

Understanding social media within Internet marketing

Graduation report

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Foreword

For several years, I have had the dream to spend some time in the United States. I wanted to experience that big and diverse country that has to deal with so many prejudices, and learn from its people and culture. From January 2008 on I had sent many emails to US companies, trying to find an internship for the next year. But it did not work out, apparently Americans did not think that far ahead. So in September 2008 I registered at Global Placement, a company that offers internships abroad to international students. Through them, I came in contact with Intern Abroad, a small company based in Miami and San Francisco that helps international students finding an internship in one of these cities. San Francisco, it sounded like a dream come true!

Nora Archambeau became my contact person and helped me finding an internship in San Francisco. We had regular contact by email and telephone, and on November 20, 2008 I got an amazing email: "You've been placed!"

I would like to use this opportunity to give special thanks to Nora, who supported me realizing my dream, and kept supporting me and giving advice and feedback during my entire internship. I also want to thank Franco Folini, my company supervisor for his help, feedback and time. My other colleagues, Carolyn and Cris have been wonderful too; from all the funny stories and discussions with Cris to the trips I have made with Carolyn. All these people have made my time in San Francisco so much more than just an internship.

--Mirjam

Executive summary

In 1991, the first website entered the World Wide Web. Now, 18 years later, more than one billion people around the world find their way to the Internet, searching for products, entertainment or soulmates.¹ Rapidly, the Internet was discovered as an interesting tool for marketers to reach a big amount of consumers.

Novedge (created in March 2003) is a company that sells software aimed at the design and manufacturing industry through their online web shop. The company wants to know how social communication techniques can help them in achieving its online marketing objectives, using blogs, communities and social networks. A community, called RhinoJungle, would be used to see which social media tools are most effective so they could be used in the future to help reaching the Internet marketing objectives of Novedge. The following objectives for the community had been defined:

- Offer users a valuable and informative site to share information and connect with other users;
- Improve Google ranking of Novedge;
- Become part of the ‘federation’ of websites;
- Hold connection with customers in between purchases; and
- Offer after-sales service to customers who bought the software at Novedge.

Several social media tools like Twitter, Facebook and news digests were tested for its effectiveness to achieve the objectives. Blog posts and a press release were written too, and a mass mailing was sent out to the entire mailing list of Novedge to see if that helped growing the community. But building an active and lively community takes time, and time means money. In the long run, with enough members, the community can become self-sustaining, but in the short run, active participation from a moderator is needed to stimulate other members to become active on the community.

¹ Chaffey et. al. (2009)

Blog posts and direct invitations increased the amount of page visits and members at a rapid pace. But after publishing the press release there were no clear signs of an increase in page visits. The Facebook page has not been very successful either; it brought some Facebook users to RhinoJungle, but less as we hoped. A successful approach was having a contest; page visits increased and members became more active. But questions have to be asked: are people only signing up for the contest? Are they coming back when the contest is over?

One of the recommendations is to increase the usage of the blog at the website of Novedge. Scoble and Israel (2006) write in their book “Naked Conversations” that two of the most important reasons to engage in the blog dialogue are to get a more accurate perception of customer needs and to engender trust. Dwyer (2007) adds a third reason: to make customer more involved in a company’s products.

Singley (2009) recommends having a minimum of 2-3 new posts published per week. Different employees of Novedge can write the posts so the workload does not have to come on one person alone, and multi-author blogs tend to be more popular.² It is estimated that each blog posts will take an hour, so if all 3 employees of Novedge write a blog post once a week, it will take 3 hours a week in total to keep the weblog updated.

Another recommendation would be to involve suppliers of plug-ins more into the community. Based on one of the findings, having a supplier send a message to their customers to invite them to become member of the community was a successful approach. An advantage for customers is that if the supplier is present on the community, it is easier for customers to contact them in an informal way. And a supplier can ask their customers for feedback on their products, also in an informal way. By providing visitors with the opportunity to interact with the company, organizations (like suppliers of plug-ins) can foster deeper buyer relationships by customizing products and services to meet customers’ demands and interests.³

² Singley (2009)

³ Lesser et. al. (2000)

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Glossary of terms

Blog

Personal online diary, journal or news source compiled by one person, an internal team or external guest authors. Postings are usually in different categories. Typically comments can be added to each blog posting to help create interactivity and feedback. From ‘Web log’.⁴

CAD (Computer-aided design)

Software used in art and architecture and engineering and manufacturing to assist in precision drawing.⁵

Core77

Core77 publishes articles, discussion forums, an extensive event calendar, hosts portfolios, job listings, a database of design firms, schools, vendors and services to serve a devoted global audience of industrial designers ranging from students through seasoned professionals.⁶

Facebook

A social utility that helps people communicate more efficiently with their friends, family and coworkers.⁷

HTML (HyperText Markup Language)

A standard format used to define the text and layout of web pages.⁸

NURBS (Non-uniform rational B-spline)

Class of curves and surfaces that are widely used in CAD systems.⁹

⁴ Chaffey et. al. (2009)

⁵ WordNet Search 3.0

⁶ Core77 (2009)

⁷ Facebook (2009c)

⁸ Chaffey et. al. (2009)

⁹ Anderson School District Five: Academy of Engineering and Biomedical Science

Plug-in

Additional software package to add features to basic software.

Pulse

The always-updated online source of CAD, design, and 3D graphics news.¹⁰

RhinoJungle

Online community created by Novedge for users of Rhinoceros® and its plug-ins.

Rhinoceros® (Rhino)

NURBS-based 3D modeling software, developed by Robert McNeel & Associates.

Robert McNeel & Associates (McNeel)

Software development company, supplier of Rhinoceros® and its plug-ins Flamingo™, Penguin™, and Bongo™.

Social media

A category of sites that is based on user participation and user-generated content.¹¹

tenlinks.com

An online CAD, CAM and CAE media company. TenLinks has grown into a network of websites and newsletters that together form the largest online community of CAD, CAM and CAE users.¹²

Twitter

A service for friends, family, and co-workers to communicate and stay connected through the exchange of quick, frequent answers to one simple question: What are you doing?¹³

¹⁰ Novedge (2009c)

¹¹ Lazworld.com Inc. (2009)

¹² TenLinks.com (2009)

¹³ Twitter (2009b)

Introduction

“How can Novedge use online social media tools to help reaching its Internet marketing objectives?”

In 1991, the first website entered the World Wide Web. Now, 18 years later, more than one billion people around the world find their way to the Internet, searching for products, entertainment or soulmates.¹⁴ The focus of this research is on online social networks, or communities. According to Mislove et. al. (2007) online social networks provide a basis for maintaining social relationships, finding users with similar interests, and locating content and knowledge that has been contributed or endorsed by other users.

The internship company Novedge (created in March 2003) is a company that sells software aimed at the design and manufacturing industry through their online web shop. They want to know how the social communication techniques of Web 2.0 can help achieving its online marketing objectives, using blogs, communities and social networks. To research this, an online community was set up, called RhinoJungle.

By experimenting with blogs, press releases, Twitter, Facebook and mass mailings while keeping close track of page visits and increase in amount of members, it was possible to define which techniques are beneficial and which are not. Unfortunately, one of the limitations in this research is time. An online community needs time to grow, to attract more members, to contain a lot of valuable information. Building a self-sustaining community in only a few months with limited resources is almost impossible.

In this report the reader will find an overview of the graduation assignment, but first the current situation and marketing objectives will be described. After that, the methodology and findings

¹⁴ Chaffey et. al. (2009)

will be described and discussed and recommendations to Novedge will be given. It might be wise to have a quick look at the Glossary of Terms before reading the report, to get an understanding of the used terms and names.

I hope this report enjoys and informs the reader as much as I did while doing the research.

Mirjam Hart

June 2009

San Francisco, USA

1. Current situation

Chaffey (2009) uses stage models of capability to evaluate the current usage of Internet services and the integration of Internet marketing. Based on these stage models it can be said that Novedge is at level 4 out of 5. This means that there is an “interactive site supporting transactions with users”. Next to the products that are offered in the online webshop, the website of Novedge hosts a weblog, a newsletter and a news aggregator, called ‘Pulse’. On every product, blog post, newsletter or news item in Pulse, visitors of the website can leave a comment, making the website very interactive.

Novedge does not collect detailed information about their customers. Information about the amount of sales in different sales segments is known, but it is not possible to create a customer profile based on these limited data. More information about segments can be found at ‘Segmentation’ on page 13.

The following marketing tools give a better understanding of the current situation at Novedge.

