Course of
Digital Management Consulting

Digital technologies impact on Management Consulting
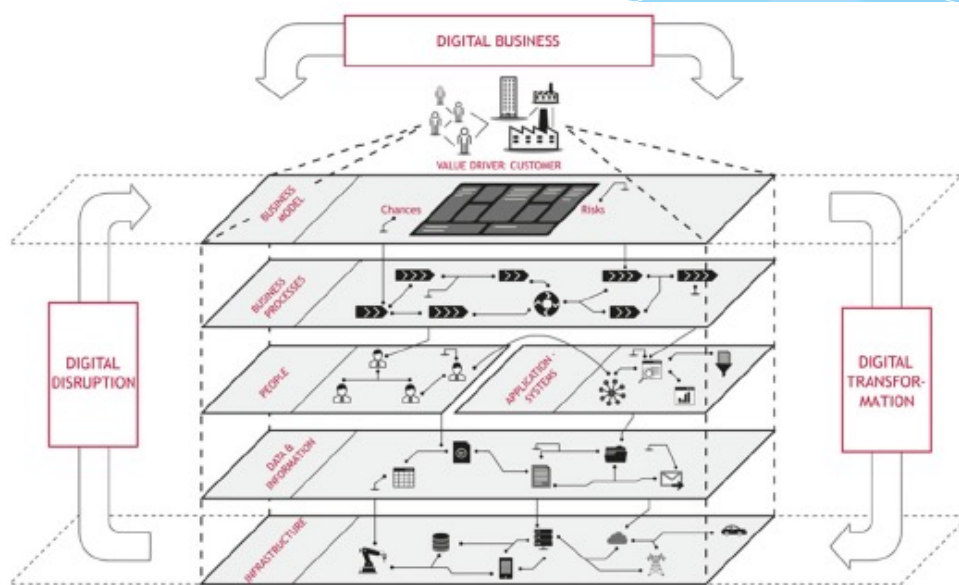
Prof. Corrado Cerruti

Agenda

➢ Digital Transformation overview;

➢ Knowledge Management in a MC firm;

➢ Disruption in Management Consulting;

➢ Emerging digital business models;

➢ AI impact on Management Consulting.

Digital Transformation

Digital Transformation can be described as the impact on the society (and on the companies and their relationships with the customers) of digitalization.
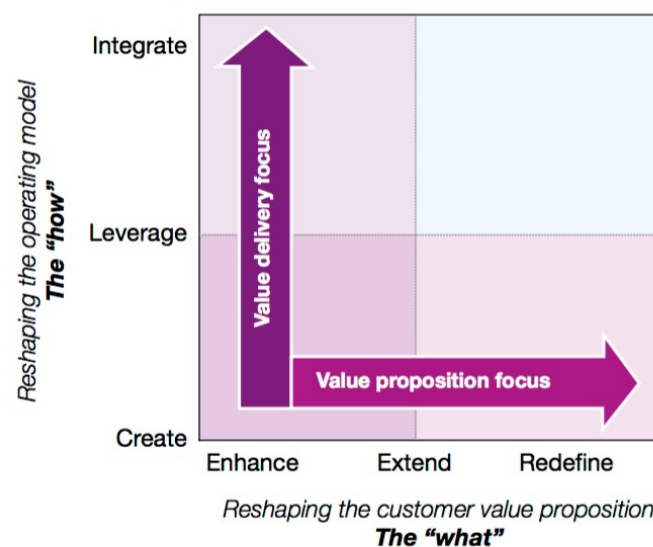

