VII Міжнародна науково-практична конференція
«АКТУАЛЬНІ ПРОБЛЕМИ СУЧАСНОГО ДИЗАЙНУ»
Київ, КНУТД, 04 квітня 2025 р.

УДК 7.012: 004.514

THE APPLICATION AND PRACTICE OF FIGMA SOFTWARE IN INTERFACE DESIGN

ZHOU Tianyu[1,2], YEZHOVA Olga[1]

[1]Kyiv National University of Technologies and Design, Kyiv, Ukraine
[2]Shaanxi University of Science & Technology, Xi'an, People's Republic of China
21026377@zjcst.edu.cn, oyezhova70@gmail.com

This paper explores the application and practical advantages of Figma software in interface design. Through a comparative analysis of mainstream UI design tools, including Figma, Adobe XD, Sketch, Illustrator, and Photoshop, the study highlights Figma's strengths in multi-user collaboration, cloud-based accessibility, and dynamic design functionalities. By analyzing Figma's application in icon design, interface prototyping, and interactive effects, the study underscores its growing influence in modern UI/UX design practices. The findings provide insights for designers, educators, and developers on leveraging Figma to enhance interface design processes.

Key words: *Interface design, graphic design, computer graphic, Figma, UI design, design tools, design methods*

INTRODUCTION

Interface design refers to the image, text, color elements after reasonable layout, make software applications, web pages can bring users good visual effect and experience process, is directly affect the user for the preferences of interface and task performance, so for this form of visualization will need to design tools for digital performance [1]. Among them, Figma, as an online collaborative UI design tool developed in 2012 and officially released in 2015, is used through the browser or client as an application platform, which can be used through the network, and all users' design results and material data are stored in the cloud, has gradually become one of the most popular interface design tools [2]. With the rise of the Internet industry, more and more design software is widely used, but between different design tools function and use way there are certain differences, at the same time different design projects between different software fusion, in the design tools today, most of the development practitioners, teachers and even don't have enough time to experience and learn new software, so easy to let UI design learners or designers face difficulties and software replacement.

PURPOSE

This paper will take Figma software as the research goal, summarize the application characteristics and design methods of the software, and use the method of comparative analysis and design practice to verify its practical application value, so as to provide the basis and direction for the selection of interface design software and design tools.

VII Міжнародна науково-практична конференція
«АКТУАЛЬНІ ПРОБЛЕМИ СУЧАСНОГО ДИЗАЙНУ»
Київ, КНУТД, 04 квітня 2025 р.

RESULTS AND DISCUSSION

Comparison of the basic characteristics of the UI design tools. This paper compares analyzes the basic function characteristics of the current mainstream design software such as Figma, XD, Sketch, AI and PS, as shown in Table 1. From the perspective of use function, compared with other design tools, Figma has a more comprehensive interactive function, which can produce more smooth and real animation effects, and facilitate designers and developers to communicate with the actual effect types. Finally, according to the data sources of Uxtools Design Tool research website, the number and score of Figma have been increasing year by year, becoming the first in the list of design tools, which also shows that ma is a mainstream tool for design and development of various Internet enterprises around the world.

Table 1.

Uxtools Design Tool comparison
(based on materials from the site https://uxtools.co/tools/design)

Software	Usage (vote)	Year	Platform	Prototyping	Layout
Figma	3480	2015	Web/Mac/Windows	Transitions/Animations	Auto
XD	599	2015	Mac/Windows	Transitions/Animations	Auto
Sketch	574	2008	Mac	Basic click-through	Auto
AI	545	1986	Mac/Windows	No	No
PS	450	1987	Mac/Windows	No	No

Application value of Figma software in interface design. Figma software the first advantage is multiple collaboration mode, can assist design workflow of collaborative interaction between developers and product managers, through Figma's team function, different pages are created. Each designer can not only design in his own page, but also view the design progress of team members at any time, and share the elements and components in the design file, greatly reducing the cost of workflow.

Figma as a design tool for the cloud, With the powerful plug-in functionality, In its plug-in library will be updated and increased as the number of users and developers increases and the demand for use, These plug-ins help designers provide easier ways to operate beyond ma's built-in features, For example, the source file icon, font generation, 2.5d icon, automatic typesetting, AIGC, dynamic design and other plug-ins are provided, In Figma will be arranged according to the degree of popularity used, Designers can suit their own use needs and common types.

Figma community function is one of its biggest features, designers or learners can see a lot of excellent design case, different from Dribbble, Behance this kind of open design community, for design work is given priority to to show, but in Figma community, designers can even select the design of the original files, through the analysis of each component in the source file, layer, can not only to

VII Міжнародна науково-практична конференція
«АКТУАЛЬНІ ПРОБЛЕМИ СУЧАСНОГО ДИЗАЙНУ»
Київ, КНУТД, 04 квітня 2025 р.

optimize the source file design, but also can further improve their ability for the design of related material.

