Adapting to Disruptive Changes in the Digital World: Management Consulting Majors

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Abstract

Management consulting is one of the most dynamically growing sectors of the modern global economy, characterized by a very high resilience to the fluctuations of the macroeconomic environment. Nevertheless, a number of prominent researchers note the disruptive trends in the global consulting industry and predict the disruptive effects of the realization of these trends for the traditional leaders of the consulting business due to the spread of digital technologies, especially big data analytics and artificial intelligence. In an effort to understand the validity of such assessments, the author of this article consistently analyzes the features of the evolution of the management consulting industry landscape, examines the key factors of disruptive changes that deepening digitalization brings to the consulting industry, and considers the main mechanisms used by global industry leaders to adapt to the rapidly evolving digital environment. It is concluded that, despite the challenges of the digital transformation, these leaders not only continue to grow dynamically, maintaining their dominant positions on global markets, but are also very active in penetrating new market segments emerging in the face of digital shifts.

Keywords: management consulting industry; disruptive innovation; digital transformation of consulting; factors of disruptive change

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Introduction

Management consulting became an industry in its own right in the 1950s, displaying high growth rates and resilience to external challenges.[1] However, since approximately the mid-2010s numerous researchers have noted the emergence of disruptive trends in the industry, along with growing risks to traditional business models, associated with the wide adoption of digital technologies, especially big data (BD) analytics and artificial intelligence (AI) (Christensen et al., 2013).[2] The interest in long-term shifts in the industry is not purely academic: it is largely due to the role professional consultants play in strategic decision-making by owners and top managers of the world's largest corporations and banks. Demand for consulting services is also growing in the public sector in the leading countries of the world, and at major international organizations (including the UN's specialized agencies), which increases their impact upon public policy and international relations.

In the context described above, a balanced analysis of shifts in the management consulting industry landscape seems to be very relevant. The key factors of disruptive changes that advanced digital solutions bring to global industry leaders (majors), and the main mechanisms the latter apply to adapt to digital transformation challenges, deserve particular attention. The insufficient coverage of the topic in the extant academic literature (Cerutti et al., 2019; Larsson et al., 2019) gives additional value to the study. The paper analyzes the specific features of the management consulting industry, which determine its structural dynamics. The key factors of disruptive change associated with the deepening digital transformation of the industry are considered, along with the approaches major companies take to adapt to these changes.

Disruptive Innovation in the Consulting Industry: Conceptual Framework and Industry Specifics

Developed by Harvard professor Clayton Christensen, the theory of disruptive innovation (further referred to as disruption theory) has become one of the more prominent management concepts of recent decades.[3] In general terms, it describes the structural transformation of industrial markets accompanied by the replacement of previous leaders – owners of well-known brands applying advanced management systems – by newcomer firms that find existing, or newly emerging, untapped niches and, by developing certain innovations, reshape the markets in their favor (Christensen, 1997; Christensen et al., 2018). Essentially, Christensen's concept describes how in certain situations the once-great companies fail, despite their utmost sensitivity to customer needs and their generous investments in advanced technologies.

In a typical scenario described by the theory, newcomer firms (which have much fewer resources) can not only challenge established players, but replace them as industry leaders. The key aspect of a radical transformation (disruption) of the existing market structure is the emergence of new niches open for the newcomers, while the incumbents remain passive. Disruption theory links this process to incumbents' economically determined focus on improving technologies, products, and services in the segments offering the highest profit margins, with the most stringent requirements for products' advanced functionality. As a result, less profitable segments (comprising less affluent and less demanding customers) remain relatively free from competitive pressures. That is where new players are rushing with functionally simpler and relatively cheaper products, which subsequently begin to penetrate the upper market segments by improving customer value. At the same time the newcomers maintain their price advantages, which determined their initial success. When the bulk of customers switch to the newcomers' products, one can talk about market disruption.

The validity of the disruption theory has been tested in various industries (Christensen, Bower, 1996; McKendrick et al., 2000; Danneels, 2011), but subsequent independent analysis has questioned the original conclusions (King, Baatartogtokh, 2015). More accurate testing through a series of dedicated surveys and expert interviews provided a detailed picture of all 77 cases that Christensen cited as examples of disruptive innovations (Christensen, 1997). The test results turned out to be unexpected: only seven cases (9% of the total sample) reproduced the key elements of the industry market transformation process described by the disruption theory relatively accurately. In the vast majority of cases (91%), one or more of these elements were missing, which was confirmed by further research (Si, Chen, 2020). In other words, the presence of visible signs does not mean that disruption is inevitable: in many cases, the industry specifics significantly affect both the disruptive transformation processes and their outcomes (Kharlov, 2020).

[1] https://www.mca.org.uk/press-releases/management-consultancy-sector-responds-quickly-to-recession, accessed on 15.11.2023.

