Ministry of Education and Science of Ukraine

Odessa National Academy of Food Technologies

International Competition of Student Scientific Works

BLACK SEA SCIENCE 2020

Information Technology, Automation and Robotics

Proceedings

Odessa, ONAFT 2020

UDC 004.01/08

Editorial board:

Black Sea Science 2020: Proceedings of the International Competition of Student Scientific Works. Information Technology, Automation and Robotics. / Odessa National Academy of Food Technologies; B.Yegorov, M. Mardar, S.Kotlyk (editors-in-chief.) [*et al.*]. – Odessa: ONAFT, 2020. – 365 p.

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ANALYSIS OF RELEVANCE OF DEVELOPMENT OF INFORMATION RESOURCE OF WORKFLOW PLANNING FOR BUSINESS ADMINISTRATORS

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Abstract.*This paper examines the relevance of creating a new workflow planning product for business administrators.*

In time when time management is an important part of our lives, there are many programs that help to organize the time, but all programs have their pros and cons. We will carry out the analysis of time planning on several currently relevant programs for planning the time, will consider the advantages and disadvantages, and on the basis of

these data we will consider whether the creation of a new program is relevant and what functionality is needed in it.

Keywords: *time management, business organization*

Introduction

"We cannot go back. That's why it's hard to choose…" - (Mr. Nobody)

The modern pace of life cannot be called deliberate; to say - «I have time to make all the plans of the day» almost impossible, after all, it is difficult and it takes pains to choose which work to do right now. This has a negative impact on productivity both in personal life and at work.

Principles and tasks of time management

Time management — is a time management technique that includes rules and principles that help a person to organize their time properly and maximize efficiency in any business.[1]

If it is possible to implement a time management program in your personal life, if you want it yourself, then it is very difficult for a staff of employees. People treat their time differently: someone already adheres to their own plan for the day, and someone lives aimlessly and does not want to have time to make his working norm, and this can delay the development of the whole company. However, the employee from the second group, unwilling to perform the work, according to introduced norms of work and / or work functions that he should perform, and the threat of dismissal still forces him to carry out his work almost in time.

Time management or time management processes are based on the following basic principles[2]:

— *correct goal setting* (the main thing is that it is clearly defined and achievable);

— *motivation* (the desire to save time must be conscious and connected to meeting any important needs);

— *performance* (time management is necessary to eliminate or at least reduce the time deficit by performing certain tasks in a shorter period).

Some people have a habit of managing their own time, others need help from outsiders: a friend, an expert, a leader, or in the modern world, it can be a program on your phone or computer.

No matter in what way, but in the case of competent distribution of their time resources, allocating important and minor tasks, the person begins to control his time completely, and problems with «rush job» disappear on their own.

Time management tasks allow the employee:

— to achieve the set goals, spending the minimum amount of time;

— achieve high results in anything (both in work and in personal life);

— rationally allocate your working time without overtime work and, accordingly, be able to rest fully, leaving time for leisure and socializing with loved ones;

— increase your financial position in case you do additional work;

— get rid of stress and fatigue from the constant workload;

— have a clear career plan for the future;

— to control your own life completely.

Now there are two main directions of time management: corporate and personal.

Corporate time management is relevant in large enterprises and is important, above all, for managers who plan the working schedule of a particular structural unit or enterprise as a whole. In this direction, the manager distributes the priority of current tasks and determines the timing of tasks, and then, depending on the results obtained, decides how many tasks to be put for a certain period of time before each of his subordinates and, of course, controls their performance.

Personal time management applied to an individual may affect both his or her professional activity and the sphere of private time, development, relationships. Personal time management is relevant when a person has «nothing to do» - neither at work nor in personal affairs. If the employee constantly feels tired, works hard every day, and the «light» is not visible, it means that it is simply necessary to pay attention to his interaction with time. You can help him or her to make good use of time, but this requires that the employee first expresses his / her desire (at least he / she agrees to help) and secondly that he / she clearly understands why he / she needs it (because in the lack of motivation, it is difficult to achieve a positive result).[7]

Time management is not about working more intensively - it is a way to work efficiently and reduce the depletion of physical and moral resources and increase productivity, not through increased efforts, but through their proper distribution.

