Artificial Intelligence (AI) tools for monitoring internet portals 1/24/25

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Internet portal serves as a company's business card, making it essential to ensure uninterrupted access to information and seamless communication. To guarantee maximum availability and optimal performance, AI-driven website monitoring is employed. This enables businesses to track the performance of their websites and online services, identify issues early, and proactively resolve them before they impact users.

When visiting websites, users often encounter requests to accept cookies or grant access to their location. These prompts are just a small part of broader monitoring processes. For example, after searching online for a specific product, a user might start seeing targeted advertisements for that same item the next day. This kind of tracking and personalization is powered by AI-based analytics and monitoring tools that collect data on user behavior to tailor content and advertising to individual interests. However, monitoring extends well beyond personalized advertising—it also plays a critical role in detecting problems and maintaining cybersecurity.

As AI technologies continue to evolve, the nature of website monitoring is undergoing significant transformation. In the past, monitoring relied on manual scripts and static methods, where administrators would oversee portal performance reactively—intervening only after issues had occurred. Today, AI tools use predictive analytics to automatically detect anomalies and prevent disruptions before they affect users.

AI monitoring tools are available in various forms, including Software as a Service (SaaS) solutions, custom-built software, and open-source technologies. These tools can monitor websites comprehensively, from detecting downtime and security threats to measuring performance and load times. They help ensure fast and efficient user experiences while also analyzing user behavior to inform content optimization and data-driven decision-making.

As for tools on the market combine performance monitoring with user behavior analytics. Popular examples include Datadog, New Relic, Dynatrace, and AppDynamics. Other tools, such as Google Analytics, Hotjar, Mixpanel, and Heap, specialize specifically in analyzing user behavior. For data storage and processing, most solutions rely on cloud services such as AWS, Azure, and Google Cloud, although some also offer local server storage options. Pricing models vary significantly—many user analytics tools offer free plans with limited functionality, while performance monitoring tools typically operate on a subscription basis, with costs depending on data volume, number of users, and additional features.

Website monitoring is subject to several legal regulations, particularly those concerning personal data protection and privacy. One of the key legal frameworks is the General Data Protection Regulation (GDPR), which defines how personal data must be collected, processed, and stored, including the requirement to obtain user consent for cookie usage. The EU's E-commerce Directive also applies to online services and monitoring practices. Websites are required to follow rules concerning cookie policies and user consent mechanisms, while also maintaining robust cybersecurity measures to protect user data and prevent breaches.

An effective monitoring strategy that leverages AI tools significantly enhances both the quality and security of an online portal. This, in turn, strengthens user trust and satisfaction. Without such a strategy, companies may find it difficult to remain competitive, as they are less able to respond quickly to problems or ensure a consistently positive user experience.