1.1. *The Marketing Mix*

The marketing mix is one of the most famous models in the area of marketing. The elements, also known as the four P’s, are product, price, place and promotion. Together they form the basic, tactical elements of a marketing plan.¹⁵

1.1.1. Product

Novedge LLC is a company that sells graphics and design software through its online shop. At the moment, Novedge has ± 3,000 products in its catalog from 106 different brands. Besides software, Novedge also sells some ‘hardware’, like drawing tables, mice and books. This hardware accounts for 2 to 3 % of the total catalog.

¹⁵ Marketing Teacher (2009)

1.1.2. Price

Because the products of Novedge are so diverse, so are the prices. The different categories (student license, upgrade, stand alone, floating or network license) also account for a difference in prices. To stay ahead of competition, Novedge offers a 'best price guarantee' to certain products in its catalog. If a customer finds the same product at a cheaper price at a competitor, Novedge will match the price. But they can only offer that on products where all resellers have to apply to the same pricing conditions.

1.1.3. Place

Novedge sells its products online through its website. A web-form can be filled in online to purchase a product, but it is also possible for the customer to make a purchase by telephone, or to send the purchase order by mail or fax. The purchase can be paid for in several ways: by credit card, Paypal, Google checkout, regular checks or via wire transfer.

The office of Novedge is located in San Francisco, California, USA, and in very rare occasions customers come by the office to pick up and pay for their order immediately by cash or credit card.

1.1.4. Promotion

Because Novedge is an online store, the promotion of Novedge is also online. The main promotion is on Google, using Google's Adwords¹⁶ to make sure that Novedge's website will turn up high in search results. Other search engines, like Yahoo and Live are used for the same purpose. Unfortunately this did not result in higher sales, so this campaign was heavily reduced.

Novedge also uses an 'associates' system. With this system (which is originally developed by Amazon.com) other people, or organizations (for example Car Body Design¹⁷), can place a link to Novedge on their website. When visitors of the Car Body Design-website click on the link of Novedge and order something, Car Body Design will earn a small fee.

¹⁶ Google (2009a)

¹⁷ Car Body Design (2008)

Furthermore, Novedge works with coupons. With each order that is shipped from Novedge's own inventory, a discount coupon is added to the package. This coupon gives \$ 25 discount on a next purchase of at least \$ 500 when the purchase is made within 30 days.

Unfortunately, Novedge has to deal with a general problem when it comes to promotion and binding customers: the products of Novedge usually have a purchasing cycle of at least 1 year, sometimes 3 years, so customers are not buying frequently from Novedge. When a customer has bought a core version of a product (for example Rhinoceros 3.0), customers can buy additional plug-ins (for example Penguin). After a while (the time span differs greatly amongst products) upgrades are released for products (for example Rhinoceros 4.0), which customers can buy. Because plug-ins are bought more often than core versions, it would make sense to promote the plug-ins more than the core versions. But not every customer needs a plug-in, some are satisfied with just the core version. Also the margin on plug-ins is much lower compared to the core version, so Novedge does not make big profits on selling plug-ins.

After testing different ways of promoting products, experience told that most customers are taking their buying decision at their own moment; promotions or coupons do not have much effect on that.

1.2. *Segmenting, targeting and positioning*

1.2.1. Segmenting

Novedge deals with 3 types of customer segments: educational, commercial and government. Commercial sales include both business-to-business (B2B) and business-to-consumer (B2C), at the moment percentages about how much is B2B and how much is B2C are not known. Although Novedge does not keep detailed records of their customers (yet), it can be said that the majority of the customers is male, with an age in between 30-55 years old. The customers can be hobbyist (consumer sales), professional designers or engineers (business sales) or students or professors (educational sales).

The following table gives an overview of the amount of items sold and sales per segment of the last 2,5 years.

2007

	# (in terms of items)	Revenue	Profit
Commercial	98.80%	99.60%	99.60%
Educational	1.20%	0.40%	0.40%
Government	0.00%	0.00%	0.00%

2008

	# (in terms of items)	Revenue	Profit
Commercial	84.00%	94.50%	93.50%
Educational	15.80%	5.20%	6.20%
Government	0.20%	0.40%	0.40%

2009

	# (in terms of items)	Revenue	Profit
Commercial	76.80%	91.10%	89.30%
Educational	23.20%	8.90%	10.70%
Government	0.00%	0.00%	0.00%

Table 1: Data from January 1, 2008 until June 4, 2009 (source: Novedge)

In 2008, Novedge started adding more educational products to its catalog. This explains the big increase in educational orders in that year, and the following.

The way the sales of Novedge are distributed can be explained using the ‘Long Tail’ theory of Chris Anderson (2006). This theory explains the strategy of selling a large number of unique

items in relatively small quantities. Because inventory costs are close to 0, this allows Novedge to realize profit with selling small volumes of hard-to-find and unique products to many customers, instead of only selling large volumes of a reduced number of popular items. Based on this theory, Novedge is always trying to add more products to its catalog.

1.2.2. Targeting

To attract customers, Novedge has a ‘best-price-guarantee’. This means that if you can find the same product somewhere else online at a cheaper price, Novedge will match the price. Furthermore Novedge is rather active (and is increasing its activity) in online social media: they have a page on Facebook¹⁸, a Twitter account¹⁹ and they host and moderate several online communities²⁰ (and more are coming). With these activities Novedge wants to target as much people as possible by being present on the Internet as much as possible.

1.2.3. Positioning

Novedge wants to position itself as much more than ‘just’ a reseller. They want to stand close to the customer by offering additional services, like technical support and online communities. Besides that, Novedge wants to remove the perception of customers that resellers are biased and only focus on products with the highest margin.

To communicate this positioning and their quality, Novedge sends their customers an email a few weeks after their purchase asking to write a review about the product or the company at the website of Novedge. Furthermore, all the customers that use ‘Google Checkout’ as their form of payment are asked by Google to rate the company. These reviews shows that customers are very satisfied with the service of Novedge; it is perceived as fast and efficient and customers would recommend the company and buy again at Novedge.²¹

¹⁸ Facebook (2009b)

¹⁹ Twitter (2009a)

²⁰ RhinoJungle (2009) and SpaceClaiming (2009)

²¹ Google (2009d)

1.3. SWOT analysis

1.3.1. Strengths (internal)

One of the strengths of Novedge is their big catalog. Novedge is always looking for new products to add to their catalog in order to be able to serve their customers even better. Next to that, the customer service as offered by Novedge is perceived as of a very high quality. Once an order is placed, Novedge keeps very close track of it and informs the customers about the status and the location of the order. After the order is delivered (according to UPS / FedEx / DHL), Novedge contacts the customer to ask if the package was received in good condition and if the package contained what they ordered. Because the majority of the orders placed at Novedge are being processed by other companies (usually the supplier), Novedge has less control over these orders. Therefore they check afterwards if everything went okay.

Fast shipment and delivery is also one of the spearheads of Novedge. Orders are processed within 24 hours, and if the product is in stock at Novedge or at a US supplier, it will be shipped the same day. The tracking system Novedge has developed makes sure that orders executed by suppliers are being checked when their status has not been updated for a certain amount of time.

Another strength of Novedge is the uniform and consistent shopping experience customers have when shopping at the website of Novedge; every product or brand is presented in the same way. In that case, customers know what to expect if they are browsing through the website of Novedge to find their products. This will save them time instead of shopping at the separate websites of the suppliers of the different products where the presentation of information and the order processing is done in different ways.

1.3.2. Weaknesses (internal)

The main weakness of Novedge is to bind their customers. The purchasing cycle at Novedge is in average 2 to 3 years. After that, customers are willing to invest in additional software like extra plug-ins or more licenses. Another reason for the long purchasing cycle is that once a customer has bought a license for a system (for example Rhinoceros 4.0) it will not switch easily to another

system (for example AutoCAD). Next to a new investment, this also means that all people working with the system has to be trained again.

Another weakness that is closely connected to the first one is that it is very difficult for Novedge to build a personal relationship with its customers. Traditional resellers can build a personal relationship with their customers while doing business face-to-face. In this process, a traditional reseller can use techniques like up selling and cross selling to stimulate sales. For an online reseller like Novedge this is very difficult since there is no face-to-face contact with their customers. Novedge can only build an online relationship.