[2] See also: https://www.inc.com/soren-kaplan/the-business-consulting-industry-is-booming-and-it.html, accessed on 17.12.2023.

[3] https://www.economist.com/books-and-arts/2011/06/30/aiming-high, accessed on 18.11.2023.

Looking at the management consulting industry through the lens of disruption theory raises a number of interrelated questions: How do disruptive trends develop in this industry? What industry-specific factors affect these processes? Can these factors redefine the nature of market transformation? A former professional consultant himself, Christensen could not ignore this industry, and in 2013 he co-authored a research paper on this topic (Christensen et al., 2013). According to the research, the development of the global consulting industry perfectly fits into the framework of this theory, and traditional market leaders will inevitably face the destructive consequences of disruptive innovations. Without going into details of the analysis carried out by the authors of the paper, we note that their conclusions were based on interpreting the actual changes in the global management consulting industry at the turn of the 20th and 21st centuries, and paying particular attention to its specific features, which for many decades made it immune to disruptive processes. First of all, we are talking about the low transparency of the consulting business, with clients not thoroughly understanding both the nature of services they have purchased (consulting products), and especially their pricing mechanisms. Secondly, the majors' high adaptability allows them to push customers toward solutions to an ever-growing number of management issues, thus avoiding the threats of disrupting the existing industry structure.

According to Christensen et al., the emerging shifts in the management consulting should soften the industry specifics, opening the way to transformation processes in line with disruption theory. In particular, the business opacity factor will be eliminated by democratizing access to the knowledge and analytics which underpin consulting products. It is not only about the growing amount of various business-related data, the gathering and processing of which are becoming increasingly easy (and affordable) due to the wide adoption of broad-band internet and digital analytics. The number of highly skilled and experienced professionals in consulting firms is growing. The dissemination of knowledge about the nature of their activities allows clients to split consulting projects into specific tasks and select different companies to carry out each of those. Thus, increasingly more customers can turn to small contractors, without having to rely on industry leaders traditionally focused on big projects (such as strategic business restructuring, digital transformation, etc.). Orders may be allocated among smaller firms specializing in specific areas. This way clients promote small and medium-sized market players, often established by former staff members of industry giants. Such compact teams comprising experienced consultants are able to provide competitive services at much lower costs due to their lower overheads. Quite frequently, they move from serving small clientele to more profitable consulting market segments, thus implementing the disruption theory growth model.

Christensen and his followers saw significant potential for disrupting consulting's traditional development path in business development analytics technologies. A number of researchers noted the opportunity to automate routine elements of consulting services for which the solution development process is well-known and largely standardized (Curuksu, 2018). The advantages of such technologies, especially the high speed of processing huge amounts of data at lower costs, might help reduce entry barriers for new companies on a market dominated by the strong brands of traditional industry leaders.

Competitive Landscape and Shifts in the Industry Structure

A decade has passed since Christensen et al. published their work promising a radical and inevitable transformation of the consulting industry. This is long enough to assess not only how the actual changes in the industry match the classic scenario of disruption theory, but also the consequences of these changes for a small group of majors and the latter's prospects for maintaining their positions. In recent years, a growing number of publications have linked disruptive trends in the consulting industry with the rapid development and broad adoption of AI,[4] which demands a serious rethinking of the practical implementation of disruption theory.

Though identifying trends in management consulting poses certain challenges,[5] the available information, albeit incomplete and ambiguous, still allows one to determine the distinct characteristics of and the more significant changes in the industry landscape. First of all, despite the differences in its absolute estimates, almost all researchers note the global industry's high growth rate: until recently it grew very quickly, significantly outpacing most of the world's leading economies. While in 1991 the global revenue from management consulting services were estimated at only 25.3 billion USD (UN, 1993), in 2011, according to the most conservative estimates, it reached 107 billion USD, and in 2019 this figure already reached 160 billion USD.[6] The

[4] https://www.newyorker.com/science/annals-of-artificial-intelligence/will-ai-become-the-new-mckinsey, accessed on 17.12.2023.

[5] There are no generally accepted management consulting statistics, the available data on key industry indicators can vary significantly, sometimes by orders of magnitude. Most often this is due to major differences in defining the industry, its boundaries, and the types of services provided.