Analysis of existing time management programs

Several popular programs in this field have been selected for analysis and I will say in advance - they are all very different, each with its own unique features and advantages and disadvantages:[3]

1. «Trello»

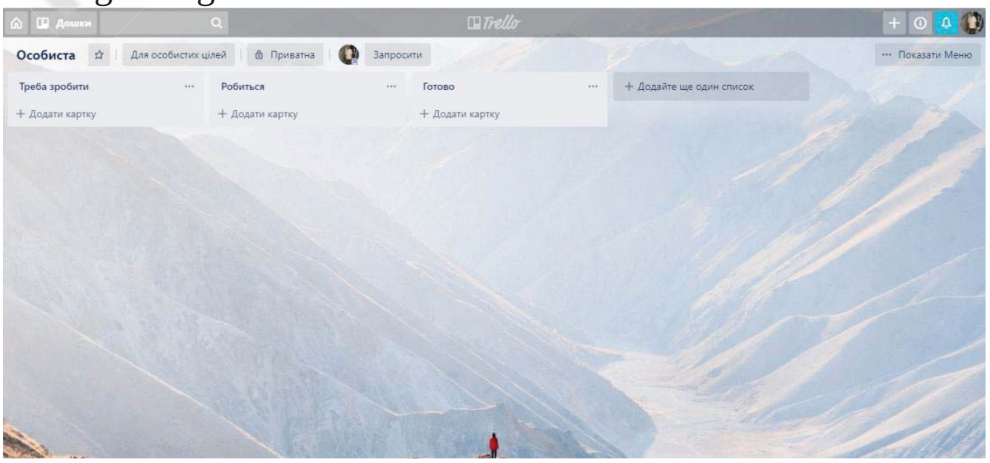
Trello is a service for organizing projects of any size. It splits tasks by special boards so you don't get confused in different projects and your staff can have access to individual tasks. It can be used for both personal and corporate use.

Pros:

1. User-friendly interface;
2. Mobile version;
3. Corporate and personal use.

Cons:

1. Very simple for some tasks;
2. It is difficult to navigate a large number of boards;
3. Not enough integration with other services.



Drawing 1 – Web resource board «Trello»

2. «Wunderlist»

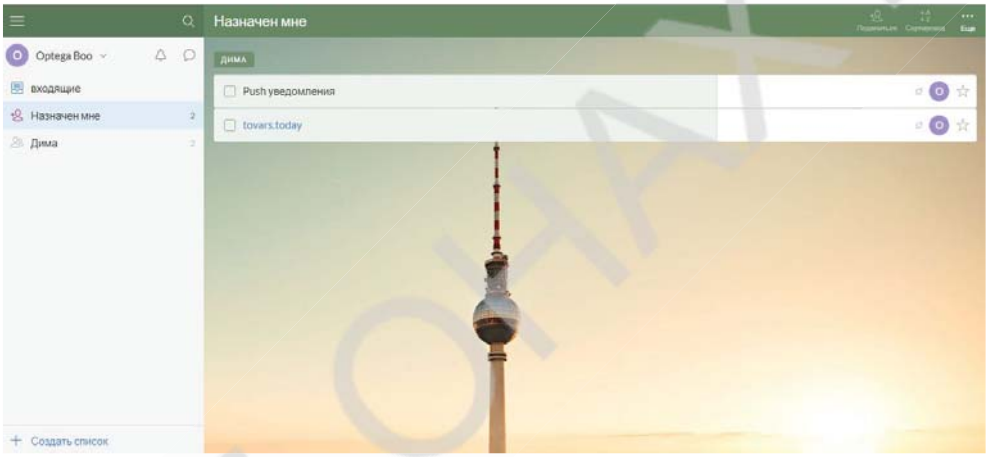
Wunderlist is based on a to-do list. This is a project within which separate tasks are created. Each of these sets the time of performing and the notification time. Set reminders for repeated events: once a day, a week, a month and a year. You can set a reminder in a few days.[4]

Pros:

1. Wunderlist is easy to learn;
2. Mobile version;
3. Delegations and collaboration on lists.

Cons:

1. You cannot postpone the task for an hour or for another day;
2. You cannot schedule multiple messages on a single task in one day;
3. The timing of the beginning and completion of the task cannot be noted;
4. Not enough integration with other services.