Source: Nils Urbach and Maximilian Röglinger, Digitalization cases, 2019

Digital Transformation: what & how

a. Reconfiguring the customer value proposition (**what** is being offered)
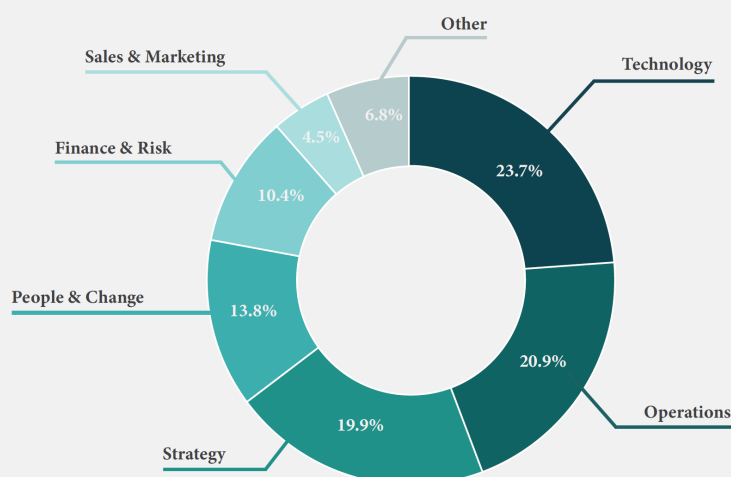b. Reshaping the operating model (**how** it is delivered).
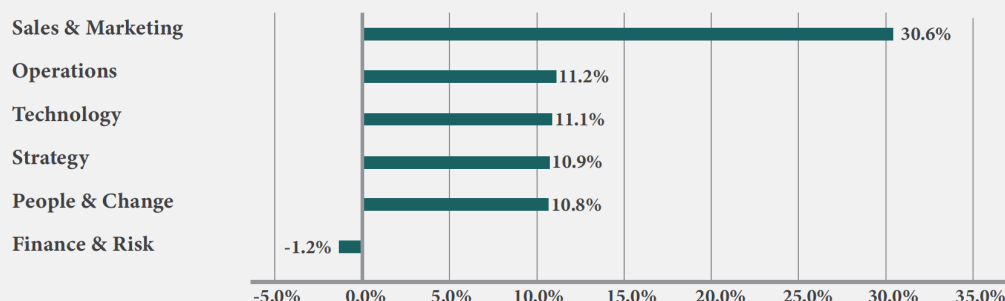

Elements of digital transformation

Source: IBM Institute for Business Value analysis.

Assessing the Management Consulting industry

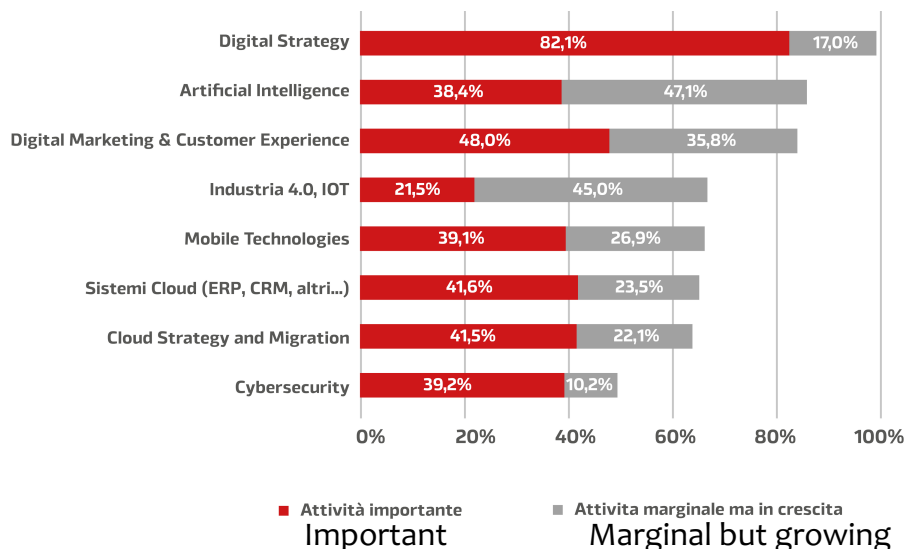**MC turnover market share by Service Lines (European panel 2021)**

Technology — 23.7%
Operations — 20.9%
Strategy — 19.9%
People & Change — 13.8%
Finance & Risk — 10.4%
Sales & Marketing — 4.5%
Other — 6.8%

Source: FEACO-Tor Vergata "Management Consulting in Europe" January 2023

Service Line	Value
Sales & Marketing	30.6%
Operations	11.2%
Technology	11.1%
Strategy	10.9%
People & Change	10.8%
Finance & Risk	-1.2%

Digital transformation related consultancy

Digital transformation related consultancy presents roughly 1/3 of the overall Italian consulting market.
70% of the the digital transformation projects (in value) is managed by large consulting companies

