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COMPARATIVE ANALYSIS OF INFOTAINMENT SYSTEMS

Abstract. The issues of relevance of work in information and entertainment systems, on the pages of which a lot of diverse and fascinating content is concentrated, are considered. The existing information and entertainment systems that are in demand in the market are analyzed and all the key characteristics of the resources, their features and disadvantages are identified. The possibilities of registering and working with content in the systems Reddit, Pikabu, JoyReactor, 9GAG, Fishki.net are investigated. Special attention is paid to determining the rating of publications and comments. The analysis of functional features of information and entertainment systems is carried out. The type of content for infotainment system development – the UGC (user-generated content) (videos, photos, GIFs, memes, blog posts, and audio) created and distributed by users on the Internet is defined. The viewing modes of existing systems are analyzed. The forms of activity necessary for the development of a new infotainment system are formulated.

Keywords: UGC, rating, infotainment portal, user profile, content.

Introduction

A human is designed in such a way that he urgently needs rest and relaxation. It is not always possible to allocate time and money to organize a high-quality leisure time. Infotainment systems that are in high demand among users come to the rescue. Their pages contain a lot of diverse and exciting content [1].

People on such sites view event feeds, respond to attractive messages, read, recognize, are surprised and laugh. The process of staying on such resources is addictive. Watching interesting videos, pictures, reading original texts on the most unexpected topics – all this happens for the sake of spending your free time and from banal boredom. It is natural for people to seek light entertainment for themselves, if possible.

Infotainment sites are designed to enrich people's minds and fill them with new facts. At the same time, they are able to raise the mood, captivate and dispel melancholy. With their help, it is easy to overcome the tedious wait, spend time with pleasure and some benefit [1].

Entertainment portals can be supplemented with news feeds, catalogs, etc. That is, everything that can be of interest to a modern person with healthy ambitions is concentrated in one place. The content of such sites is aimed at engaging the reader. They describe only the brightest events of show business, the world of fashion, art and offer to study the latest achievements. Within the framework of entertainment sites, you can always read a horoscope, find a new dish or leisure time that can arouse interest.

The pages of such portals contain everything that can charge a person with positive emotions and change their mood for the better.

There are no problems with Internet Access today, so nothing prevents a person from plunging into the world of interesting, informative and fun news. Infotainment portals can safely be called effective "pills" for boredom [1]. Usually, such sites are filled with information using UGC (user-generated content) – this is any type of content (videos, photos, GIFs, memes, blog posts, and audio) created and distributed by users on the Internet [2-4].

The main material

The article analyzes infotainment systems that are in demand in the market, identifies all the key characteristics of resources, their features and disadvantages.

Reddit is one of the most popular communication platforms in the world, which is widely used in America, and is not so popular in Ukraine. The portal is divided into «subreddits» (thematic sections), where users start topics (threads) and discuss news, events and share their own experience there.

People can vote for or against comments by increasing or decreasing their rating – the rating of the comments themselves and their authors depends on this [6].

Reddit is both a news aggregator, an entertainment site, and also a social network or discussion forum divided into thematic sections – subreddits. Reddit users independently add content to the platform that other Redditors can comment on and support or replace.

Each user of the site can create a subreddit on any topic, as long as they follow the rules of Reddit. Subreddits are managed by volunteer moderators who can change the community interface, dictate what content can be posted, and even delete posts and ban users. Reddit is generally managed by administrators-employees of the company who have broad rights on the site, including the ability to remove moderators, take away their rights, and even delete the community on the service [7].

Each individual subreddit has its own rules, and they are most often unique and specific to that subreddit.

For example, you can send your infographic to /r/dataisbeautiful, one of the most popular subreddits with over 13 million subscribers. However, the rules clearly state: «no to infographics or other non-automated charts» [8].

If there is a need to participate in this or another community, then you need to study the rules of the subreddit. Failure to follow the rules will result in a quick ban, and there are no exceptions.

Reddit was originally written in the Common Lisp programming language, but was rewritten in Python

back in 2005 for greater flexibility and access to numerous libraries [9].