1.3.3. Opportunities (external)

To turn a weakness into an opportunity would be to engage more in social media to bind customers and build a strong relationship. When Novedge has a presence in forums, blogs or other social networks where their customers are too, customers will remind Novedge when they are thinking about a new purchase. Another opportunity for Novedge is to offer extra after-sales-service for their customers in these social networks, to help them with their support questions by interacting with the customers in online communities.

Another opportunity is the expansion of the catalog by adding new products, and with that being able to serve more and diverse customers. As described in the strengths, Novedge is already working hard on that.

1.3.4. Threats (external)

Novedge is in the luxury position that they actually do not have direct competitors. The best way to explain this is to compare Novedge to a supermarket, a place where you can get almost everything. There are other shops that sell some specific products, like bread or cereals, but there is no other supermarket. This is the same with Novedge, they sell almost everything in the field of CAD / CAM software, and there is not another online company that has the same broad choice as Novedge has. But it depends on the customers' mindset whether this is a threat or not. If the customer prefers to buy at only one store for buying software, the competition is not really a

threat. Furthermore, Novedge's extensive catalog, the best-price guarantee, the excellent customer service and the good relationship Novedge has with the suppliers of the products makes them stand out in between other online software resellers.

2. Internet marketing objectives

Because of the small size and limited resources of Novedge, the company does not have a written marketing strategy. Their marketing plan mainly consists of several objectives they want to reach. In reaching these objectives different possibilities are explored on a trial-and-error basis.

There are 5 main objectives for the Internet marketing at Novedge:

- Improve Google ranking
 - More than 46%²² of all people coming to novedge.com are coming through a search on google.com, and almost 11% is coming through advertisements on Google (pay-per-click). The first group is called ‘free visitors’, and the second group is ‘paid visitors’. To improve Google ranking, and with that increasing the amount of ‘free visitors’, is very important and an ongoing process.
- Create a ‘federation’ of websites with lots of cross-referencing
 - Besides the general homepage of Novedge (novedge.com), Novedge wants to create a whole group of websites that all link to each other, without violating the nature of each one. Each website in the federation will have its own purpose. The website of Novedge will contain links to all other websites in the federation on logical places (for example a link to RhinoJungle on the product page of Rhinoceros 4.0), and the separate websites in the federation will link to each other when that is appropriate. This will improve the performance of each separate website, and it will improve the Google ranking of novedge.com; the more websites that link to novedge.com, the higher the Google ranking will be. Websites that are already part of the ‘federation’ are Spaceclaiming (spaceclaiming.com), Pulse (novedge.com/pulse), the monthly newsletter and the blog (blog.novedge.com). RhinoJungle (rhinojungle.com) has been added to this group during this internship.

²² Google (2009b)

- Change and improve the perception of customers about resellers
 - Novedge wants to be much more than ‘just’ an online webshop, they want to stand close to the customer by offering more services than competitors. Technical support and the many additional websites in the ‘federation’ are part of the extra services Novedge offers to its customers. Furthermore Novedge wants to change the idea of customers that resellers are biased; Novedge is neutral and does not favor one product over the other. Novedge’s vision is to sell the best suitable product to the customer, not the one with the highest margin.
- Be ‘first in mind’ for customers
 - When thinking about buying CAD related products, Novedge wants to be the first thing that comes in mind at customers, like Amazon is ‘first in mind’ for many people when thinking about buying books online.
- Hold connection with customers in between purchases
 - The purchasing cycle at Novedge is in average 2 to 3 years. To bind customers to Novedge in those 2 to 3 years, the communities can offer a great place to stay in touch and exchange information.

3. Methodology

To help Novedge improving their current situation and achieving their marketing objectives, a graduation assignment has been set up which will be made during an internship. In this section, the structure and used methods during the graduation assignment will be explained to the reader.

3.1. Sampling design

During the internship, several (social media) tools were tested for its effectiveness. One of the tools was organizing a questionnaire in the form of a contest. On May 6th, the questionnaire was launched on RhinoJungle to gather both quantitative and qualitative data about the members and about what they think of the community. The questionnaire can be found in appendix 1.

At the moment the questionnaire started, RhinoJungle counted 282 members. Three weeks later, on May 31st, the community had 353 members, an increase of 25%. On the first day of the questionnaire, 35 people participated in it, in total 102 people participated. With a member total of 353 members this means a response rate of 28.9%. All results of the questionnaire can be found in appendix 2.

3.2. Research design

The biggest focus during this internship was on the community RhinoJungle. To attract new members to the community, different methods were used. RhinoJungle acted as a test case, successful methods could also be used for the website of Novedge itself and other communities in the future. Here is an overview of the biggest events:

- On February 23rd, a Facebook page totally dedicated to RhinoJungle was created to attract Facebook users to the community and to increase visibility of the community;
- On March 2nd and March 10th, over 150 emails were send to people who write blog posts or keep a weblog about 3D design;
- On March 9th, a blog post mentioning the new community was published on the weblog of Novedge;
- On March 10th and 12th, one of the new members (a supplier of Novedge) invited more

than 9,000 people to RhinoJungle;

- On March 18th, a press release about RhinoJungle was posted on Novedge's website and sent to several online news sources;
- On March 19th, several suppliers of plug-ins were invited;
- On March 31st, an email invitation to the entire mailing list of Novedge (around 70,000 subscribers) was sent;
- On April 22nd, RhinoJungle is mentioned on the website of Core77, a popular online resource for industrial designers;
- On May 6th, a questionnaire was launched where all members could give their feedback on the community. This questionnaire was transformed into a contest, where a randomly selected winner would be picked and win a license for a software plug-in; and
- On May 13th, all Rhino-customers of Novedge ($\pm 15,000$ people) were directly invited to RhinoJungle.

3.3. *Data collection and analysis*

From March 1st, 2009, the collection of data started from all different sources to monitor the performance of the social media tools. On a daily basis the activity and amount of members at both Facebook pages, the Twitter account and the RhinoJungle community were tracked (see appendix 3).

Another way of data collection was via a special parameter that tracked the traffic coming from RhinoJungle to the website of Novedge. This parameter is build in the HTML code of the hyperlinks on RhinoJungle that direct to Novedge's website (for example the advertisements and the 'store' link). In this way, the amount of people coming to Novedge's website through RhinoJungle could be monitored, as well as how much sales was generated by this.

Traffic Summary	
Associate Since Thursday, March 12, 2009	
Total Clicks 2,031	Clicks Since Mar 12, 09 2,031
Average Clicks per Day 21.46	Average Clicks per Day Since Mar 12, 09 21.46
Last Click Recorded Today at 9:19:52 AM PST	

Figure 1: Traffic from RhinoJungle to Novedge (from March 12 until June 15, 2009)

To track the amount of page views and visits to RhinoJungle, Google Analytics²³ was used. As of March 1st, Google Analytics was set to track all traffic to RhinoJungle. This provided an important insight into how often the community was visited and which events affect the amount of visitors the most.

The questionnaire was developed using Google Documents²⁴. This application lets users create documents online, also questionnaires. The results were gathered in an excel-sheet. Google also offered a summary of the results with charts and graphs, which can be found in appendix 2.

3.4. Limitations

Building an active and lively community takes time, and time means money. Having people to sign up as members is one thing, having them posting content or replying on forum topics or blog posts is another thing. As Hinchcliffe (2008) indicated "many communities struggle for a while until they catch their stride when they reach the right participant, or offer the right means of engagement."

In the long run, with enough members, the community can become self-sustaining. Based on

²³ Google (2009b)

²⁴ Google (2009c)

another pilot community of Novedge, called ‘Spaceclaiming’²⁵, it is an assumption that with at least 500 members, the community will start becoming self-sustaining. But in the short run, active participation from a moderator is needed to stimulate other members to be active at the community. How long that ‘short run’ and ‘long run’ will be is very difficult to say since there is little material available to compare with.

Of course, this is an optimistic scenario. A worse scenario is that if Novedge cannot continue actively stimulating the members to participate, and the members themselves do not add enough content to keep the community going, the community will slowly die.

²⁵ Spaceclaiming (2009)

4. Findings

To find out how social media can help Novedge achieving its Internet marketing objectives, several methods were tried to attract new members to RhinoJungle. The effectiveness of the different methods were tested, with this data it was possible to compare the methods. Based on the results, recommendations about which tools can be used best in achieving the Internet marketing objectives can be given. These recommendations can be found in chapter 6 of this report.