[6] https://www.consultancy.uk/news/24659/market-sise-of-the-global-consulting-industry-in-2020, accessed on 15.12.2023.

industry has successfully survived all the global economy crises of recent decades. The only exception was 2020, when the pandemic led to a one-time 17.5% annual revenue loss, but in 2021 rapid growth resumed,[7] and according to all existing forecasts, it will continue at least until the end of the current decade.[8]

The consulting industry has a distinct two-tier structure. At the lower level there are small businesses and individual entrepreneurs, distributed across many highly specialized segments, and with a short life cycle due to intense competition.[9] This is explained by low market entry barriers in terms of required investments in tangible assets and regulatory restrictions (in most countries, management consulting is an unlicensed activity). The top tier is dominated by a small group of multinational giants which control the bulk of the market: in 2018, just five global majors accounted for almost 43% of global consulting revenues, and the top ten accounted for 56.6%.[10] According to Gartner analytics, in 2022 , the 20 largest companies accounted for 68.5% of the global consulting services market, and their share continues to grow (Gartner, 2022).

Such an industry structure, combined with a high growth rate, strong competition, and a constant influx of new ambitious players at the lower levels, appears to be particularly favorable for a radical transformation in line with disruption theory. However, this does not happen in reality; on the contrary, the global majors have been effectively resisting competitive pressure from smaller market players for decades. This does not mean that the global consulting industry is somehow immune to serious structural changes; the industry's current configuration is largely determined by such transformations, but they did not occur according to the classic scheme described in Christensen's theory.

The first of these structural shifts, which have seriously shaken the majors' positions, was the massive entry of international accounting firms onto the consulting market. During the industry's initial development (in the 1950s-1960s) the group of leaders comprised only major companies specializing in strategic consulting services,[11] including McKinsey, and (somewhat later) Boston Consulting Group (BCG) and Bain. The situation started to change quickly with the leading accounting firms entering the industry in the 1970s. Offering management consulting services in addition to traditional audits, they quickly became leaders in the operations consulting segment, which soon became the most profitable part of the business. Having increased consulting services' high profit margins, they began to actively diversify into strategic consulting as well. All these developments took place along with the consolidation of the international accounting firms themselves, whose elite group, following a series of large-scale mergers and acquisitions, has consistently narrowed from the "Big Eight" in the early 1980s to "Big Six" in the early 1990s, and the "Big Four" in the 2000s (Deloitte, EY, KPMG, and PWC).

The next dramatic shift in the structure of the global consulting business occurred at the end of the 1980s and during the first half of the 1990s, caused by the introduction of the so-called integrated information systems (ERP class) into the industrial sector; many experts believe it marked the initial phase of industrial firms' digitalization. These systems allowed managers to use key company resources (material, financial and human) much more efficiently, and to do so in an integrated way. The strong demand for such software solutions resulted in the emergence of a separate IT consulting segment, which provided a new powerful growth driver for the global consulting industry.

Major international accounting firms and their corporate successors (primarily Accenture and IBM) were the first to appreciate the potential of this new business area. They already had specialists with the necessary qualifications in operational consulting and IT and captured the most profitable market segments. The Big Four's management consulting revenues during this period began to approach those of their core audit services. This group of companies quickly became the world leaders in terms of revenues from consulting services, far ahead of the Big Three leading strategic consultants (Figures 1 and 2).

The new phase of the digital revolution, which began at the turn of the 21st century, also significantly boosted demand for IT consulting services. While in 2016 the global IT consulting market was estimated at 48 billion USD, by 2023 it grew almost 50% reaching 70.7 billion USD.[12] A new segment,

[7] https://www.statista.com/statistics/936889/management-consultancies-worldwide-annual-revenue-growth/, accessed on 18.12.2023.

[8] https://www.reportlinker.com/p06193734/Management-Consulting-Services-Global-Market-Report.html, accessed on 15.11.2023.

[9] For example, according to official statistics, about 80% of the US consulting firms cease operations within the first two years, i.e. their life cycle is much shorter than in other industries (https://www.consultingbusinessschool.com/whats-with-the-high-failure-rate-of-consulting-startups/, accessed on 11.05.2024).

[10] https://www.statista.com/statistics/624204/market-share-of-leading-consulting-firms-worldwide/, accessed on 17.12.2023.

[11] Management consulting covers three main areas. These include strategic consulting: long-term planning of company development, including corporate-, functional-, and production-related strategies, industrial market studies, large-scale restructuring, etc.; operations consulting: dealing with operational management issues, including management accounting and reporting, various aspects of internal financial management, business processes re-engineering, supply chain management improvement, organizational changes, cost cutting, etc.; and information management (IT) consulting: the implementation of information (digital) systems to support core management functions, or corporate management as a whole.

digitalization-related services, was growing in recent years at a particularly high rate. In 2016-2023 its volume increased 180% from 23 to 65.4 billion USD.[13] Despite the ongoing shifts in the global consulting industry's product structure, the positions of traditional leaders in new market segments were only strengthening.