Drawing 2 – Web resource task page «Wunderlist»

3. «Google Calendar»

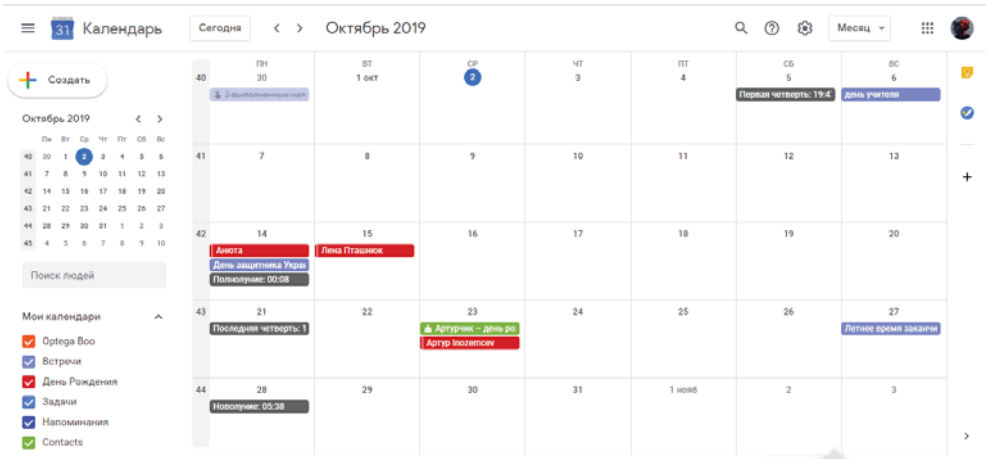
A classic and understandable service for scheduling meetings, events and chores. It allows not only to set the date and place of the meeting, but also invites participants by e-mail. Event reminders come, depending on the setting, by mail and / or as messages. [5]

Pros:

1. You can create multiple calendars and share them with other users;
2. The presence of simple «reminders» that will pop up on the screen at a given time;
3. Export and import calendars;
4. Mobile version;
5. Integration with Google services.

Cons:

1. You spend a lot of time setting one day planning;
2. More suits for reminding important tasks than scheduling;
3. Not enough integration with other services.



Drawing 3 – Home page of the web-resource «Google Calendar»

4. «Microsoft To Do»

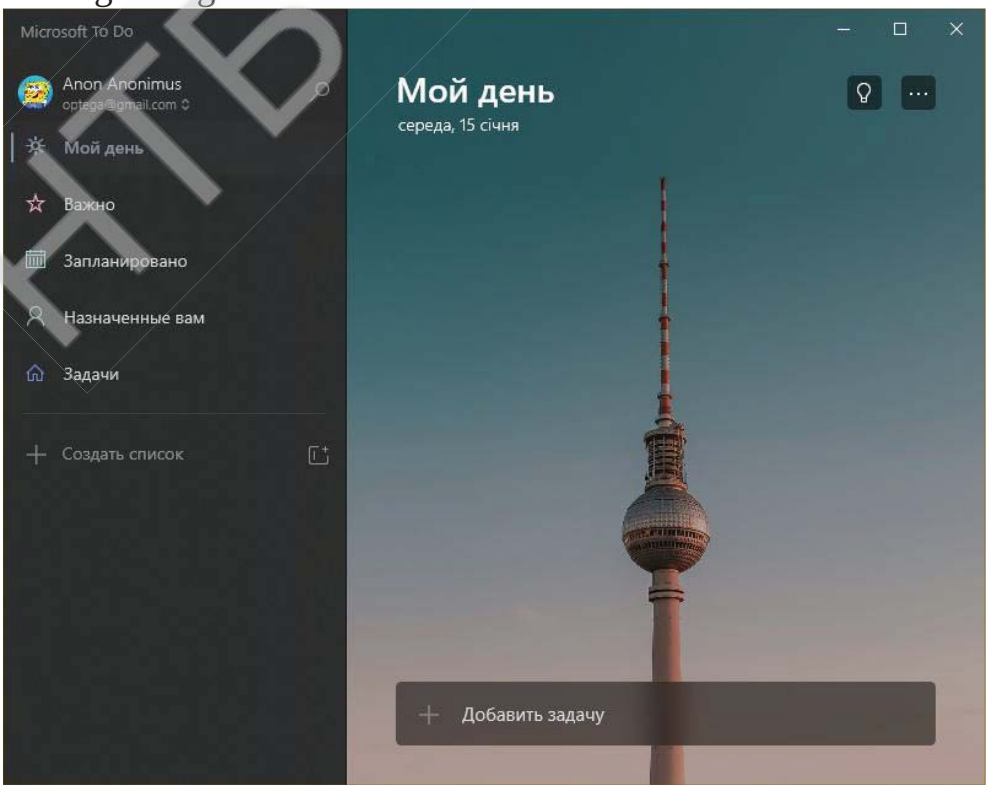
Enhanced version of Wunderlist - to-do list for the day. Unlike Wunderlist, it has an individual plan for the day, reminders of important plans for today, and lets you customize your plans visually - sets color, themes, etc. [6]