	Important	Marginal but growing
Digital Strategy	82,1%	17,0%
Artificial Intelligence	38,4%	47,1%
Digital Marketing & Customer Experience	48,0%	35,8%
Industria 4.0, IOT	21,5%	45,0%
Mobile Technologies	39,1%	26,9%
Sistemi Cloud (ERP, CRM, altri...)	41,6%	23,5%
Cloud Strategy and Migration	41,5%	22,1%
Cybersecurity	39,2%	10,2%

Attività importante — Important
Attivita marginale ma in crescita — Marginal but growing

Source: Assoconsult Annual Report 2021/22

Knowledge Mgmt strategies in a MC firm

Leveraging systems (mainly IT)

Leveraging people and relationships

CODIFICATION		PERSONALIZATION
Provide high-quality, reliable, and fast information-systems implementation by reusing codified knowledge.	**Competitive Strategy**	Provide creative, analytically rigorous advice on high-level strategic problems by channeling individual expertise.
REUSE ECONOMICS: Invest once in a knowledge asset; reuse it many times. Use large teams with a high ratio of associates to partners. Focus on generating large overall revenues.	**Economic Model**	EXPERT ECONOMICS: Charge high fees for highly customized solutions to unique problems. Use small teams with a low ratio of associates to partners. Focus on maintaining high profit margins.
PEOPLE-TO-DOCUMENTS: Develop an electronic document system that codifies, stores, disseminates, and allows reuse of knowledge.	**Knowledge Management Strategy**	PERSON-TO-PERSON: Develop networks for linking people so that tacit knowledge can be shared.
Invest heavily in IT; the goal is to connect people with reusable codified knowledge.	**Information Technology**	Invest moderately in IT; the goal is to facilitate conversations and the exchange of tacit knowledge.
Hire new college graduates who are well suited to the reuse of knowledge and the implementation of solutions. Train people in groups and through computer-based distance learning. Reward people for using and contributing to document databases.	**Human Resources**	Hire M.B.A.s who like problem solving and can tolerate ambiguity. Train people through one-on-one mentoring. Reward people for directly sharing knowledge with others.

M. T. Hansen, N. Nohria, T. Tierney. "What is your strategy for managing knowledge?" – *Harvard Business Review*, March-April 1999

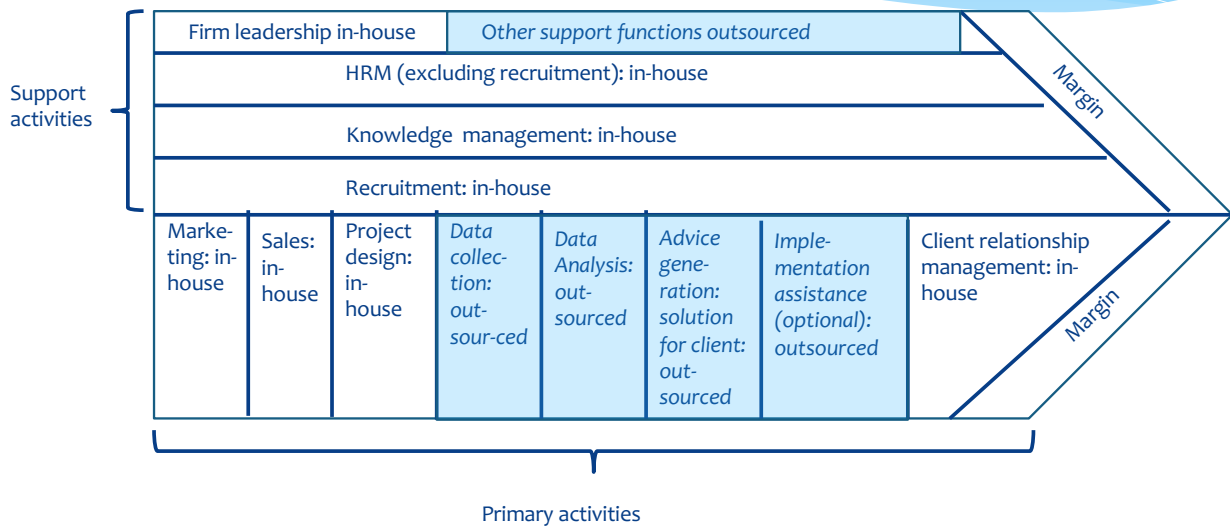# HOW MUCH INFORMATION TECHNOLOGY DO YOU NEED?