A small and stable group of major companies has emerged at the top tier of the management consulting industry, far outpacing other industry players in terms of their "market clout". This group's growth patterns clearly contradict disruption theory: the traditional leaders are not being pushed out, and the segment is growing not because of the lower-tier newcomers' improvement, but due to the entry of similar-size players from other industries. Accordingly, in the absence of new rivals capable of shaking their positions, the majors demonstrated consistently high growth rates for decades. This configuration indicates that these companies are highly capable of making use of their unique competencies to develop and apply effective strategies and tactical tools to counter disruptive trends.

Main Factors of Disruptive Change and Adaptation Mechanisms

The current consulting industry structure disproves numerous forecasts about the inevitable change of industry leaders, which forces us to take a closer look at the main drivers of disruptive change in the context of digital transformation. Previous analysis identified two types of disruptive processes (Gans, 2016). The first works on the *demand* side, when traditional industry leaders cannot meet demand in certain market segments (in line with the classic disruption theory scenario). The second process develops on the *supply* side, when emerging technologies and other innovations offered by new service providers devalue the incumbents' existing competencies and products.

An analysis of the current state of the management consulting industry indicates that its majors are affected by both types of disruptive change factors (Figure 3).

Demand-Side Factors

The main clients of consulting firms are large industrial corporations and banks; they are interested in significant cost reduction in consulting services and strive to apply various instruments of control over these activities. One such instrument is multi-sourcing (allocating consulting projects among multiple contractors on a competitive basis), with the participation of former professional consultants. Some tasks are delegated to firms' own employees, or in-house consultants. Efforts are being made to improve pricing transparency. The effectiveness of such techniques, and as a result, customers' motivation to use them, have increased significantly due to the digital transformation: information about the capabilities and competencies of specific consulting firms, and the quality of their services has become much more available (among other things through client reviews posted on social networks[14]). The market has become much more democratic due to the broad adoption of techniques for working with specialized business information. Applying various data search and processing tools is much easier allowing clients to develop their own competencies in this area.

Market demand for data-driven products, and for new service-based business models has made developing of such competencies a strategic imperative for many companies operating in traditional industries (Stahl et al., 2023). It is no coincidence that in recent years many industrial enterprises and financial institutions have stepped up the hiring of former professional consultants, especially those with specialized data-processing knowledge and skills. Such employees became the core of rapidly growing in-house consulting divisions, which perform relevant functions instead of third-party providers. Such practices have already increased competition between market players, along with industry majors' noticeably reduced ability to impose exclusive multi-year contracts worth tens, and sometimes hundreds, of millions of dollars upon clients.

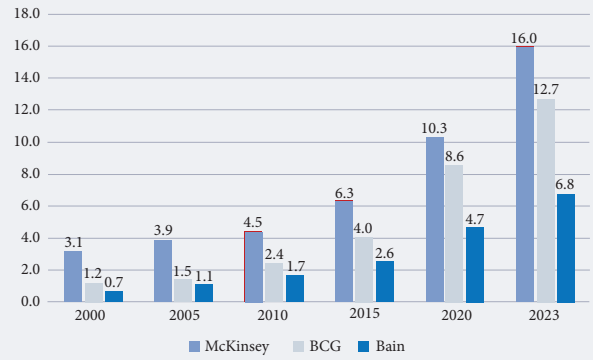
However, the disruptive potential of in-house consulting has its limitations. In the event of serious challenges, the organization's own consultants cannot replace independent professionals due to the inevitable conflicts of interest. As global experience shows, even the most experienced and qualified management consultants, once employed by an organization, cease to impartially assess its issues and suggest optimal solutions without regard to their own career prospects (Davison, 2009).

The largest consulting clients, dissatisfied with the traditional approach to the pricing of consulting services (based on fixed hourly rates and accurate recording of consultants' working hours), became the main champions of novel pricing models. The disadvantages of classic pricing include the opaque calculation of consultants' time, and the lack of a clear correlation between their remuneration and

[12] https://www.consultancy.org/consulting-industry/it-consulting, accessed on 28.12.2023.

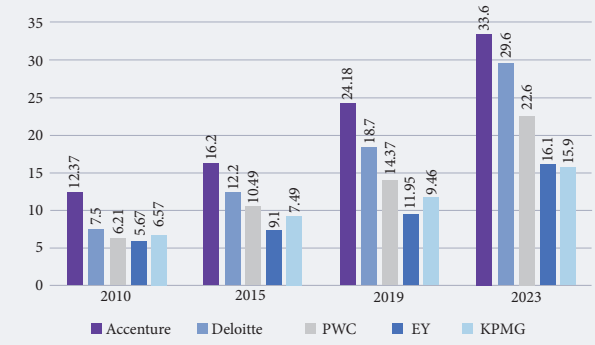
[13] https://www.preplounge.com/en/articles/digital-transformation-consulting, accessed on 17.11.2023.

