



The simple way to control the health process yourself

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For companies and organizations, digital preventive medicine will become increasingly important in the future to sustainably ensure corporate success as well as corporate attractiveness through resilient and healthy employees. With the help of digital platform solutions for individualized prevention and integrated health promotion, employees can independently track, control and optimize their health process.





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Preventive Medicine

The New Health Consciousness - Megatrends Health & New Work

Physical and mental health indicators play an equally significant role in individual and collective well-being. They are regarded as necessary prerequisites for individual quality of life, vitality and performance. The modern world of work (New Work) in particular places extraordinary and rapidly changing demands on employees. Physical strength and endurance are no longer the requirements in today's working world. Rather, it is mental performance and the ability to adapt quickly to new, dynamic and complex situations that are required. Due to globalization and strong networking, social and communication skills are also of high importance. Given this shift in requirements, it is not surprising that absenteeism, especially due to mental illness, has increased enormously in the last decade (example: in 2008 it was still 12.6 and in 2019 18.4 days of absence per member). People with mental illnesses are absent longer on average than those with any other diagnosis. Nevertheless, musculoskeletal disorders continue to be considered the most common causes of sick leave in Germany, along with mental illness. It is therefore particularly important to set a holistic focus that includes both mental and physical indicators.

In addition, more health-related days of absence can be observed with increasing age, which is why demographic change also plays a striking role here. These health developments in Germany, as well as the Covid-19 pandemic announced in March 2020, are triggering a new health awareness among the population, which is anchoring the megatrend of health as a fundamental value in our lives. Health is no longer viewed in its individual facets, but rather as a complex interplay of behavioral patterns, lifestyles, habits, social relationships as well as the working environment.



Preventive Medicine

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Based on these societal and global challenges, the field preventive medicine is becoming increasingly important. In preventive health, the stated goal is to maintain the current state of health and to avoid or prevent the risk of contracting certain diseases. Preventive medicine in this form can be represented primarily by proactive health screenings, healthy work-life balance, and various measures for the application of stress management strategies. Here, the interface between health insurance companies commercial enterprises with the help of suitable digital platforms that take the new understanding of health into account holistically is of great importance.

vivamind offers such a platform with its software in the form of a HealthCare Service [SaaS] and the integration of sound expertise in preventive medicine as well as many years of experience in health research. This platform incorporates the latest results from organizational and research projects on the topics of prevention, health promotion, cognitive performance skills, and leadership and motivation. The development and validation of psychological and medical online assessments are components of this platform.



Preventive Medicine

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Individualized preventive medicine

The trend from a generalized to a personalized approach to medicine should also be emphasized. This paradigm shift also poses a major challenge to preventive medicine. Here, the individual is viewed with his or her unique characteristics. This orientation requires an individual approach and treatment for each person, which is reflected, for example, in the form of individually oriented strategies for the prevention, diagnosis and treatment of diseases. In this context, the human being moves to the center of preventive medicine and requires health management that is focused on him or her.





This focus is a challenge as far as general methods are no longer effective and a change in thinking must take place. To be able to meet this challenge, it is necessary that the human being is viewed holistically with all his or her characteristics on both the physical and psychological levels. However, not only internal factors (such as characteristics and skills) are relevant for individual health, but also external factors (for example leadership behavior), which is why both perspectives must also be considered in interaction with each other.





Digital Health & Cybersecurity

Digitization has also found its way into the topic of health for quite some time now. The use and thus also the acceptance of digital health products continue to rise steadily. In 2021, 20.9 billion euros in sales were recorded in Europe for the area of eHealth and digital fitness & well-being alone. Forecasts indicate annual growth of approximately 8%. A high level of popularity is evident on the part of users (consumers), especially for digital health apps.