The biggest focus during this research was on a new online community, started by Novedge, called ‘RhinoJungle’. RhinoJungle aims at users of the software called ‘Rhino’, created by the company Robert McNeel & Associates. The community would be used as a test case to see which social media tools are most effective so they could be used in the future to help reaching the Internet marketing objectives of Novedge. After a brainstorm session with Mr. Folini, the following objectives for the community had been defined:

- Offer software users a valuable and informative site to share information and connect with other users;
- Improve Google ranking of Novedge;
- Become part of the ‘federation’ of websites;
- Hold connection with customers in between purchases; and
- Offer after-sales service to customers who bought the software at Novedge.

To help reach the goals of RhinoJungle, Twitter and Facebook were used as complementary tools. These social media tools has been chosen because they are growing rapidly in popularity and amount of registered users; Facebook has over 200 million active users²⁶ and Twitter was ranked as the fastest growing community in February 2009 by Nielsen with a growth rate of 1,382%²⁷.

²⁶ Facebook (2009d)

²⁷ Nielsen Wire (2009)

Another tool that was used was sending weekly news digests. This digest is an extra service Novedge offers to its customers and is specifically designed for all Rhino customers of Novedge. The digest consists of two parts: news items related to the Rhino software and its plug-ins, and a part called ‘Rumors of the jungle’. This last part is used to mention activity on the community and highlight special events, like contests. By posting this digest on Pulse and RhinoJungle, the visibility of the digest, and Novedge increased.

Furthermore, a press release and a blog post were written to announce and promote RhinoJungle, both were published on the website of Novedge.

Below, figure 2 gives an overview of the amount of visitors coming to the website of RhinoJungle starting March 1st, 2009. This data comes from Google Analytics.

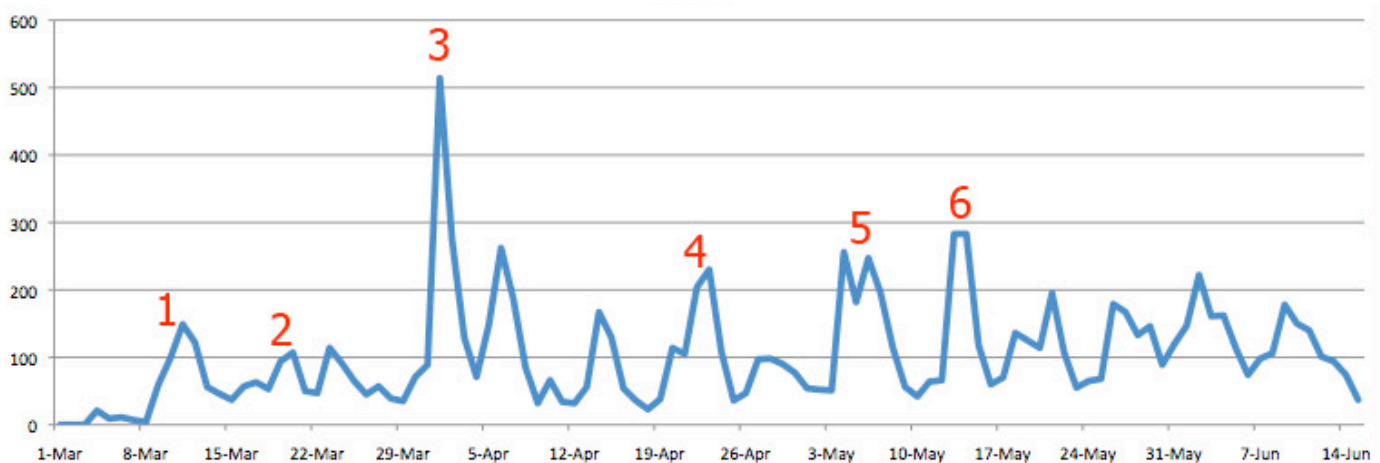


Figure 2: Amount of visitors coming to RhinoJungle until June 15, 2009 (source: Google Analytics)

The chart of Google Analytics highlights a few events:

1. The blog post about RhinoJungle on the website of Novedge and the invitations (over 9,000) one of the new members sent;
2. The press release about RhinoJungle on the website of Novedge (and other websites);
3. The mass mailing to all customers of Novedge to invite them to RhinoJungle;
4. The reference to RhinoJungle on the website of Core77;

5. The questionnaire on RhinoJungle; and
6. The invitations to the Rhino-customers.

These events can also be found when looking at the increase in members at RhinoJungle in the figure below. The events have the same numbers in both figures for easy comparison. Data in this figure is collected from March 1st, 2009 until June 14th, 2009.

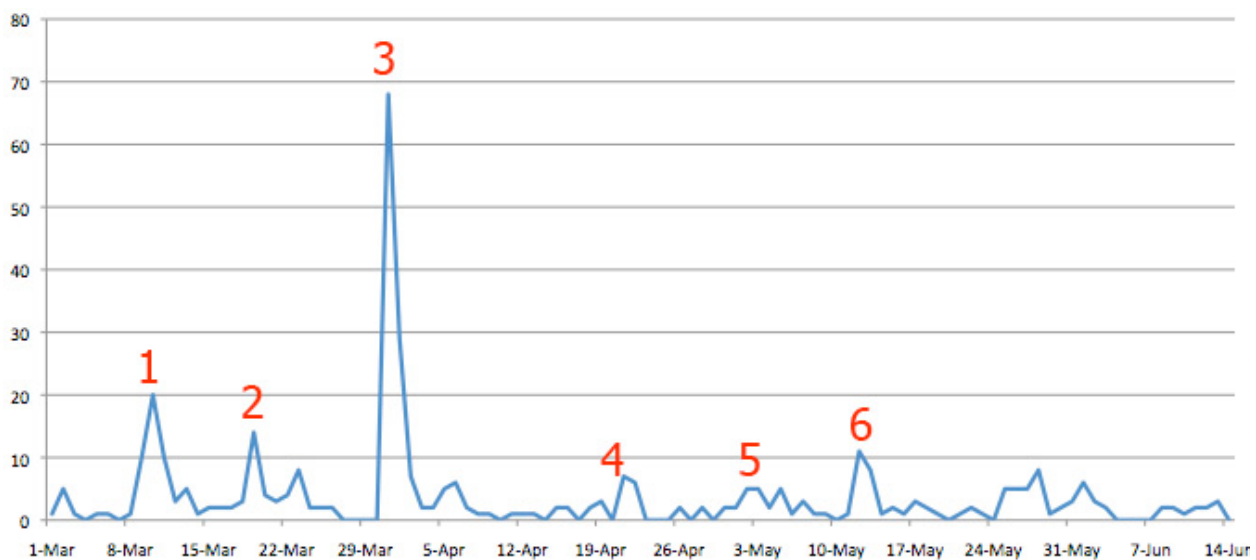


Figure 3: Daily increase in members on RhinoJungle (source: RhinoJungle)

The first big success for RhinoJungle came in the period March 9 to 11, 2009. On March 9, a blog post about how social media could be beneficial to Novedge was written and posted on the website of Novedge.²⁸ A day later, a supplier signed up as a member of RhinoJungle and sent an invitation to over 9,000 people, asking them to join the community. These events resulted in a big increase in members for a few days (see number 1 in figure 2 and 3). In appendix 3 all the graphs about the development of the community are included.

²⁸ Novedge (2009a)

The second big event (see number 2 in figure 2 and 3) was the press release announcing the launch of the community on March 18, 2009. Next to Novedge's own website²⁹, this press release was also sent to tenlinks.com³⁰ which distributed the press release to several other news sites. This resulted in an increase of 14 members on the day after the release of the news, but nothing more substantial after that.

The big hit came on March 31 and April 1 (number 3 in figure 2 and 3), when an invitation was sent to the entire mailing list of Novedge. This resulted in 68 new members on March 31 and 29 new members on April 1, meaning that in 2 days the total amount of members jumped from 114 to 211. This increase can clearly be seen in both graphs of the amount of visitors and the increase in members as the 3rd event.

Another event that is worth mentioning here is the reference to RhinoJungle on the website of Core77³¹. This did not result directly in a lot of new members (6 on the day of publication) but Google Analytics (see table 2 below, data from March 1, 2009 until June 15, 2009) shows that Core77 account for 66.29% of all new people visiting RhinoJungle.