Figure 1. The "Big Three" Strategic Consulting Companies' Revenue Growth, *billion USD*



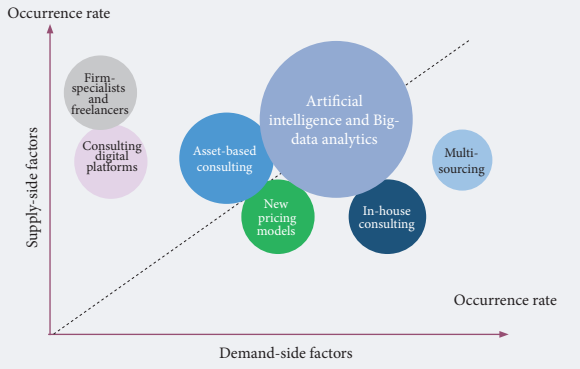
Source: author, based on data from *The Economist* (https://www.economist.com/business/2022/10/04/where-next-for-managements-consiglieri, accessed 28.12.2023; https://www.economist.com/business/2024/03/25/have-mckinsey-and-its-consulting-rivals-got-too-big, accessed 21.04.2024).

Figure 2. Accenture and the Big Four International Accounting Companies' Revenue from Management Consulting Services services, *billion USD*



Source: author, based on data from Traceview Finance and Statista (https://traceviewfinance.com/working-at-big-4-firm-a-comprehensive-guide/, accessed 28.12.2023; https://www.statista.com/statistics/327456/revenue-of-accenture-plc-by-business-line/, accessed 28.12.2023).

Figure 3. Main Factors of Disruptive Change in the Global Consulting Industry



Note: the bubble size reflects comparative assessments of specific factors' the disruptive potential.

Source: author, based on (Nissen, 2018; Birkinshaw, Lancefield, 2023).

the outcomes achieved. Trying to find alternative approaches, many large consulting firms have proposed linking service fees to client performance indicators such as costs, sales, or even market capitalization.

In most cases, such efforts tend to have limited and contradictory results, not so much due to inefficient pricing models as to the serious risks that the implementation of such schemes entails for all parties. In particular, consultants must convincingly substantiate their contribution to the changes in the client company's various performance indicators, which are also affected by many other factors such as market conditions, employees' actions taken on their own initiative, and so on. No less serious risks arise for consulting firms' customers, because performance-based schemes linking compensation to tangible results often undermine the consultants' objectivity and independence. Being financially interested in rapid gains, they may underestimate the long-term effects of their recommendations.[15]

Taking into account the above risks, it is hardly surprising that, despite growing pressure from large clients to change traditional pricing models, the share of reward-based pricing contracts remains relatively small, at 12-15%.[16]

Supply-Side Factors

A notable trend in the global consulting industry in recent years has been the growing role of supply-side disruptors, which often pose greater threats to industry leaders than demand-side factors. First of all, we are talking about the growth of specialized consulting services offered by small firms and independent individual players. Unlike the market majors who offer a wide range of services to potential clients from various industries, specialized consultants' supply is limited and focused on demand from companies in one or two sectors. This focus and low overheads allow small firms and freelancers to successfully compete oun the consulting market on the basis of their deep industry knowledge and attractive pricing.

The traditional clientele of independent players are small and medium-sized businesses, which cannot afford the expensive services of the majors. However, current demand for specialized consulting is increasingly coming from large industrial firms and financial institutions interested in deal-

[14] https://hingemarketing.com/blog/story/top-5-business-challenges-for-management-consulting-firms, accessed on 17.12.2023.

[15] https://consultantjournal.com/blog/setting-consulting-fee-rates, accessed on 11.02.2024

ing with digital transformation challenges. These issues are highly specialized and require deep industry knowledge and experience that the global leaders often lack; they can be handled by relatively inexpensive specialists with relevant qualifications (Consulting.us, 2019).

The growth of specialized consulting is also connected with the increasingly important role that freelancing plays on the skilled labor market.[17] According to a Verified Market Research (2024), in 2020 the global freelance market amounted to 3.8 billion USD, and by 2028 it is expected to exceed 12 billion USD. Another growth driver was the emergence of digital consulting platforms. Initially created to facilitate bringing performers and customers together, such platforms quickly gained popularity and became a distinct supply-side disruptive factor on the global consulting services market. As a special survey of almost 700 top managers of the largest US companies showed (Fuller et al., 2020), in 2009-2020 the number of digital platforms for freelance consultants grew from 80 to more than 330. Over 60% of the respondents reported actively using such platforms to hire consultants, and almost 50% of executives expected their use of this tool to increase in the future.[18]