Pros:

1. Easy to master;
2. Mobile version;
3. Delegations and collaboration on lists;
4. Individual plan for the day.

Cons:

1. You cannot schedule multiple messages of a single task in one day;
2. The timing of the beginning and completion of the task cannot be noted;
3. Not enough integration with other services.



Drawing 2 – The computer version window «Microsoft To Do»

Object, subject matter and tasks of analysis

The object of study of this paper is the relevance of creating a new workflow planning product for business administrators and what functionality is important for such programs.

The subject of the study of this work are the programs that allow you to manage your time and why there is no perfect program for time management.

The task of the analysis:

1. To highlight the popular programs used to plan personal time;
2. To carry out analysis of these programs, highlight their advantages and disadvantages;
3. To find out the relevance of creating a new product in this area and what functionality should be in the program in order to be a rival in the market.

Analysis result

The analysis of the programs revealed the main features of the program and their presence in each of the products viewed.

Comparative characteristics of analogues:

Features	**Trello**	**Wunderlist**	**Google Calendar**	**Microsoft To Do**
User-friendly interface	+	+	+	+
Work offline	+	+	+	+
Deprecated interface	-	+	+	-
Group work	+	+	+	+
Connection of other services	-	-	+	-
Out-of-program messages	-	-	+	+

There are many other programs and web-resources for planning personal time or work of the staff. For some the features which this programs provide are sufficient, but as for me they are very limited as they are «local», that is, they work only in their midst and do not use the ability to connect modules, other services with API technologies, which can open broadly the functionality of any application and attract a larger audience of users.

My analysis is aimed primarily at the administrator of any enterprise, which, through my program, will mainly be able to create tasks for each individual employee and group staff with clear parameters (start date, term, deadline, notifications, etc.), control the progress task execution, ability to chat for each task separately. In their turn, the employees responsible for the task assigned to him by the manager can monitor changes in the task, change it himself (perform or add minor tasks), participate directly in the chat of a task.

Furthermore, each user of the program will have his own personal page where he will be able to create his personal plan and tasks for himself, which will not intersect with working tasks.

Program notifications can be configured as regular push messages from the browser, to the mailbox, or to various modern messengers.

Due to integration with a separate services, some already have an API that will allow you to connect to them and perform some actions without using the services directly; for example: send a reminder to any user with a regular message, the desired messenger, or by e-mail in due time, or after some action was taken; to publish any post on your social network page, also under certain conditions, time or action; automatic creation of tasks / reminders from mailboxes; etc. It is also possible to automate such processes as: food delivery order; order office supplies such as water, coffee, hygiene products, etc.; employee's birthday reminder and ordering a present or flowers; etc. The problem with the automation of some processes is that there are no services for many needs that provide API connection, or they are not enough functional, or there is no such function. To solve this need, one needs to interact with the services themselves and, or provide them with our facilities to create a connection, or they create such opportunity and to connect to them.

Several small business owners with a staff of 10 to 50 were interviewed during my analysis, all of whom have identified the needs for such a program and are willing to cooperate in creation and implementation of such a product.

Conclusion

Nowadays, people pay attention to programs that provide a wide range of services, not just the usual day planning. The product should fully meet the demands of the modern person, as well as the main functions of workflow planning and the ability to control the workflow of each member of the staff quicker and more efficient. It should involve not only the usual time manager, but also to be able to interact with other services from different fields.

As small business owners are interested in the program, you can find investors to sell this product, and in this case, users.

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