000	4300	4500
short-term ACR						
ASSETS	21,500	26,850	30,130	31,550		
Capital	16,329	20,697	23,115	23,505		
share capital	8763	8763	8763	8763		
retained earnings	0		0	0		
net profit for the financial year			7,566	11,934	14,352	14,742
Long-term reservations		0	0	0	0	
Long-term liabilities		10,000	14,000	17,600	17,000	
- long-term financial		0	0	0	0	
- long-term business		10000	14000	17600	17000	
Short-term liabilities		839	1538	573	1108	
- short-term financial		339	738	173	508	
- short-term business		500	800	400	600	
OBLIGATIONS	27,168	36,235	41,288	41,613		

Pre-Balance Sheet Of The Company's Income Statement In Eur

2009	2010	2011	2012	2013		
1. Net sales revenue			50,000	60,000	90,000	100,000 105,000
- domestic market			50,000	60,000	90,000	100,000 105,000
- foreign market	0	0	0	0	0	
2. Other operating income	0	0	0	0	0	0
3. Cost of materials and services			18,000	21,800	32,700	35,900 38,700
- material	4,000	4,800	7,200	7,900	8,700	
- service	14,000	17,000	25,500	28,000	30,000	
4. Employee labor costs			22,540	24,800	38,400	42,200 44,000
- salary costs	20,000	22,000	35,000	38,500	40,000	
- insurance costs	540	600	1,000	1,100	1,200	
- other labor costs		2,000	2,200	2,400	2,600	2,800
5. Write-offs	1,400	1,400	1,400	1,400	1,400	
- depreciation of OOS	1,400	1,400	1,400	1,400	1,400	1,400
6. Other costs	1,200	1,300	1,400	1,500	1,600	
- other costs	1,200	1,300	1,400	1,500	1,600	
7. Financial revenues						
8. Financial expenses		1,000	1,000	800	600	400
9. Extraordinary income	0	0	0	0	0	0
10. Extraordinary expenses		0	0	0	0	0

11. Total profit or					
total loss	5,860	9,700	15,300	18,400	18,900
12. Income tax	1,289	2,134	3,366	4,048	4,158
13. Net profit	4,571	7,566	11,934	14,352	14,742
14. Average number of employees	1	1	2	2	2
15. Number of employees as of 31.12.	1	1	2	2	2

VIII. Profitability And Profit

Display of invested capital and return on capital.

Capital		16,329	20,697	23,115	23,505
share capital		8763	8763	8763	8763
retained earnings		0		0	0
net profit for the financial year		7,566	11,934	14,352	14,742

IX. Composition Of Company Costs

How much are the costs over the years and how are they distributed?

3. Cost of materials and services	18,000	21,800	32,700	35,900	38,700
- material	4,000	4,800	7,200	7,900	8,700
- service	14,000	17,000	25,500	28,000	30,000
4. Employee labor costs	22,540	24,800	38,400	42,200	44,000
- salary costs	20,000	22,000	35,000	38,500	40,000
- insurance costs	540	600	1,000	1,100	1,200
- other labor costs	2,000	2,200	2,400	2,600	2,800
6. Other costs	1,200	1,300	1,400	1,500	1,600
- other costs	1,200	1,300	1,400	1,500	1,600

X. Company Cash Flow Management

What cash flow will the company have, positive or negative? How will it handle potential liquidity problems and how will it handle having too much cash in its accounts, etc.

Long-term liabilities		10,000	14,000	17,600	17,000
- long-term financial		0	0	0	0
- long-term business		10000	14000	17600	17000
Short-term liabilities		839	1538	573	1108
- short-term financial		339	738	173	508
- short-term business		500	800	400	600
OBLIGATIONS		27,168	36,235	41,288	41,613

SHORT-TERM ASSETS		7,500	13,000	16,300	17,500
Stocks					
Trade receivables		5000	10000	12000	13000
- long-term		0	0	0	0
- short-term		5000	10000	12000	13000
Short-term financial investments		0	0	0	0
Good.at banks, checks, cash .		2500	3000	4300	4500

short-term ACR						
ASSETS			21,500	26,850	30,130	31,550

XI. Conclusion

As we can see from the balance sheet simulation and the rest of what is said in the text, the newly established company will be competitive, with an appropriate break-even point and appropriate economic indicators.

The company will grow rapidly under the set conditions with an appropriate level of profitability, both in the business part and in the capital part. The turnover of assets from the balance sheet is appropriate for the activity that the company performs. Thus, liquidity and other problems related to the conditions prevailing in the market are not expected. Compared to the companies mentioned above, it certainly creates a competitive advantage, which is based on dynamism and flexibility and appropriate marketing "aggressiveness" in the market!

Literature:

- [1]. Infoton Doo, Advertising, Publishing , Event Organization , Murska Sobota, 2008
- [2]. Neumann & Morgenstern , The Theories Of Games And Economic Behavior 1953
- [3]. Vesna Čančar - Decision Analysis , Selected Chapters, EPF , Maribor 2003
- [4]. Aljaž Ule, Game Theory : Mathematics Of Strategic Decision-Making, University Of Primorska (FAMNIT) And University Of Amsterdam (FEB - CREED), 2018
- [5]. Dr. Friderik Klampfer, Advertising , Encyclopedia Of Applied Ethics),2018 -Marketing Magazine,2018-Ljubljana
- [6]. Marko Rolih , A Magic Trick To Turn Unsuccessful Marketing Campaigns Into Winning Ones, 2018
- [7]. Pam Neely, 3 Case Studies Where I Dramatically Increased The Impact Of Online Marketing With Simple Approaches, 2019
- [8]. Mars Dorian , How To Attract Online Audiences And Customers? Steal Them!2019-Marc Hunter, 7 Secrets To Finding (SALE) Opportunities: How The Best Salespeople Do It,2019