Source	Visits	% New Visits	% Visits
(direct)	3,696	54.90%	33.58%
rhinojungle.com	2,159	33.53%	19.61%
google	1,377	66.38%	12.51%
core77.com	982	66.29%	8.92%
facebook.com	221	24.43%	2.01%
novedge.com	200	52.00%	1.82%
rhinojungle.ning.com	183	22.40%	1.66%
google.com	164	45.73%	1.49%
mail.google.com	153	38.56%	1.39%
archinect.com	122	81.97%	1.11%

Table 2: Top traffic sources for RhinoJungle (source: Google Analytics)

²⁹ Novedge (2009b)

³⁰ Tenlinks (2009)

³¹ Core77 (2009)

Finally, from May 6 until May 31, 2009 a questionnaire was held on RhinoJungle (number 5 in figure 2 and 3). The aim of this questionnaire was to gather information about the members of the community and to get feedback about the performance in order to be able to improve the community based on the comments of the members. To stimulate the members to participate in the questionnaire we asked a supplier to offer a free license of their software product to a randomly selected participant. In this way there were no costs for Novedge.

The questionnaire was promoted with a banner on the website of RhinoJungle itself, on Facebook and on Twitter. On a regular basis, messages would be posted on Facebook and Twitter, reminding people to sign up for the community and participate in the questionnaire. Next to that, the questionnaire was promoted at several editions of the weekly news digest, being sent to almost 15,000 subscribers. The complete questionnaire, and the results, can be found in appendix 1 and 2.

Based on the findings from the questionnaire, the average user of the community is a male between 26 and 35 years old and is a designer. The majority of the members found the community through the website of Novedge or via a personal invitation of Novedge. The most appreciated parts of the community are the videos and the forum, which are mainly the most useful and informative sources.

The most important aim of the questionnaire, getting feedback about the performance of RhinoJungle, worked out very well; many members had great ideas about features that could be added or how to improve the community. This feedback gave an insight into what the members value about the community and what brings them (and more important: keeps them!) to RhinoJungle.

Figure 2 of Google Analytics shows that the average amount of page visits increased a bit since the contest. Also the activity on the community increased. Of course this is related to the growth in members; the more members, the higher the chance of increased activity.

5. Discussion

Based on the findings in the previous chapter, it can be said that some tools are more effective when it comes to reaching people than others. The several social media tools that were tested will be discussed here.

5.1. *Facebook*

To start promoting the RhinoJungle community in February 2009, a page on Facebook was created, totally dedicated to RhinoJungle³². This page was used to expand the visibility of the community among the members of Facebook. By linking this page to other, relevant pages within Facebook by adding them to the favorites of RhinoJungle (for example the ‘Rhino’ page³³, the ‘industrial design and 3D’ page³⁴ and Novedge its own page³⁵), more people would be able to find the Facebook page. On the other hand, the Facebook page is also promoted on the website of RhinoJungle itself, as a cross-reference. In this way, both sites are promoting each other, trying to bind the people as much as possible.

Unfortunately, until so far the effect of the Facebook page is not showing very well. The questionnaire confirms this; only 6% of the people that responded said they found RhinoJungle through Facebook. But as also explained in the ‘Limitations’ in the ‘Methodology’ chapter (page 23), building a big community, whether inside or outside Facebook takes time, especially when you are promoting something that is not known to the general public. In appendix 2 the results of the questionnaire can be found.

5.2. *Inviting bloggers*

The next step in promoting the community was by inviting people that are writing blog posts that are part of the news feed of Novedge, called Pulse.³⁶ In general, these people are named and

³² Facebook (2009f)

³³ Facebook (2009e)

³⁴ Facebook (2009a)

³⁵ Facebook (2009b)

³⁶ Novedge (2009c)

quoted often in the world of 3D design, so having them on the community from the beginning can be very beneficial and an extra motivation for other people to sign up.

Over 150 invitations were sent by email on March 2 and March 10, 2009 to personally invite them in this early stage of the community. Percentage wise, this resulted in a duplication of the amount of members. But since we only had 8 members at that moment, it cannot be seen as a big success; only 3.8% of the people that received an invitation signed up within 3 days. Probably the community was too immature for people to see the added value of it to sign up as a member.

5.3. *Blog post & invitations by supplier*

The blog post that was written on March 9, and the invitations that were sent on March 10 by a supplier of Novedge resulted in a big and rapid increase in members for the community; on March 9, 10 and 11, 30 new members signed up, an increase of 176.5%. These invitations turned out to be a great way to attract more people to the community because suppliers are seen as a reliable source of information. But because both events happened around the same time, it is difficult to tell which event had more effect.

5.4. *Mass mailing*

At the end of March it was decided to send a mass mailing to the entire mailing list of Novedge, consisting of over 70,000 subscribers. This mass invitation could only be sent once since Novedge does not want to bother the subscribers of the mailing list with too much unwanted messages. Therefore the mailing had to be timed rather well. Finally the mailing was sent at March 31, 2009 and it resulted in lots of new members. But unfortunately that only lasted for 3 days, and the amount of new members was not as much as hoped. Out of 70,000 people that received the invitation, only 104 people signed up as new members in 3 days, which was an increase of 91.2%. It is highly probable that more people that received the mailing eventually signed up at the community, but after 3 days the amount of daily new members dropped to rather normal levels of 2 to 5 new members a day.

5.5. Referrals on other websites

References from other websites can be very useful for RhinoJungle; the more visibility on different websites, the better. Referrals on other websites also increase Google page rankings. When Core77³⁷, a popular online resource for industrial designers mentioned the community on their website, page visits increased for a few days and a few more members signed up on that day. What was interesting to see is that on the same day, the amount of fans on the RhinoJungle Facebook page increased by 8 (an increase of 16.7%), which had never happened before.

5.6. Contest

The contest in May was successful, page visits increased and 71 new members (25.2%) joined the community. The contest also increased the activity at the website, more people were replying on articles or posted articles themselves. But it is good to ask some questions concerning this contest: Are people only signing up for the chance of winning a prize or are they seriously interested in the community? Will people come back after the contest? Unfortunately it is really hard to research that, so an answer to these questions cannot be given at the moment. But time will tell whether this contest will be an increase in member activity in the long run, or only the short run, during the contest.

³⁷ Core77 (2009)

6. Recommendations

The research question of the internship is “How can Novedge use online social media tools to help reaching its Internet marketing objectives?” Based on the several tools that were tested on the RhinoJungle community, recommendations can be given about which tools are more effective than others.

First of all, it is recommended that Novedge will use their weblog in a more active way. At the weblog, all kind of different subjects can be discussed, like product reviews, new product releases, general support questions and new information about the different communities Novedge is hosting. This will take a certain amount of time, but it is a way to communicate directly to the customers and to “offer insight into your industry, your methods, and your thoughts.”³⁸ Dwyer (2007) sees corporate blogging as a tool that combines customer relationship management (CRM) with building brand community. “Blogging seeks to enhance CRM by putting a human face (i.e., the blog author) on the cold automaticity of data gathering. In doing so, its goal is to increase consumers’ affective commitment.”³⁹ Scoble and Israel (2006) write in their book “Naked Conversations” that two of the most important reasons to engage in the blog dialogue are to get a more accurate perception of customer needs and to engender trust. Dwyer (2007) adds a third reason: to make customer more involved in a company’s products.

At the moment, the frequency of a new blog post varies a lot, sometimes every 2 weeks, sometimes 2 at the same day. Singley (2009) recommends having a minimum of 2 to 3 new posts published per week. Different employees of Novedge can write the posts so the workload does not have to come on one person alone, and multi-author blogs tend to be more popular.⁴⁰ It is estimated that each blog post will take an hour, so if all 3 employees of Novedge write a blog post once a week, it will take 3 hours a week in total to keep the weblog updated.

³⁸ Sitepoint (2008)

³⁹ Dwyer (2007)

⁴⁰ Singley (2009)

Another recommendation would be to involve suppliers of plug-ins more into the community by contacting them personally and explaining all the benefits. By having more suppliers present on the community, it is becoming “a place where the latest ‘unofficial’ news is exchanged or leaked and where visitors can expect to have non-hierarchical contact with an organization’s employee.”⁴¹ An advantage for customers is that if the supplier is present on the community, it is easier for customers to contact them in an informal way. One of the advantages for the supplier is that they can ask for feedback on their products and services, also in an informal way. By providing visitors with the opportunity to interact with the company, organizations (like suppliers of plug-ins) can foster deeper buyer relationships by customizing products and services to meet customers’ demands and interests.⁴²

Rhinoceros is a very popular product with a lot of different plug-ins, and all these plug-ins have his or her own customer database. Based on one of the findings, it resulted in a substantial increase of members when a supplier sent a message to their customer database to invite them to become member of the community.