About the design of the Reddit site, we can say that it is light and clear, does not have text overload. The navigation bar is located in the left corner, which includes feeds, interesting subreddits and profiles of other users, and in the right corner – current tops of subreddits by various categories (Fig. 1). You can view Reddit in three modes: «classic», similar to the old site feed, «card», which resembles the design of Facebook, and «compact», where the blocks are located more tightly to each other.

Reddit uses a logarithmic combination of positive and negative votes to determine the popularity of con-

tent both in subreddits and on the site's home page [7]. Here's a simple explanation: the first 10 votes have the same impact as the next 100 votes, and these 100 votes have the same impact as the next 1000 votes, and so on.

All posts are divided into thematic categories. Among them are "Science", "Games", "Music", "Videos", "News", "Food", "Books" and many others. In total, the site has more than 11,000 subreddits that unite fans of various topics [5].

When you first meet Reddit, it can scare you away with the amount of "information overload" (Fig. 2), as well as the almost complete absence of content in the native language.

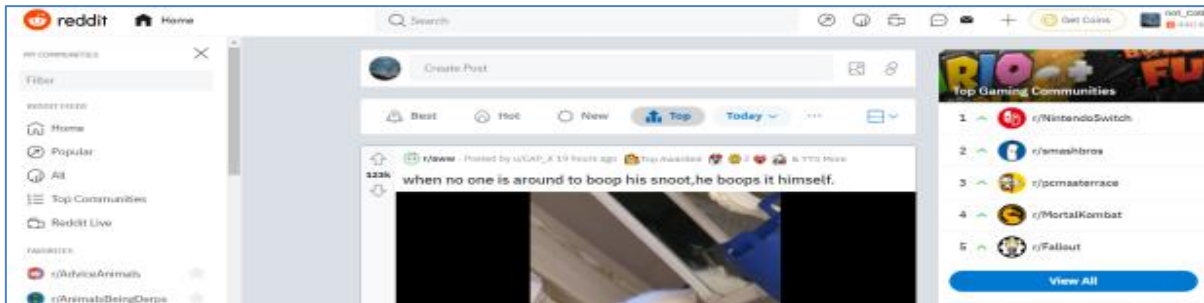


Fig. 1. Infotainment system «Reddit»