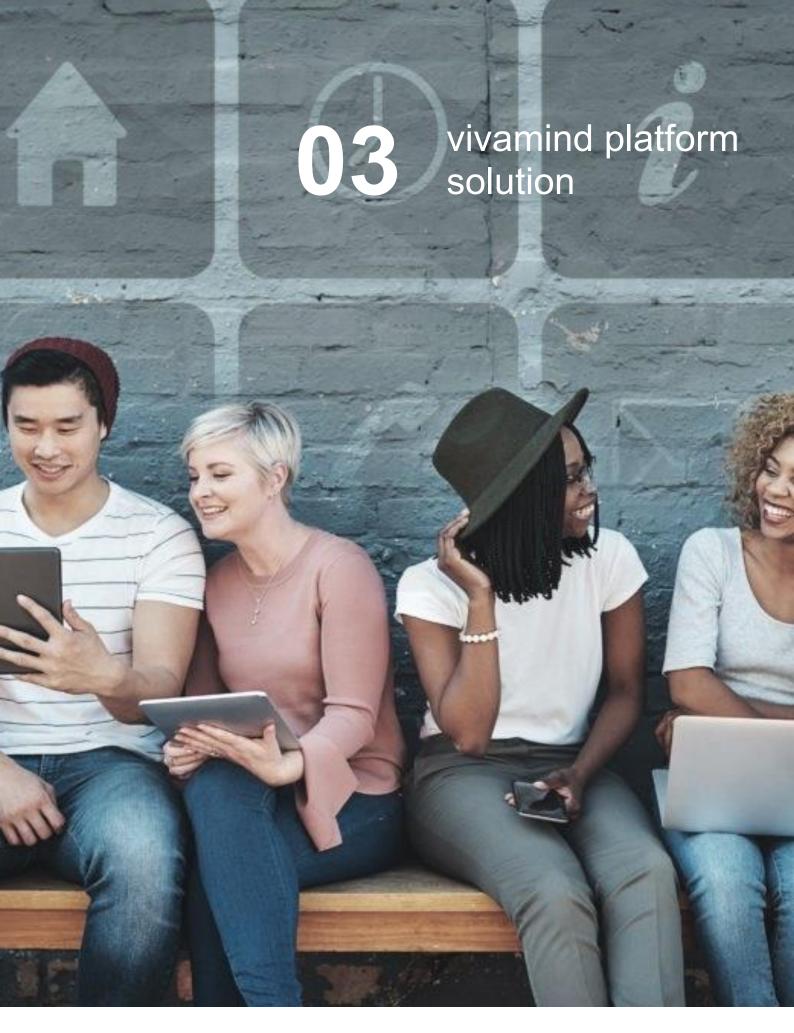
In addition to personal interest, there has also been an increased public interest in eHealth for several years. As a representative example, the speech of the then Federal Minister of Health Jens Spahn on 07.11.2019 on the adoption of the Digital Health Care Act (DVG) can be used. In this speech, Jens Spahn announced the digital health application (DiGA) to establish with the goal of ensuring a high-quality and economical medical prescription in the future. In 2020, Deloitte drew a first conclusion on the application through targeted interviews on the DiGA with all relevant stakeholders (users, physicians, stakeholders, etc.). It quickly becomes clear in this report that the focus of this app is exclusively on the medical sector. In addition, the application as well as the access are more difficult, as it requires the instruction of an expert (medical professional). Despite these hurdles, the product is very well received once it reaches its user. The enormous potential of eHealth is strongly emphasized in several places in this report. eHealth is perceived as the future of the healthcare process, which is why great potential is seen from an economic and political perspective.

In terms of the German market, it can be noted that one in five citizens has at least one health app on their mobile device. There are now many special apps or platforms from various providers that focus on one topic area, such as nutrition. Of course, there are also cross-topic apps (for example nutrition and exercise). Many are provided holistically or only with their basic functions free of charge. Intelligent smartphones are able to integrate information from various platforms into one app. At this point, it quickly becomes clear that with the increase in digital use of health apps, the risk of data misuse also increases. Especially in the case of free apps or platforms, the question arises as to how they are financed. One popular way of financing is through integrated advertising pop-ups. However, users very often find these annoying and dubious. In addition, many platforms lack evidence due to a lack of comparative values or overly complex algorithms.

Challenges of eHealth products

The multimodal approach to health very rarely receives the evidence-based consideration it requires in current health platforms.