However, despite the noted growing importance of specialized consulting, independent players, and freelancers, along with digital consulting platforms, they do not pose a serious threat to the hegemony of the global majors. Firstly, neither independent firms nor (especially) freelancers, even those who join forces in professional teams run by experienced managers, have the necessary competencies and, most importantly, sufficient trust of major clients to be given complex large-scale projects which represent the real target of global industry leaders.[19] Secondly, the specialized consulting market players themselves do not seek to compete with traditional leaders, preferring rather to cooperate with them, supplementing their project teams with specialist expertise in specific areas. In turn, the majors use independent consultants to strengthen their market positions, compensating for gaps in specialized knowledge (industry-related, technological, digital, etc.) as may be necessary, or simply strengthening their own resources in case they turn out to be insufficient. It is no coincidence that traditional consulting companies' demand for freelance services through recruiting platforms has recently been growing at its highest rate to date.[20]

Many researchers link the prospects of traditional major industry players losing their leadership positions to the growth of so-called asset-based consulting (ABC). Although the ABC concept remains largely debatable, a number of its elements do reflect the current changes in the industry. Unlike the classic management consulting, which mainly relies upon skilled human resources with their knowledge, experience, and creativity, ABC focuses on monetizing reusable assets: various techniques, templates, analytical approaches, digital tools, and special applications increasingly used in consulting. By transforming such codified knowledge into intellectual assets, consulting firms can use them over and over again to solve the management issues of multiple clients, thus saving significant amounts of resources and stepping up their consultants' productivity.

One of the key aspects of the ABC concept is the "productizing" of services under a new pricing model, which in effect is a new business model for consulting activities. We are talking about disaggregating consulting services into specific elements and separating their codified part into reusable knowledge as a product sold to the client. Being transformed into an ordinary alienable product (as opposed to a service whose consumption requires the direct participation of a producer), intellectual assets form the basis of a new pricing model unrelated to charging for service providers' time. The proponents of ABC consulting noted good prospects for such unconventional approaches to doing business in the early 2010s against the backdrop of rapid growth in the sales of various analytical applications and digital products based on subscription models or one-time payments (Forrester, 2015).

Current quantitative data mainly support optimistic forecasts about the growth rate of the ABC consulting segment. According to Gartner (2020), by 2025 more than 69% of consulting service providers will use such solutions to provide over half of their service portfolio (vs 13% in 2020). However, not all intellectual assets with reuse potential by far,

[16] https://www.consultancy.uk/news/1048/performance-based-pay-gaining-speed-in-consulting, accessed on 28.12.2023.

[17] The so-called "freelance revolution" happened at the "intersection" of digitalization and the impact of the global COVID-19 pandemic, during which millions of skilled professionals appreciated the benefits of remote work with a flexible schedule and optimized work-life balance, while employers took advantage of the chance to save on workplace costs.

[18] As the number of registered consulting platform users increases, customers' ability to determine freelance consultants' compensation rates increases as well by encouraging price competition between the latter. Indirect network effects in the form of the improved quality of human resources offered by platforms, due to the increased range of professional skills and qualifications of registered professionals, turn out to be no less important.

[19] As one of the most prominent experts in the consulting industry noted, "one cannot imagine that the head of a Fortune 500 company would hire freelance consultants to run a serious project, since if they fail, he risks losing his job. Trust is very difficult to build through online interaction models, but it's crucial for making a deal when the stakes are particularly high." (https://www.spencertom.com/2018/04/14/uberisation-of-consulting-a-major-disruption-or-merely-hype/, accessed on 28.12.2023).

[20] https://www.forbes.com/sites/jonyounger/2020/12/14/freelance-management-consulting-in-2021-optimism-abounds-after-a-tumultuous-year/, accessed

even those owned by the largest consulting firms, are in demand on the market. Real client demand is only visible for tools based on new-generation digital technologies, primarily BD analytics and AI, which are increasingly integrated and applied in combination with others. These products have already been demonstrating such impressive growth and functionality that they are becoming a disruptive driver in the global management consulting industry on their own.

Digital products based on BD analytics and AI have created the most promising segments of the modern global consulting market in terms of predicted growth, especially against the background of the rapid development of generative AI tools. According to the most conservative estimates, the AI consulting market should grow from 5.5 billion USD in 2022 to more than 45.6 billion in 2031, i.e., at an average annual rate of 26.5% during the forecast period (Business Research Insights, 2024). Similar growth rates are predicted for the global BD analytics consulting market. Spherical Insights estimates that it will grow from 61.4 billion USD in 2023 to 581.3 billion in 2033, or at an average annual rate of 25.2%.[21]

The disruptive potential of BD analytics and AI tools creates risks not only for the majors but for the entire consulting industry as a whole (Beck, Libert, 2018; Kaplan, 2023). AI technologies such as machine and deep learning, neural networks, natural language processing, and process robotization allow for automating many consulting functions. Thus, one of the labor-intensive and expensive components of most strategic consulting projects traditionally relates to collecting and analyzing information about client companies' business environment, industry trends, the behavior of competitors, suppliers, customers, etc. The use of BD analytics and AI tools allows one to not only significantly accelerate the implementation of these tasks and achieve more accurate results, but also do it at a significantly lower price. A good example of a firm integrating such tools is the US-based firm Palantir Technologies, which has developed a unique Foundry platform to effectively support strategic decision-making in a variety of industries.