The last recommendation is to have regular contests at the RhinoJungle community as an extra stimulus to help growing the community, but it has to be done with care, concerning the unknown reasons why people sign up. Regular contests will increase the popularity of the community and the activity of the members. For Novedge, is it not a lot of effort to have a contest, suppliers like to be involved by offering a license or another product (it is also great marketing for their company) and it is a fun and creative way to attract the attention of the community and to involve the members in the community. A contest on a regular basis, for example every other month would be a good idea. This will result in about 5 contests a year, with no contest during the summer months.

⁴¹ Hinchcliffe (2008)

⁴² Lesser et. al. (2000)

References

Anderson, C. (2006) *The Long Tail: Why the future of business is selling less of more*, New York, New York: Hyperion

Anderson School District Five: Academy of Engineering and Biomedical Science. *Computer Integrated Manufacturing: Glossary* [online] Available at: <http://aoe.anderson5.net/ResourceMaterials/CIM/CIMGlossary.htm> [accessed May 9, 2009]

Car Body Design (2008) *Car Body Design: Car Design for Automotive Designers, Engineers and Enthusiasts* [online] Available at: <http://www.carbodydesign.com/> [accessed May 13, 2009]

Chaffey, D., Ellis-Chadwick, F., Mayer, R., and Johnston, K. (2009) *Internet Marketing: Strategy, implementation and practice*, 4th ed., Harlow, England: Pearson Education Limited

Core77 (2009) *The Core77 Army* [online] Available at: <http://www.core77.com/about/> [accessed May 9, 2009]

Dwyer, P. (2007) *Building Trust with Corporate Blogs* [online] Available at: <http://icwsm.org/papers/2--Dwyer.pdf> [accessed May 13, 2009]

Facebook (2009a) *Industrial Design and 3D* [online] Available at: <http://www.facebook.com/pages/Bogota-Colombia/industrial-design-and-3D/18911546135> [accessed May 6, 2009]

Facebook (2009b) *Novedge* [online] Available at: <http://www.facebook.com/pages/Novedge/17567650675> [accessed February 17, 2009]

Facebook (2009c) *Press Room: Facebook Factsheet* [online] Available at:
<http://www.facebook.com/press/info.php?factsheet> [accessed May 9, 2009]

Facebook (2009d) *Press room: Statistics* [online] Available at:
<http://www.facebook.com/press/info.php?statistics> [accessed February 17, 2009]

Facebook (2009e) *Rhino* [online] Available at:
<http://www.facebook.com/pages/Rhino/21567317597> [accessed May 6, 2009]

Facebook (2009f) *RhinoJungle* [online] Available at: <http://www.facebook.com/pages/Rhino-Jungle/53621217249> [accessed May 6, 2009]

Google (2009a) *Google Adwords* [online] Available at: <http://adwords.google.com/> [accessed May 6, 2009]

Google (2009b) *Google Analytics* [online] Available at: <http://www.google.com/analytics/> [accessed February 19, 2009]

Google (2009c) *Google Docs* [online] Available at: <http://docs.google.com/> [accessed May 15, 2009]

Google (2009d) *Novedge – Google Search* [online] Available at:
<http://www.google.com/products/reviews?fq=novedge&cid=e88e69293ff50885&sort=1&cat=merchants> [accessed May 6, 2009]

Hinchcliffe, D. (2008) *Twelve best practices for online customer communities* [online] Available at: <http://blogs.zdnet.com/Hinchcliffe/?p=190> [accessed May 14, 2009]

Lazworld.com Inc. (2009) *Internet Marketing Glossary* [online] Available at:
<http://www.lazworld.com/glossary.html#s> [accessed May 9, 2009]

Lesser, E.L, Fontaine, M.A. & Slusher, J.A. (2000) *Knowledge and Communities*, Boston, Massachusetts: Butterworth-Heinemann

Marketing Teacher (2009) *Marketing mix: What is the marketing mix?* [online] Available at:
http://www.marketingteacher.com/Lessons/lesson_marketing_mix.htm [accessed May 9, 2009]

McNeel, R. & Associates (2006). *Robert McNeel & Associates - North America* [online]
Available at: <http://www.en.na.mcneel.com/> [accessed February 19, 2009]

Mislove, A., Marcon, M., Gummadi, K. P., Druschel, P., and Bhattacharjee, B. (2007) *Measurement and analysis of online social networks* in Proceedings of the 7th ACM SIGCOMM Conference on Internet Measurement (San Diego, California, USA, October 24 - 26, 2007). IMC '07. ACM, New York, NY, 29-42 [online] Available at:
<http://portal.acm.org/www.dbproxy.hu.nl/citation.cfm?id=1298306.1298311&coll=ACM&dl=ACM&CFID=16488462&CFTOKEN=34443097> [accessed December 28, 2008]

Nielsen Wire (2009) *Twitter's Tweet Smell of Success* [online] Available at:
http://blog.nielsen.com/nielsenwire/online_mobile/twitters-tweet-smell-of-success/ [accessed May 6, 2009]

Novedge (2009a) *Novedge in the World of Social Media* [online] Available at:
<http://blog.novedge.com/2009/03/novedge-in-the-world-of-social-media.html> [accessed May 6, 2009]

Novedge (2009b) *Novedge Kicks-Off Social Media Campaign with a Trip to Rhino's Jungle* [online] Available at: http://www.novedge.com/PressReleases/PR_Mar_18_2009.asp [accessed

May 6, 2009]

Novedge (2009c) *Novedge Pulse™ Latest News* [online] Available at:
<http://www.novedge.com/pulse.asp> [accessed May 9, 2009]

O'Reilly, T. (2005) *What is Web 2.0: Design patterns and business models for the next generation of software* [online] Available at:
<http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-isweb-20.html> [accessed February 23, 2009]

RhinoJungle (2009) *RhinoJungle: The jungle where all the Rhino animals live* [online] Available at: <http://rhinojungle.ning.com/> [accessed February 19, 2009]

Scoble, R. & Israel, S. (2006) *Naked Conversations: How Blogs are Changing the Way Businesses Talk with Customers*, Hoboken, New Jersey: John Wiley & Sons, Inc.

Singley, M. (2009) *6 Best Corporate Blogging Practices* [online] Available at:
<http://mattsingley.com/blog/index.php/2009/03/6best-corporate-blogging-practices/> [accessed May 6, 2009]

Sitepoint (2008) *Corporate Blogging: You're Doing It Wrong* [online] Available at:
<http://www.sitepoint.com/blogs/2008/12/12/corporate-blogging-youre-doing-it-wrong/> [accessed April 30, 2009]

Spaceclaiming (2009) *Spaceclaiming: The online community about exciting new CAD technologies* [online] Available at: <http://www.spaceclaiming.com/> [accessed February 19, 2009]

TenLinks.com (2009) *About TenLinks.com* [online] Available at:
<http://tenlinks.com/about/index.htm> [accessed May 9, 2009]

Twitter (2009a) *Novedge Pulse (_Pulse_) on Twitter* [online] Available at:
http://twitter.com/_Pulse_ [accessed February 19, 2009]

Twitter (2009b) *Twitter: Home* [online] Available at: <http://twitter.com/> [accessed April 30, 2009]

WordNet Search 3.0. *CAD* [online] Available at:
<http://wordnetweb.princeton.edu/perl/webwn?s=cad> [accessed May 9, 2009]

Appendix 1: RhinoJungle questionnaire

Dear RhinoJungle Member,

In order to improve the RhinoJungle community and our service to our members, we would like to ask you to answer a few short questions. Novedge and ASGvis will give away one V-Ray for Rhino license to a randomly selected participant of the poll. If you want to qualify for this, please enter your RhinoJungle user name below.

Deadline for submission: May 31st, 2009. Limit one response per member.

Thank you very much for your cooperation!

The Novedge Team

(Guidelines for the poll can be found at <http://rhinojungle.ning.com/page/about-rhinojungle>.)

RhinoJungle User Name

Gender *

- ☐ Female
☐ Male

Age *

- ☐ 18 or younger
☐ 19-25
☐ 26-35
☐ 36-45
☐ 46-55
☐ 56-65
☐ 66 or older

What is your profession? *

- ☐ Architect
☐ Engineer
☐ Designer
☐ Professor / teacher
☐ Software developer
☐ Student
☐ Other:

Which Rhino plugins are you using?