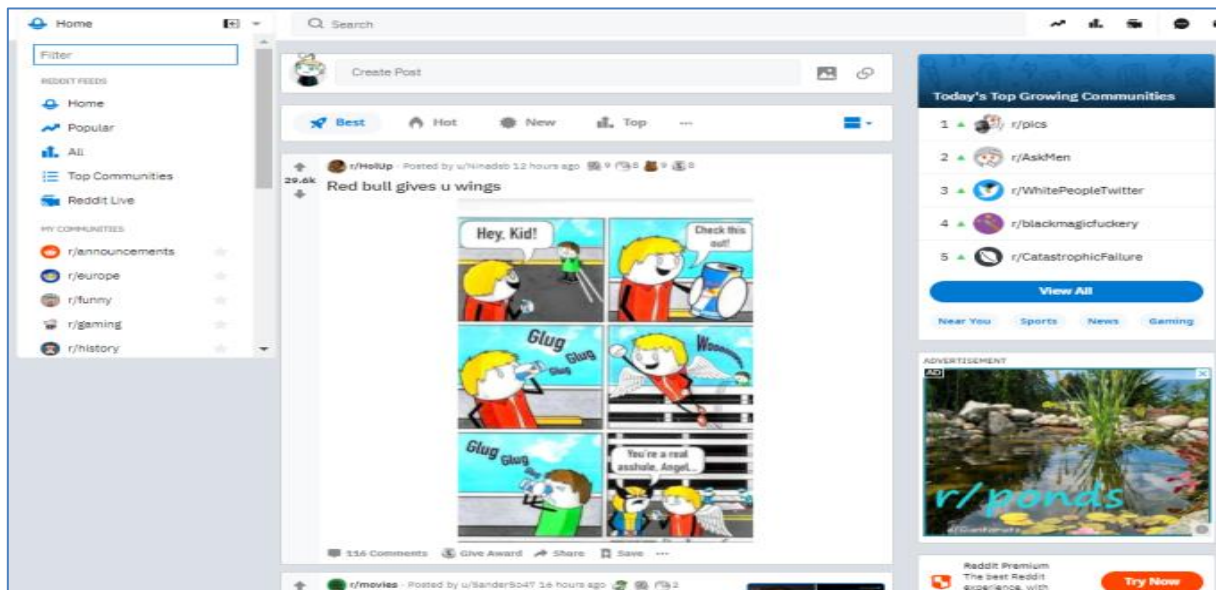


Fig. 2. Reddit homepage

Features of this resource:

- easy division of content into thematic sections-subreddits (subreddits);
- ability to quickly track any news;
- easy registration – by email (you need to enter a username, password, and confirm your email), or by using a Google or Apple account;
- the main page of the site displays only those posts on topics that you subscribe to;
- there are convenient filters that allow you to view news by popularity, release date, and so on;
- the ability to communicate with other people on topics of interest by commenting on posts, or in a personal chat;

- a wide range of settings (you can set up traffic savings);
- a simple rating system, the so-called «Karma»;
- there is a personal paid system of rewards that can be given to the author of an interesting publication or an accurate comment, and thus raise karma for yourself and the author;
- a simple process for creating your own subreddit, but there are two requirements – the account must be at least 30 days old and have 500 + karma;
- a convenient and wide space for advertisers and brands;
- the well-known Ask Me Anything section where users questions are answered by world famous people;

– two-factor authentication to protect user accounts.

Disadvantages:

- too many rules (even each subreddit has its own rules that are placed in the side menu, for violation of which a ban is issued);
- to disable ads, you must purchase a paid Reddit Premium subscription.

In March 2019, the audience of «Pikabu», accord-

ing to SimilarWeb, was 32.5 million unique visitors, and in 2018, more than 426 thousand new users registered on the site. The site ranks 502nd in the world in terms of popularity [10]. When you get to the main page of Pikabu, you can say that its appearance is quite pleasant (Fig. 3). All elements of the site meet modern design standards and are quite intuitive. After the redesign, Pikabu lost its resemblance to Reddit. Pikabu switched to full display of publications [11].

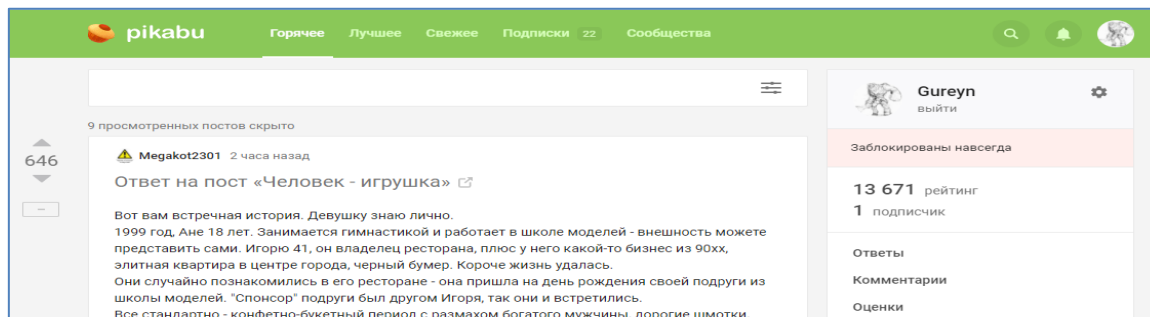


Fig. 3. Pikabu Interface

On Pikabu, the rating is quite significant compared to Reddit, as various restrictions for the user depend on it. It is formed depending on all ratings of comments and added posts (the rating of a comment changes the rating of user to +/- 0.5, and the rating of the post to +/- 1). Let's take a closer look:

- -200 account automatically blocked;
- -25 You can't add comments;
- 0 rating after registration;
- +10 you can attach an image to a comment;
- +150 you can add a video;
- +1000 you can add a link and edit a post (with a rating below 1000, you can't edit a post after it is published, or attach a link to it);
- +10 000 you can combine tags. Accordingly, an "elite" that has scored 10 000 or more ratings has the ability to combine tags (adjust them for convenience);
- 20 000 people with the highest rating can view the resource completely without ads.