In operations consulting projects, most often aimed at improving certain business processes and reducing costs, BD analytics and AI can help with the labor-intensive parts of the current state diagnostics, identifying bottlenecks, and streamlining business processes based on best practices. For example, a smart process mining tool developed by the German company Celonis allows one to automatically identify zones of inefficiency in the supply chain and production, thus automating the traditional management consultant work. Based on machine learning technology, the US-based firm Mosaic has developed a predictive model for maintenance of construction and mining equipment. Its implementation allowed a global manufacturer of such equipment and its customers to effectively predict equipment failure time and significantly reduce operating costs by reducing the downtime and optimizing repair schedules.

Using BD analytics and AI tools to model behavior patterns of various market participants (first of all customers), build and analyze development scenarios for a particular industry (market segment), etc. opens up wide prospects. For example, the digital product line jointly developed by the US companies Dunnhumby and Placer.ai combines expert customer data analytics with AI-based technology to provide manufacturers and users of consumer goods with unique insights into factors affecting the attraction of clients to retail locations. Netflix, a global entertainment industry leader, has adapted machine learning algorithms to analyze user preferences and develop a recommendation system for its streaming service. After several years of using the system, a significant improvement of the indicators was recorded related to the interest in content and subscriber retention.[22]

The popularity of generative AI technologies is growing at an accelerated rate. A large-scale international survey of executives at the 300 largest corporations across industries conducted in December 2023 found that by the end of 2024, 74% of these companies expect to use generative AI tools for strategic analysis and product innovation purposes (MIT, 2023).

Thus, a growing number of labor-intensive tasks previously performed by external consultants (and not just routine ones, but also more complex ones that are still amenable to formalization) are being "handed over" to new-generation digital tools. However, it would be too early to talk about an existential threat to the management consulting industry, or to traditional industry leaders' positions. The AI development prospects may be difficult to predict, but it is already evident that even the most advanced BD analytics and AI systems lack a number of key management consulting properties that are fundamentally important for making management decisions, such as creativity, critical thinking, human intuition, and empathy. AI-based systems

on 08.12.2023.

[21] https://finance.yahoo.com/news/global-data-analytics-market-sise-090000523.html, accessed on 28.02.2024.

and tools cannot adequately assess complex social interactions, especially cultural and emotional aspects of communication. Situations that require taking into account the human factor and the use of emotional intelligence turn out to be beyond AI tools' capabilities, while applying these tools in such cases can be extremely risky.

The potential to increase the beneficial impact of management consulting by replacing consultants in many labor-intensive jobs and freeing up their time to deal with more complex issues that require creativity, relevant experience, and professional intuition, makes BD analytics and AI tools unquestionably valuable. It is no coincidence that the broad adoption of such tools in almost all sectors of the economy has sharply increased the demand for consulting services to support their application. As highlighted in a recent study of the latest consulting market trends, it became very clear from 2023 that "the advancement of sophisticated technologies like data analytics and generative artificial intelligence (genAI) are not slowing demand for consulting services. In fact, the opposite is true. Companies in every industry are turning to consultants for guidance in adopting new tools and integrating them into their business strategies." [23]

The positions of global leaders are also strengthening. While at the end of the 2010s many analysts were pretty sure that dynamic technology companies will undermine the majors' dominance of the consulting industry through the massive application of new software solutions based on BD analytics and AI, at the beginning of this decade, such illusions faded. The results of a survey of consulting tenders held in 2022 by 1,222 major clients in 12 countries[24] are quite indicative of this point of view. According to its findings, global industry leaders remain undisputed favorites in terms of the number of tenders they win, and their gap with other market players is only growing.

The key strategies of the leading consulting firms' successful adaptation to the mass adoption of BD analytics and AI include M&A deals with the developers of such products, the creation of strategic alliances with technology market players, and the accelerated development of their own potential in the area. One of the first to go along the M&A path with developers of new-generation digital tools was McKinsey, who acquired QuantumBlack, the leading UK manufacturer of analytical systems, as early as in 2015. Other examples of large M&A deals in the industry include BCG's acquisition of the US developer of AI tools, Formation; Accenture's purchase of the Japanese BD analytics and AI consulting firm ALBERT; and the acquisition by Deloitte of two Canadian firms specializing in AI products and data integration, Dataperformers Company Inc and Groundswell Group Inc.