Leave blank if you do not use any plugins

What other design software product(s) are you using? *

Leave blank if you do not use any other design software products

- ☐ Rhino
- ☐ AutoCAD
- ☐ Pro/Engineer
- ☐ CATIA
- ☐ SpaceClaim
- ☐ IntelliCAD
- ☐ SolidWorks
- ☐ Solid Edge
- ☐ Other:

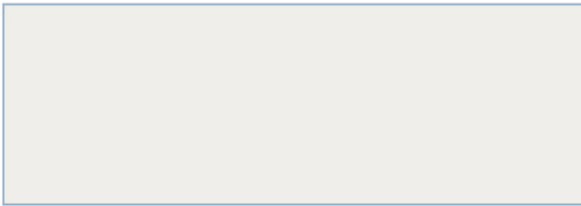
How did you find out about RhinoJungle? *

- ☐ Blog post
- ☐ Facebook
- ☐ Novedge website
- ☐ Personal invitation from Novedge
- ☐ Press release
- ☐ Through a friend
- ☐ Twitter
- ☐ Searching the Internet
- ☐ Other:

What do you like best about RhinoJungle? *

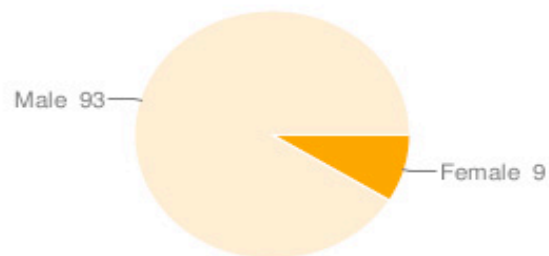
- ☐ Blogs
- ☐ Events
- ☐ Forum
- ☐ Groups
- ☐ Key resources
- ☐ News digest
- ☐ Pulse
- ☐ Videos
- ☐ Other:

What could be improved at RhinoJungle? *



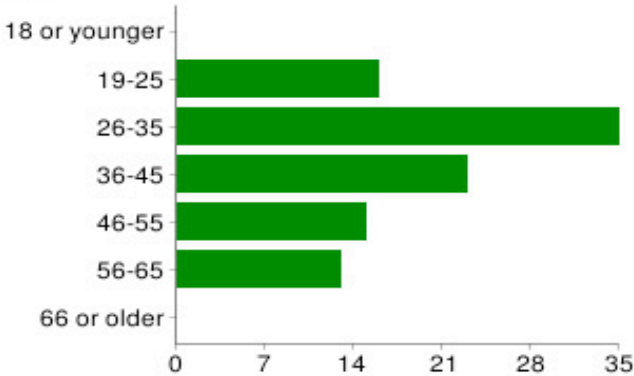
Appendix 2: Results RhinoJungle questionnaire

Gender



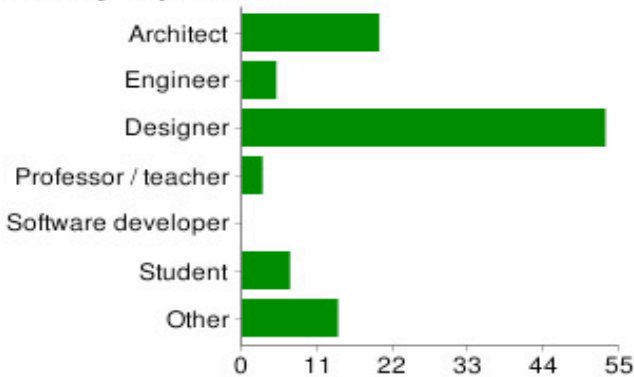
Female	9	9%
Male	93	91%

Age



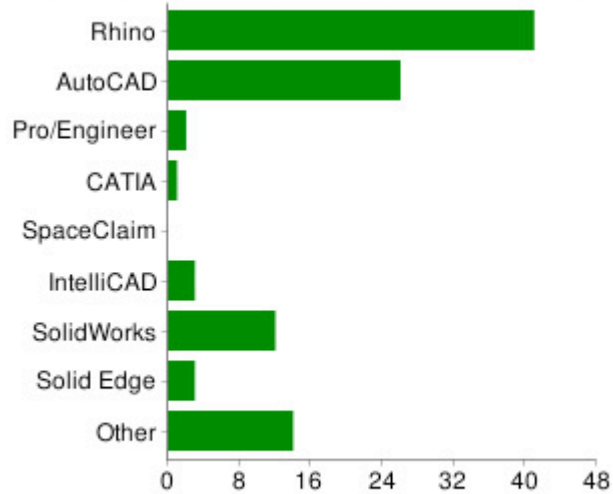
18 or younger	0	0%
19-25	16	16%
26-35	35	34%
36-45	23	23%
46-55	15	15%
56-65	13	13%
66 or older	0	0%

What is your profession?



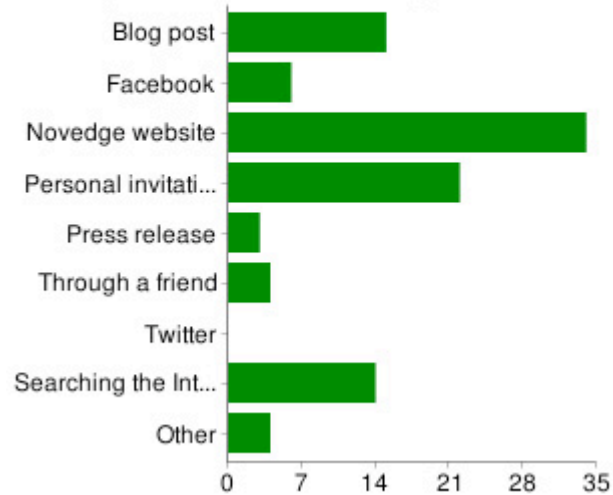
Architect	20	20%
Engineer	5	5%
Designer	53	52%
Professor / teacher	3	3%
Software developer	0	0%
Student	7	7%
Other	14	14%

What other design software product(s) are you using?



Rhino	41	40%
AutoCAD	26	25%
Pro/Engineer	2	2%
CATIA	1	1%
SpaceClaim	0	0%
IntelliCAD	3	3%
SolidWorks	12	12%
Solid Edge	3	3%
Other	14	14%

How did you find out about RhinoJungle?



Blog post	15	15%
Facebook	6	6%
Novedge website	34	33%
Personal invitation from Novedge	22	22%
Press release	3	3%
Through a friend	4	4%
Twitter	0	0%
Searching the Internet	14	14%
Other	4	4%

Appendix 3: Performance Facebook, Twitter and RhinoJungle

All data is collected from March 1 until June 14, 2009.

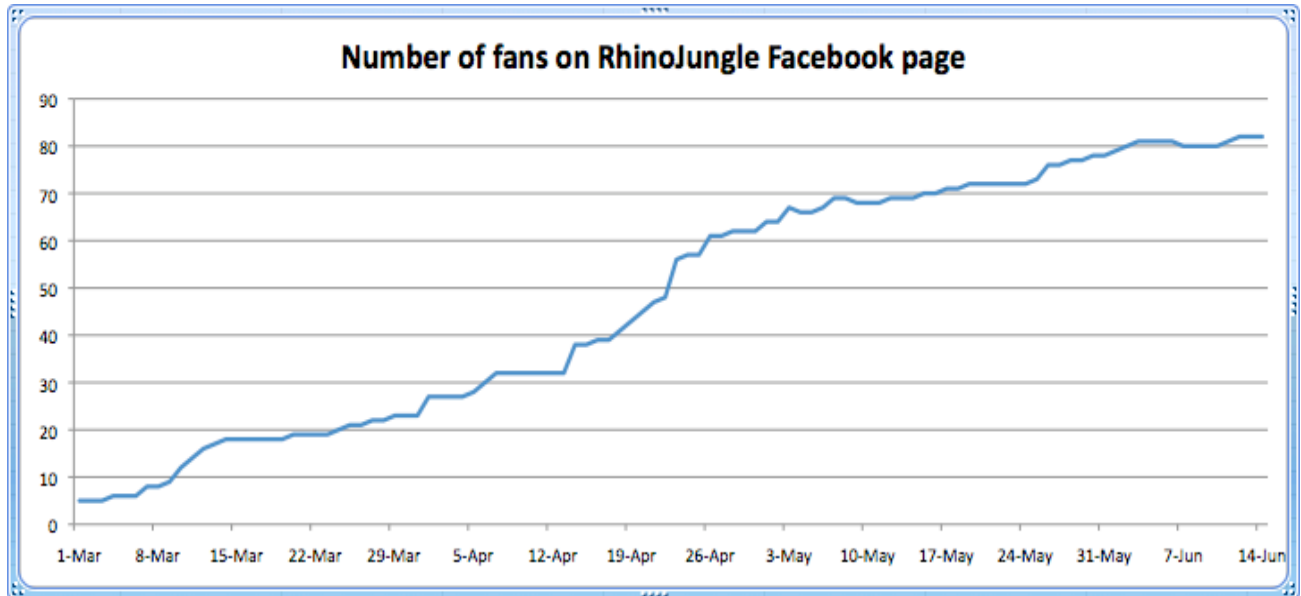


Figure 4: Number of fans on the RhinoJungle Facebook page (source: Facebook)