The main problem of Pikabu for several years now is the misunderstanding of the resource administration with users. The unwillingness of site owners to listen to those community members who gave their time and effort to the resource, forming a community that attracted new users, led to the fact that boycotts were announced to the resource and "riots" were organized on the site.

JoyReactor is another popular infotainment site in Runet, with a rating system, after Pikabu and is its main competitor.

When you get to the site, the user is met with a rather peculiar, bright design (Fig. 4), which is generally harmonious, distinguishes the site favorably from others and has everything you need for comfortable use.

Publications on the resource are marked only with tags. The tag system on JoyReactor is so large-scale and developed that it builds both site sections and communities based on interests, without having to implement them separately. Which section or community the publication will end up in is decided by the user when they put tags when publishing their post. There are no strict

restrictions on specifying tags, each user can come up with any tag that matches the content of the publication. Matching tags and content is strictly monitored and can be punished if, for example, you publish content in the wrong section or community.

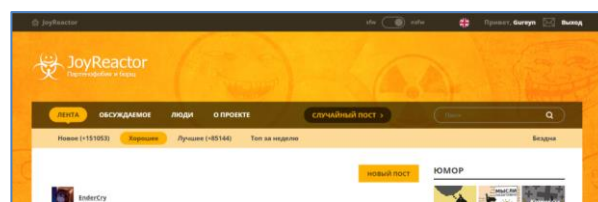


Fig. 4. JoyReactor design

Resource sections can even be considered as a separate resource, as they have their own domain, their own sections, and may have their own design.

The rating of posts and comments is credited to the user's account. It is different for the main page and for sections with communities. The rating for comments is 10 times less than for publications. The rating obtained in sections and communities gives only a variety of awards "medals" in the user profile. Advantages are given by the rating that is obtained for publications only with tags of the main page and its subsections, that is, for funny pictures and other jokes with comics.

If you get a sufficient number of ratings on the main page, the user gets a star in their profile, and privileges on the resource depend on the number of stars.

Among the shortcomings of JoyReactor, you can distinguish a large bunch of small bugs, and all sorts of flaws that the administration as a whole does not pay attention to. With long-term use of the site, its obsolescence in technical implementation becomes noticeable in the details.

Also, on the site, a request to users to support the resource financially borders on outright begging. So if you go to a site with the adblocker enabled, the site will not just ask you to turn it off, but will tell you that it will be engaged in mining until you disable the blocker, and

will also show obscene ads. Although the resource deserves to be monetized through advertising, the methods for implementing it are somewhat radical. In the middle of the site is a small banner that asks you to donate to the servers and shows how much has already been donated in the current month. Without a new audience, the community does not develop and stagnates, and in the end this leads to a decrease in traffic, which is con-

firmed by data from Amazon's Alexa service. On the graph (Fig. 5) you can see how the situation worsened after the introduction of the activation system in 2017.

9GAG is one of the most popular sources of short-form entertainment on the Internet, whose service team is based in Hong Kong, with a variety of memes, GIFs, and other viral content posted daily, using user-generated content that is shared by the entire community.



Fig. 5. Alexa traffic statistics for JoyReactor

Over the past five years, 9GAG's popularity has grown rapidly: between its website and mobile app, 9GAG now attracts more than 150 million unique visitors per month [12]. The site receives most of its traffic from the United States and Germany. According to the analytical service SimilarWeb, these two countries account for more than 17% of site traffic. The "top five" also includes France, Great Britain and Brazil [13].

The design of this resource is a bit like Reddit, made in black and white style.