The data lifecycle is mostly perceived in a very incomprehensible and veiled way by users.





Individualization for organizations

vivamind offers companies and organizations the possibility to adapt individual modules to the company's own needs. Each indicator compilation (for example fitness or mindfulness) can be customized in terms of content as long as an evidence base is available. Collaborative compilation, development and identification of company-relevant indicators are possible when using the vivamind platform. In addition, it is possible to integrate the in-house BGM offers and measures into the existing portfolio of vivamind for the own employees. We have already successfully implemented such solutions with clients from various sectors. It offers organizations and companies the opportunity to create an individual and customer tailored platform that, for example, takes team processes into account in addition to the individual health process. Furthermore, it is possible to adapt the design of the offered platform to the corporate design of one's own company (for example by integrating a company logo). This design option offers users a familiar as well as protected health space.



The challenges of eHealth products highlight the potential of evidence-based personal and privacy-compliant solutions. vivamind addresses precisely these challenges.

vivamind Health Navigator

vivamind combines two essential health areas in one platform: preventive medicine and psychology. Here, a holistic approach was chosen that takes into account important drivers of both private and professional life (for example health, motivation & performance). The digital platform solution of vivamind is aimed at all B2B customers (sectors) who want to establish and/or promote the topic of health in their corporate culture in the form of personalized health management. For this purpose, vivamind draws on more than 60 scientific algorithms and thus covers all identified relevant life and health variables (for example prevention. health promotion. leadership and motivation).

Users are continuously accompanied from status assessment to goal achievement via the vivamind platform. The developed algorithms are constantly enriched with current results from research and practical projects. Currently, we have access to 2,900,000 completed indicators. vivamind experience values or the data basis of the vivamind platform are based to date in particular on the cooperation with over 50 clients (approx. 4000 users). This source of information acts as a reliable basis for the development and validation of precisely fitting medical as well as psychological online assessments for vivamind users.

As evidence-based practice has become accepted as a necessary criterion for good practice both in the scientific context, but especially in the field of medicine (Reifegerste & Hastall, 2014; Babbie & Rubin, 2011; Albrecht, Mühlhauser, & Steckelberg, 2014; Sacket et al., 1996), the vivamind platform was developed exclusively on empirically compiled and evaluated scientific evidence from preventive medicine and health research.





Data Protection & Cybersecurity

vivamind counters the risk of data misuse with data transparency and security measured against German standards. All information on the data life cycle can be read by every user on the vivamind website and is presented in a clear form (data protection). The collected data is stored encrypted on a dedicated server in Germany and is transferred completely and encrypted by a proven technology. When logging in, vivamind verifies the identity of all users via reliable authentication steps, thus ensuring trustworthiness. Annually, IT security is certified by an external company through IT penetration tests. This involves automated attempts to hack the application from the outside and from the inside in order to prevent possible security vulnerabilities. In addition, regular and static code analyses are also performed by an external company. In this process, the so-called source code is subjected to various formal checks. This check can identify certain sources of errors before the corresponding software is executed. Last but not least, a review and update of data protection law and cybersecurity by subject matter experts takes place on an ongoing basis. Thus, the vivamind data protection and IT security management meets the highest standards in the field of data protection and cyber security.

Transparent application

In line with data transparency, every user has full control over the data he or she has stored. At any time, the user can see which data has already been stored. The stored data can be edited by the user at any time by overwriting, deleting or exporting it. The declared vivamind goal is to make the handling of personal data as easy as possible for the user. This aspiration is also reflected in the use of the vivamind platform, vivamind users receive an individualized and anonymous code for registration. After data protection-compliant two-factor authentication, users access their personal health platform and can start directly with the health checkup of their choice by entering their personal data in the respective categories. Users receive the personalized results in real time. The results are accompanied by additional explanations, so that users can understand their expression of each completed rubric. In addition, suggestions are presented with helpful tips for improving one's own health. At this point, corporate health measures of one's own company can be used sensibly and individually. Since health is viewed as a continuous process, renewed entries are collected over time. This data collection in a longitudinal design makes it possible to monitor and map the development of health. With the help of this method, vivamind ensures sustainable and long-term health. The suitability of the life and health indicators used has already been proven in various study results and company analyses (study overview).