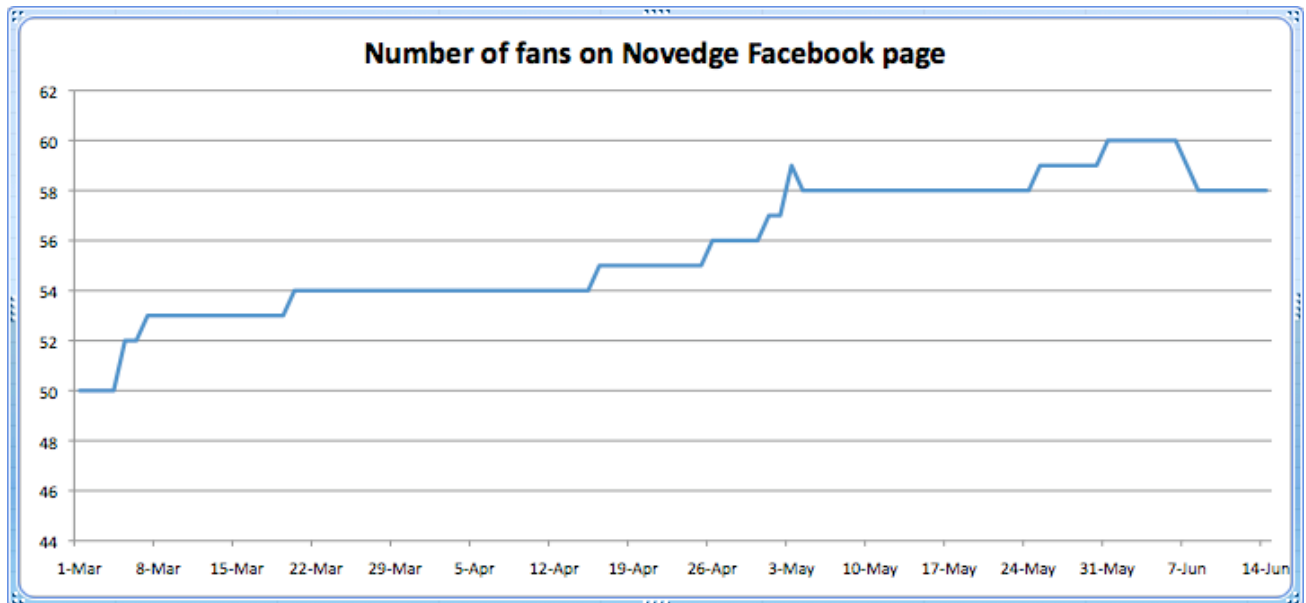


Figure 5: Numbers of fans on the Novedge Facebook page (source: Facebook)

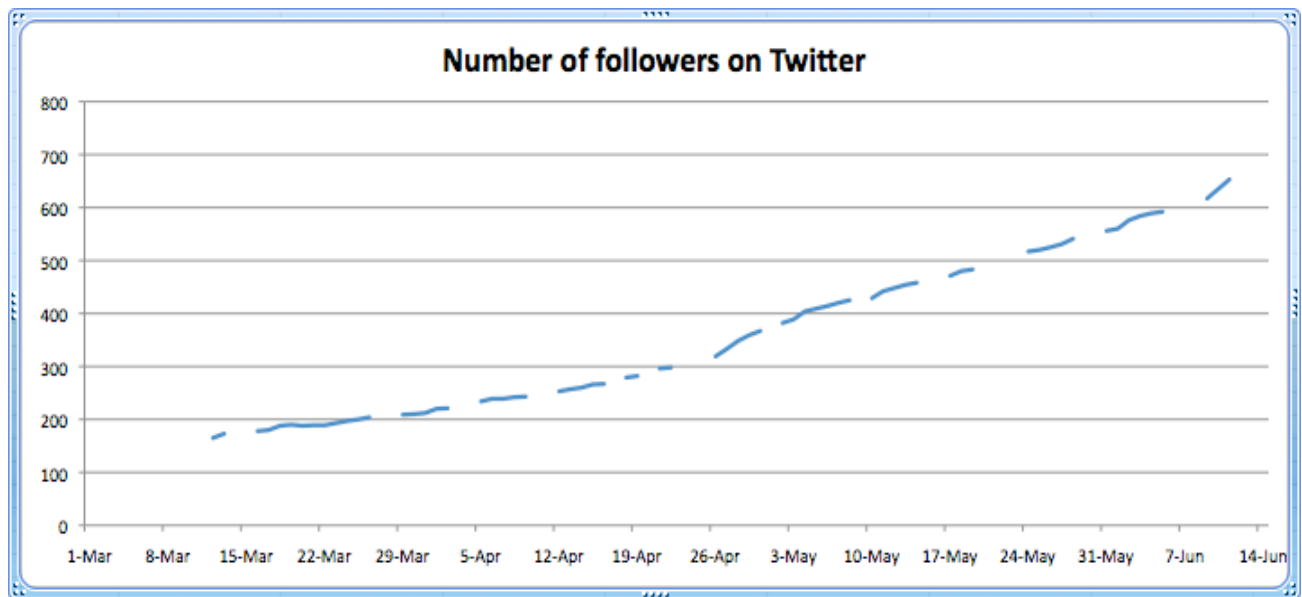


Figure 6: Number of followers on the Pulse Twitter account (source: Twitter)

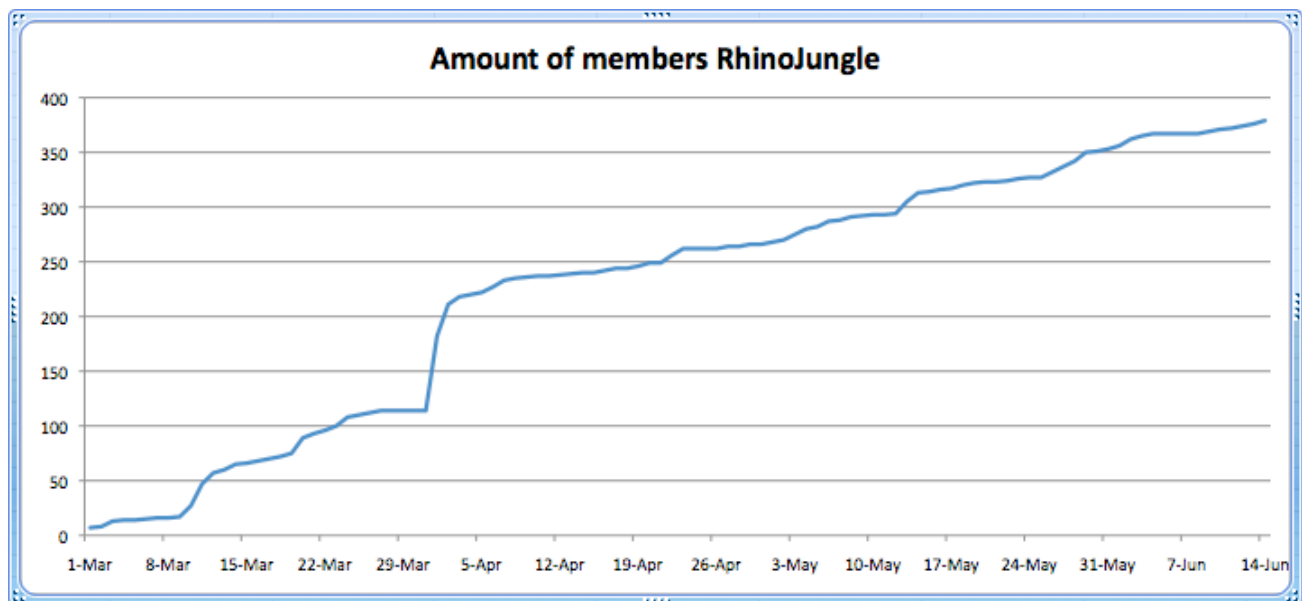


Figure 7: Amount of members on RhinoJungle (source: RhinoJungle)