Various forms of strategic partnerships with developers of innovative digital products have become an even more widespread adaptation mechanism. Thus, Bain formed a strategic alliance first with OpenAI, one of the world's leading developers of AI solutions (including ChatGPT), and then with Microsoft, to develop collaboration on the AzureOpenAI platform. PWC partnered with Google for Work to develop a line of cloud-based digital business transformation solutions, while KPMG established a joint venture with McLaren to take advantage of its predictive analytics technologies and other products.

The consulting industry majors are actively developing their own tools based on new-generation technologies. BCG has established a special division, BCG X, to develop digital products; it already employs more than 2,500 professionals in this area, and the plan for the next three years is to increase their number to 5,000. As BCG X summed up its strategy, "We want to be the first company to be tech and consulting at the same time."[25] However, BCG's strategy is far from unique; almost all leading market players are moving in the same direction. One of the first was Accenture, which relies upon the accumulated competencies and extensive information consulting experience to develop innovative solutions, especially for the implementation of various IT systems. A 2021 benchmarking study on business software engineering performance conducted by Everest Group analysts and covering 31 of the world's top companies specializing in this area, revealed Accenture's leadership in digital product development (Everest Group, 2021). At the same time, while building up their own product development potential, the global majors do not turn into technology companies but maintain their industry specialization. Combining existing competencies with new ones (in digital development), they successfully adapt to the technological shifts accompanying digital transformation.[26]

Conclusion

Despite the distinct disruptive trends in the global management consulting industry, its structure has

[22] https://digitaltransformationskills.com/ai-for-business/, accessed on 18.04.2024.

[23] https://www.alpha-sense.com/blog/trends/consulting-industry-trends/, accessed on 28.12.2023.

[24] https://www.sourceglobalresearch.com/blog-post/how-transformation-is-transforming-the-competitive-landscape-in-consulting, accessed on 19.11.2023.

[25] https://sifted.eu/articles/tech-investments-digital-transformation-brnd, accessed on 18.12.2023.

[26] In terms of digital transformation, the consulting leaders, like incumbents in any industry, pay more attention to digitalizing value creation, and to promoting their value proposition to customers than to revising monetization models in these areas (Klos et al., 2023).

proven to be unusually resilient to transformation processes. Statistics show that traditional consulting leaders have demonstrated dynamic growth for decades, even in unfavorable years for the industry. Industry majors not only maintained their dominant positions in all key markets, but significantly strengthened them through intensive penetration into the new segments created by digitalization processes.

The destructive scenarios for the consulting industry giants put forward by the proponents of disruption theory clearly underestimate the industry's features and, above all, the majors' flexible adaptability, which has helped them to retain their positions on key markets for many years. Industry leaders demonstrated this flexibility by successfully adapting to the massive integration of new-generation digital technologies into the consulting business, through acquisitions of the developers of digital products, the creation of strategic partnerships with tech companies, and accelerating the build-up of their own technological potential in most advanced areas.

The leading players of consulting industry demonstrated exceptional dynamism, based on well-established processes and accumulated management experience in identifying and developing promising market segments. Though the concept of firms' dynamic capabilities has already received significant attention in the academic literature (Teece, 2018; Werner et al., 2022; Ellström et al., 2022; Schneider et al., 2023), it remains poorly developed regarding consulting companies, which have unique advantages in this area. Unlike businesses in other industries, the consulting majors do not need to conduct special research, create detailed customer profiles, identify their problem areas and "pain points", or develop plans to meet the emerging needs.[27] All these processes have long been established and are continuously maintained in the scope of their core consulting business, while the knowledge and experience accumulated over the years is carefully recorded and structured, circulating in corporate knowledge management systems and adding to consultants' creative arsenal (Tavoletti et al., 2022; Magistretti et al., 2021).

The dynamic capabilities of the consulting majors are reflected in their thought leadership in the area of corporate management: the continuous generation of new management concepts requiring large businesses to restructure and creating new demand for expensive consulting services to support this business transformation. Thanks to the accumulated intellectual potential and long-standing reputation as a source of advanced management ideas, industry leaders can significantly influence the strategic agendas of multinational corporations, leading financial institutions, and even government agencies. Strategic planning, business process reengineering, integrated information systems, innovative business models, digital transformation, the creation of platform ecosystems, and the application of AI technologies are all regularly updated agenda items which raise important issues for the boards of directors of the largest corporations and banks in the world, and were developed and disseminated by the global consulting industry majors. Such fundamental challenges fuel the demand for large-scale consulting projects as the main source of leading industry players' market dominance, translating their thought leadership into stable revenue flows.

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[27] https://www.socialchamp.io/blog/niche-market/, accessed on 21.04.2024.

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