Application of Figma software in interface design. As a graphical user interface, Intermediate elements in which the user produces interactions with the function, There are so many types of icons, common types have text identification, mainly abbreviated or capital English letters, short Chinese characters, can directly reflect the meaning of the function, drawing class identification. Through simple geometry or transformed complex forms, ability to exhibit pattern patterns consistent with function. As shown in Figure 1, that the icon material in the Figma community plugin library is no copyright restrictions.

In the process of interface design, it is necessary to draw the basic functional framework prototype map first, and determine the main functional pages and information pages in the interface. Take the mobile app as an example, it includes the startup page, boot page, landing page, home page, function page, prompt page and other pages. After determining the prototype map, the previously designed icons, information, pictures, videos and so on can be placed in the corresponding prototype map area, fully considering the overall page layout, arrangement, as well as the consistency of the style and color, so that it can meet the requirements of the interface design. As shown in Figure 2 and 3, the prototype map and renderings are made through the icon materials in the Figma community material library (no copyright restriction), and the real display effect is generated through the model prototype plug-in.

As the advantage function of Figma software, how to make the communication between designers and front-end development more smooth and contribute to the realization of functions, designers need to design a certain dynamic effect between pages and functional controls, which can not only realize the operation of functions, but also bring smooth and comfortable use experience to users. Through the dynamic function of Figma, by connecting the corresponding anchor points according to the order of information level and function trigger, the free switch between multiple interfaces can be realized, and the real operation process of app can be simulated in the process of simulation demonstration. As shown in Figure 4, the Aninix plug-in in the Figma community plug-in library can quickly produce the dynamic effect of interface switching, which reduces the learning cost of designers, and improves the work efficiency and the authenticity of dynamic effects.
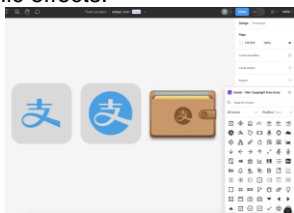

Fig. 1. Figma icon design
(Tianyu Zhou, 2025)

Fig. 2. Figma interface design
(Tianyu Zhou, 2025)

VII Міжнародна науково-практична конференція
«АКТУАЛЬНІ ПРОБЛЕМИ СУЧАСНОГО ДИЗАЙНУ»
Київ, КНУТД, 04 квітня 2025 р.

Fig. 3. Figma prototype design
(Tianyu Zhou, 2025)

Fig. 4. Figma dynamic effect design
(Tianyu Zhou, 2025)

CONCLUSIONS

This paper discusses the application of figma software in interface design, analyzes its advantages over other design software, including multi-person collaboration, extensible plug, open source community, which is widely used in icon design, interface design and interactive effect, and verified through design practice. It excavates the potential and application value of Figma in interface design. Its unique open cooperation mode will bring more long-term optimization and iteration, follow the trend of design development, and bring better user experience for designers, developers, learners and target users.

REFERENCES

1. Zhou T., Yezhova O. Contemporary Research Trends in Human-Computer Interface Design. Art and design. 2024. No2(26). C. 90–101. URL: https://doi.org/10.30857/2617-0272.2024.2.9

2. Qu. Z. F., Li. Z. H.. Figma "Outage" domestic design software quickly came out [N]. *China Business News*, 2022-03-21 (C01). DOI: 10.38300/n.cnki.nzgjy. 2022.000853.

ЧЖОУ Тяньюй, ЄЖОВА О.
ПРАКТИКА ЗАСТОСУВАННЯ ПРОГРАМНОГО ЗАБЕЗПЕЧЕННЯ FIGMA У ДИЗАЙНІ ІНТЕРФЕЙСІВ

У цій статті досліджено застосування та практичні переваги програмного забезпечення Figma у дизайні інтерфейсів. Через порівняльний аналіз основних інструментів UI-дизайну, включаючи Figma, Adobe XD, Sketch, Illustrator і Photoshop, визначено переваги Figma у багатокористувацькій співпраці, хмарному доступі та динамічних функціях дизайну. Аналіз застосування Figma у створенні піктограм, прототипуванні інтерфейсів та інтерактивних ефектів підкреслює її зростаючий вплив на сучасну практику UI/UX-дизайну. Отримані результати корисні для дизайнерів, викладачів та розробників щодо використання Figma для вдосконалення процесів проєктування інтерфейсів.

Ключові слова: *дизайн інтерфейсу, графічний дизайн, комп'ютерна графіка, Figma, UI дизайн, засоби проектування, методи проектування.*