Among the advantages are:

- simple and appropriate design for this category of sites, with no text overload;
- the ability to sort posts by popularity, rating, novelty, or category;
- no complicated registration with a Facebook and Google account, or a mailbox with its subsequent confirmation;
- there are basic necessary account settings, with the ability to download your avatar or choose from randomly suggested ones;
- the ability to communicate by commenting on posts, or in an existing collective chat on the topics present;
- convenient creation of posts where photos or videos are uploaded via a link, or directly from the device, and it is also possible to make memes directly on the site using the presented tools;
- loyal rating system for posts and comments (one user can add or subtract one rating point);
- the ability to quickly switch to the next and previous posts using the arrow keys on the keyboard.

Disadvantages:

- the built-in video player is not convenient (it does not have the ability to rewind or pause the video and adjust the volume level);

- you can't create both a personal and collective chat.

Fishki.net one of the most popular entertainment portals in the media market, which is filled with news by users themselves. This resource is read by Ukrainians, Latvians, Kazakhs and Israelis [14].

Today, according to Similarweb, the site Fishki.net gets 45 million visits per month. On some days, two million unique visitors come to the chips. Up to a thousand posts are moderated per day.

Fishki.net are interesting not only for lovers of pure humor, but also for connoisseurs of more serious materials, including historical, automotive, discussion of relations between the people, cooking recipes, problems of Medicine and education, everything that craftsmen do with their own hands, as well as issues of culture and art [15].

This site is available in two languages – Russian and English, and the design in English is slightly simplified, namely, it does not have Popular Posts, Top Companies for different periods (for a day, Sunday, month, and for the entire period) and popular tags in the right corner of the feed. The design itself, although simple, is not clear enough at first glance, for example, on the main page, where current news is located, there is a feeling of text overload, which can't be said about other pages, where all posts go one after another to the bottom.

On the site Fishki.net the rating system (karma) provides some restrictions, you can get it if other registered users rate the posts you created (+/- 1 karma) or comments (+/- 0.5 karma).

Advantages:

- easy registration, where you need to come up with a username, nickname, password, enter an email address and confirm her;
- convenient division of content into appropriate sections and the ability to sort it;

- available necessary settings for profile, privacy, news feed, and comments;
- the profile has a function for saving the history of viewing posts, namely all posts that were rated, commented on, or saved;
- the ability to quickly search for content by tags;
- easily to create your own post (there is a preview before publishing);
- the ability to create or subscribe to partnerships;
- a registered user will be able to rate the publication only after viewing it, otherwise an error message will appear;
- there are interesting entertainment tests on various topics (created only by administrators).

Disadvantages:

- at first glance, an inconvenient website design for beginners;
- there are a lot of distracting ads.

Conclusions

Based on a comparative analysis of existing analogs of infotainment systems (Reddit, 9GAG, Fishki.net etc.) their advantages and disadvantages were identified.

Based on the above, it is possible to determine the need to develop a new infotainment system that will take into account the shortcomings of existing systems. Such a system will use the following forms of activity:

- informing;
- providing an electronic library of information resources;
- providing links to carefully selected sites;
- personal account;
- portfolio (both private and whole team);
- discussions, forums, communication in project groups in social networks;
- master classes;
- contests and festivals;
- opportunity to get bonuses and certificates.

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Порівняльний аналіз інформаційно-розважальних систем

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Анотація. Розглянуто питання актуальності роботи в інформаційно-розважальних системах, на сторінках яких зосереджено безліч різноманітного та захоплюючого контенту. Проаналізовані існуючі інформаційно-розважальні системи, які користуються попитом на ринку та визначено всі ключові характеристики ресурсів, їх особливості та недоліки. Досліджено можливості реєстрації та роботи з контентом в системах Reddit, Pikabu, JoyReactor, 9GAG, Fishki.net. Особлива увага приділена визначенню рейтингу публікацій і коментарів. Проведено аналіз функціональних особливостей інформаційно-розважальних систем. Визначено тип контенту для розробки інформаційно-розважальної системи UGC (user-generated content) (відео, фото, GIF-файли, мему, дописи в блогах та аудіо), створений та розповсюджений користувачами в Інтернеті. Проаналізовані режими перегляду існуючих систем. Сформульовано форми діяльності, необхідні при розробці нової інформаційно-розважальної системи.

Ключові слова: UGC, рейтинг, розважальний портал, профіль користувача, контент.