

This proposal is made as a recommendation of an upgrade for our web server. Implementation of Artificial Intelligence (AI) into our web development system can be a very important feature that will bring some benefits. AI is already widely used by other web app development companies to simplify the development process. It is not only capable of giving real-time suggestions about the website design and layout to the development team, but also finding quality links based on user interests and domain trust.

This offer includes an explanation of advantages and disadvantages of being artificial intelligence implemented into web development. Additionally, it will contain schedule, cost breakdown and the purpose to implement.

### **Purpose and Audience**

Artificial intelligence (AI) applies to the ability of a digital computer or computer-controlled machine to perform the tasks and mimic actions which are commonly associated with intelligent beings such as humans (Frankenfield, 2020). Thus, AI technologies are able not only to understand and analyze, but also learn from data through specially designed programs and algorithms, which are complex mathematical formulas or operations.

We can see that AI contributes much to the growth of the world's economy and its "role of artificial intelligence in web development is outstanding" (How to Use Artificial Intelligence in Web Development - Inoxoft, 2022). It happens because the AI allows to reduce human error as well as to obtain a perfect digital assistant due to AI applications giving possibilities to process huge amounts of data in an instant. For example, errors that may occur during inaccuracy of people's work can be decreased to a minimum thanks to artificial intelligence because AI allows "structuring, prioritizing, automating every industry-related process" (How to Use Artificial Intelligence in Web Development - Inoxoft, 2022). Moreover, because it is very difficult for a human to perform many functions or tasks at once, artificial intelligence covers that target with high speed improving business results. Thus, artificial intelligence plays a huge role in business by empowering various fields such as education, banking or website development due to streamlining manual processes (Artificial Intelligence in Web Development, 2021).

### **Description**

To ease time-consuming tasks website development and AI have been working co-dependently. So, "today, web app development has grown to an extent that it has given birth to whole new industries related to the field" (Artificial Intelligence in Web Development, 2021). Today, artificial intelligence is helping to create more efficient and user-friendly websites using chatbots and voice search. AI is working to increase conversions and enhance UX, optimize content, and even write copyrighted texts. Machines can analyze user behavior better than any marketer or retailer, and therefore they are increasingly being used to improve the interface, design and optimize landing pages. For example, new AI-controlled chatbots are able to communicate effectively, and their speech algorithms are being improved, leaving no place for misunderstandings and conflict situations. In the past, understanding human speech by machines was problematic due to differences in pronunciation. However, modern natural language processing technologies make it easy to decipher people's mood and intentions. Thus, voice search on the site becomes a very important part of that technology. As Josh Brown says, "using AI-powered solutions allows businesses to implement user-centric innovations that improve user experience and increase customer interaction" (Artificial Intelligence in Web Development, 2021). Also, thanks to the adaptation of artificial intelligence, online stores get a powerful conversion tool. As a result, robots may understand people's preferences and even their moods and motives, showing an improvement of user experience.

Artificial intelligence in web design is no longer just a job, but a comprehensive experience that penetrates all areas of life. It has become a source of entertainment, hobbies, socializing, shopping and many other aspects of everyday life. AI in web design has paved a new path for website developers, and in some places has put them out of work. Firstly, machine learning technology being the forerunner of artificial intelligence in web design is replacing humans in many areas. So, the software, by analyzing user behavior, may be able itself determine which elements work best on the page. Based on the device used, user preferences, and typical needs, AI can optimize a commercial site in the best possible way. Machines know where and what page elements are best placed, what content is better to demonstrate to a particular client. Secondly, artificial intelligence plays a huge role in search engine optimization (SEO). Because business is heavily dependent on search traffic, the top lines of search results should be occupied by content that users liked, and not be packed with keywords. In that point AI allows you to select trending topics and keywords, and create interesting content. On the other hand, artificial intelligence in SEO analysis internal and external ranking factors, helps to correct technical errors in individual pages and entire sites. It is very important that AI compares favorably with a live SEO optimizer due to it quickly scans huge amounts of information, unmistakably finds the causes of the problem and offers logical solutions. Thirdly, video content optimization helps businesses go viral in a short amount of time. An interesting and intriguing video allows for crazy traffic overnight. Additionally, artificial intelligence makes content more effective. Because the content quality is central to search engine rankings, thus the higher the quality of the published materials, the higher the probability of getting into the top search results. Artificial intelligence is able to analyze content based on competition, the tastes of the site's target audience, key interaction triggers, and other factors. In addition to the quality of the content, the quality of the link mass plays an important role in ranking the site. Good links mean higher domain authority, search visibility, and traffic. Despite finding quality links based on user interests and domain trust is not an easy task, artificial intelligence may come to the aid of the webmaster (or even replaces him).