The level of IT support a company needs depends on its choice of knowledge management strategy. For the codification model, heavy IT support is critical; for the personalization model, it is much less important. Managers who are implementing the former should be prepared to spend a lot on large, sophisticated electronic repository systems. Andersen Consulting, for example, has developed proprietary search engines. Ernst & Young has installed a hierarchy of databases. At the top are "elite" databases that are restricted in size and contain the best knowledge on a particular topic. Next come larger databases containing specific "knowledge objects"; finally there are the much larger "holding tanks" for all kinds of other materials.

Over the past few years, Andersen Consulting and Ernst & Young have each spent more than $500 million on IT and people to support their knowledge management strategies. On a much smaller scale, Access Health initially invested $16 million in its knowledge management system when its revenues were a modest $20 million; later it spent another $40 million on the system in order to have sufficient scale to generate $100 million in revenues.

The two knowledge management strategies require different IT infrastructures as well as different levels of support. In the codification model, managers need to implement a system that is much like a traditional library – it must contain a large cache of documents and include search engines that allow people to find and use the documents they need. In the personalization model, it's most important to have a system that allows people to find other people.

M. T. Hansen, N. Nohria, T. Tierney. "What is your strategy for managing knowledge?" – *Harvard Business Review*, March-April 1999
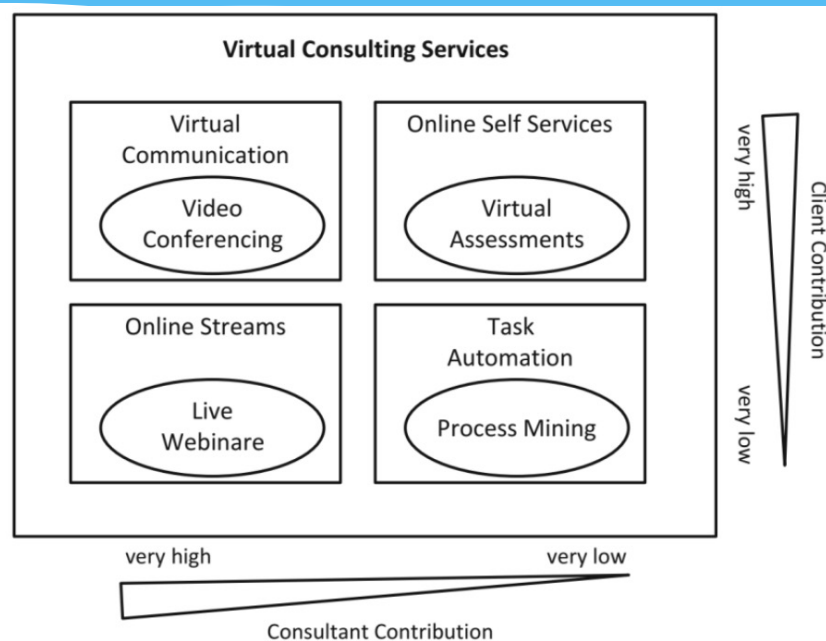
Disaggregation of the value chain

Firm leadership in-house			*Other support functions outsourced*					
HRM (excluding recruitment): in-house								
Knowledge management: in-house								
Recruitment: in-house								

Support activities

Marke-ting: in-house	Sales: in-house	Project design: in-house	*Data collec-tion: out-sour-ced*	*Data Analysis: out-sourced*	*Advice gene-ration: solution for client: out-sourced*	*Imple-mentation assistance (optional): outsourced*	Client relationship management: in-house

Margin

Primary activities

Because of some drivers (e.g. Client sophistication; Development in ICT) it is possible to build partial value chain by **outsourcing** and by **offshoring.** The main consequences are: growth of competition and transparency in consulting offerings and fees.