Balance Score

For real-time analysis, the vivamind algorithms are based on a score system. Through this score system, scores of individual health parameters are integrated into a global value. This ensures the objectivity of the result interpretation. In this context, the global value acts as a reference value (=assessment basis) to which the individual score refers in the real-time analysis. In this way, scientifically based assessments of individual characteristic values can be ensured. Repeated measurements and entries enable independent observation of one's own health process. Direct feedback and a positive development of one's own health process can motivate users to further promote and sustainably strengthen their own health. Furthermore, such scores are also suitable for company or team challenges. Note: The identification of individual scores in team challenges is not possible at any time due to complex encryption. In addition, individual vivamind scores can be calculated collectively via further specific algorithms and used as a reference value for company performance. We map this value in the form of a Health Performance Indicator (HPI). The HPI is used as a measured value or KPI for strategic health management.





Resilience



Corporate resilience

Influenced by megatrends such as demographic change, health, new work and digitalization, companies and organizations are facing work-related and sociopolitical changes. To cope with times of crisis like these, as well as the rapid and complex changes, resilient companies and individuals are equally in demand. Resilience increases the individual and organizational performance, resilience of employees and promotes a healthy as well as proactive working climate for the sustainable safeguarding of the competitiveness of companies. With the vivamind platform, an important facet of corporate resilience can be covered via the users. By actively using this platform, users increase their self-efficacy and personal responsibility by keeping their own health process on the radar and proactively promoting their health in the long term by implementing the recommendations for action. In particular, the stabilization of mental health and performance can increase the commitment of employees. The resulting motivation and innovative strength is beneficial both for corporate resilience and for the company's success.

List of sources

Albrecht, M., Mühlhauser, I., & Steckelberg, A. (2014). Evidenzbasierte Gesundheitsinformation. In K. Hurrelmann & E. Baumann (Hrsg.), Handbuch Gesundheitskommunikation (S. 142-158). Bern: Huber.

Babbie, E., & Rubin, A. (2011). Research methods for social work. Belmont, CA: Thompson Brooks/Cole.

Dohrmann, Michael; Elbel, Gregor-Konstantin; Teuber, Ibo; Tobias, Langenberg; Wallersheim, Adrian (2021): Ein Jahr DiGA Chancen für gesetzliche Krankenkassen. Online verfügbar unter https://www2.deloitte.com/de/de/pages/life-sciences-and-healthcare/articles/digitale-gesundheitsanwendungen-diga-studie.html, zuletzt geprüft am 16.03.2022.

Reifegerste, D., & Hastall, M. R. (2014). Qualitätssicherung in der Gesundheitskommunikation. In E. Baumann, M. R. Hastall, C. Rossmann & A. Sowka (Hrsg.), Gesundheitskommunikation als Forschungsfeld der Kommunikations- und Medienwissenschaft (S. 37-47). Baden-Baden: Nomos.

Sacket, D. L., Rosenberg, W. M. C., Gray, J., Haynes, R. B., & Richardson, W. S. (1996). Evidence based medicine: What it is and what it isn't. BMJ, 312, 71-72 Digital Health - Europa. (n.d.). Zugriff am 16. März 2022, von https://de.statista.com/outlook/dmo/digital-health/europa (Dohrmann et al. 2021)

vivamind team

The vivamind team consists of scientists and experienced practitioners in the fields of medicine, psychology, business administration and IT and brings many years of experience in health research, applied psychology, preventive medicine as well as web and application development.



Call to action

If you would like to learn more about how your company or organization can use the vivamind platform to sustainably improve the health of your employees and thus contribute to corporate resilience, <u>contact</u> us for a no-obligation initial consultation.



More information

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Information

Changes and errors in this document are reserved. The information contained includes general descriptions and functionalities of the vivamind platform. In specific use cases, it may be that not all individualization measures can be implemented, for example due to a platform change or app-oriented further development. Only the module changes and adaptations that are contractually agreed are binding.