## **Advantages**

**User experience.** If a visitor to your website can not use it efficiently and effectively, he will leave your website. Many client-oriented web applications are starting to rely on AI in order to improve customer experience.

**Personalized Content.** By implementing AI on your website, you can show to users certain content that is designed specifically for them. AI also can recommend them new content being it either music, video or some other content based on their past behavior and interested.

**Voice Search Optimization.** The fastest trending feature is voice search. AI can help to optimize website voice search for different mobile devices, since, the major customer base is accessing websites through their mobile phones.

**AI as a UX.** As we talked earlier, the most common example is a chatbot.

## **Disadvantages**

**Human replacement.** Since AI has proven to be more efficient, it will replace the majority of job positions and replace real humans.

**Privacy Issues.** Analysis combined with AI has unlimited potential to extract data and ideas from customers, that offends users' privacy rights.

## Project Plan

AI project typically take from 3 to 36 months. It depends on the complexity and the scope of the project.

### Machine Learning Deployment Timeline

Days	Percentage(%)
0-7	14
8-30	42
31-90	64
91-365	77
365+	82

Note: AI will never get to 100%, since it is constantly learning based on a user search, so it will be constantly changing.

## Qualification

Our company is specializing in the AI development field for over 5 years. In that time range, we raised up our own specialist in the different fields such as math, networking, graphical modeling, physics and what is more important in a computer science and programming. Together, our team is the most qualified and universal for any jobs that are required to implement AI into any system. We have worked with different companies, and you can see all the reviews on our website. Thus, you can get a better image and understanding of how we are doing our tasks and the steps that are required in order to get the project done.

## Cost

To develop MVP (Minimum Viable Product) based on the client's data will start from \$8000.

Complete implementation of AI may vary from \$20000 to \$1000000.

The first thing that we will do is making a prototype. Today, the prototype development starts from flat \$2500. It usually takes up to 10 days to create it.

The next step will be MVP (Minimum Viable Product). The cost starts up from average of \$15000, and takes around 20 days, but may vary based on the project.

The last step will be the product release and support. Here is where prices are varying at most because they are based on the ML model maintenance and customized pay-by-feature option.

## **Conclusion**

AI can be expensive at first to implement, however, it will pay for itself after a certain period of time. With an AI on your website, the company will get a higher flow of customers. And, since AI will recommend them products based on their searches, our clients will spend more money and spend less time of searching for a desirable product. Additionally, with AI customers will have a better experience, thus they most likely to stay with other company rather than searching for another.

## References:

*Artificial Intelligence in Web Development.* (2021, August 17). InData Labs.

[https://indatalabs.com/blog/ai-in-web-](https://indatalabs.com/blog/ai-in-web-development#:~:text=Artificial%20intelligence%20is%20being%20widely)

[development#:~:text=Artificial%20intelligence%20is%20being%20widely](https://indatalabs.com/blog/ai-in-web-development#:~:text=Artificial%20intelligence%20is%20being%20widely)

*How is AI influencing industry competition? - diva portal.* (n.d.). Retrieved April 11, 2022, from

<https://www.diva-portal.org/smash/get/diva2:1223191/FULLTEXT02>

*How to Use Artificial Intelligence in Web Development - Inoxoft.* (2022, January 6). Inoxoft.com.

<https://inoxoft.com/blog/how-to-use-artificial-intelligence-in-web-development/>

Frankenfield, J. (2020, March 13). *How Artificial Intelligence Works.* Investopedia.

[https://www.investopedia.com/terms/a/artificial-intelligence-](https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp#:~:text=Artificial%20intelligence%20(AI)%20refers%20to)

[ai.asp#:~:text=Artificial%20intelligence%20\(AI\)%20refers%20to](https://www.investopedia.com/terms/a/artificial-intelligence-ai.asp#:~:text=Artificial%20intelligence%20(AI)%20refers%20to)