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Alternative approaches to leverage on new digital technologies

Source: Volker (Eds.) (2018) Digital Transformation of the Consulting Industry

Disruption in the Consulting industry

At traditional strategy-consulting firms, the share of work that is classic strategy is now about 20%—down from 60% to 70% some 30 years ago.
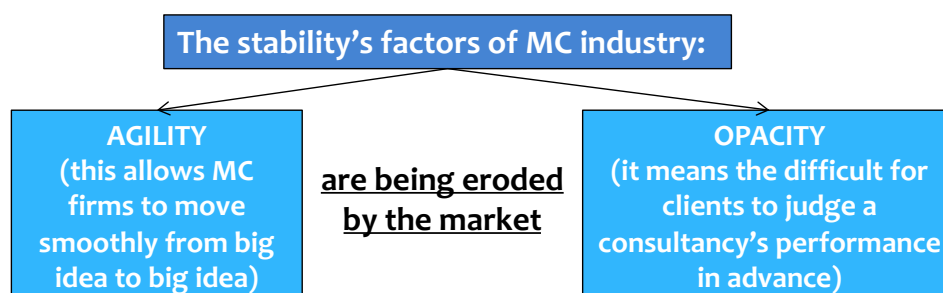
Consultancies are shifting from integrated solution shops to modular providers, which specialize in supplying one specific link in the value chain.

Source: Christensen et al., Consulting on the cusp of disruption, Harvard Business Review, Oct. 2013

Disruption in the Consulting industry

MC's fundamental **business model has not changed in more 100 years**. It has always involved <u>sending smart outsiders into organizations</u> for a finite period of time and asking them <u>to recommend solutions</u> for the most difficult problems confronting their clients.

Now, the **same forces** that disrupted so many businesses are <u>starting to reshape the world of consulting.</u> Early signs of this pattern in consulting industry include *increasingly sophisticated competitors* with **nontraditional business models** that are gaining acceptance. However, we are still early in the story of consulting's disruption.

The stability's factors of MC industry:

AGILITY (this allows MC firms to move smoothly from big idea to big idea)	**are being eroded by the market**	OPACITY (it means the difficult for clients to judge a consultancy's performance in advance)

Source: Christensen et al., Consulting on the cusp of disruption, Harvard Business Review, Oct. 2013

Disruption in the Consulting industry

THE CHALLENGE

The same forces that disrupted industries such as steel and publishing are starting to re-shape the consulting industry, with profound implications for its future.

THE ANALYSIS

Established firms have tra-ditionally relied on opacity and agility to maintain their industry leadership, but those two advantages are disappear-ing in the increasingly transpar-ent and sophisticated business environment.

THE FUTURE

Now those firms are starting to rethink their own service models and even to experiment with new models that could prove disruptive to the core business.

1. Are you formally tracking the evolution of your clients' needs and how well you continue to serve them? Has it recently become harder to win clients and to satisfy them? Are you losing your small clients or your large ones?

2. Are you being forced downstream in the pro-posal process with estab-lished clients, responding to rather than shaping requirements? Are clients having their procurement departments vet your proposals or monitor your progress?

3. Are you competing against new rivals for business, even with established clients? Are these rivals increasingly specialized?

4. Are your clients asking that you partner with nontraditional advisers or use their work products? Are these advisers leveraging automation, databases, and other technical assets?

5. Are you revising your business model in order to manage smaller projects at acceptable profit? Is this activity looked down on in your firm?

Source: Christensen et al., Consulting on the cusp of disruption, Harvard Business Review, Oct. 2013

Disruption in the Consulting industry

Solutions featuring greater *predictive technology* and *automation* will only get better with time. What's more, **data analytics and big data** radically level the playing field of any industry in which opacity is high.

The **big data company** can automatically evaluate vast amounts of data, identify stastically relevant insights, and present them through an animated briefing, rendering the junior analyst role obsolete. These companies, most of them are startups, lack the brand reputation of the incumbents and are as partners to them.

This disruption is creating **new business models**, challenging the incumbents, especially those who are not willing or capable to change!

"An organization's capabilities become its disabilities when disruption is afoot."
—Clayton M. Christensen, *The Innovator's Solution*

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Disruption in the Consulting industry: alternative business models

SOLUTION SHOP

• Structured to diagnose and solve problems whose scope is undefined

• Delivers value primarily through consultants' judgment rather than through repeatable processes

• Customers pay high prices in the form of fee-for-service

EXAMPLES
McKinsey, Bain, BCG, IDEO

VALUE-ADDED PROCESS BUSINESS

• Structured to address problems of defined scope with standard processes

• Processes are usually repeatable and controllable

• Customers pay for output only

EXAMPLES
Motista, Salesforce.com, McKinsey Solutions

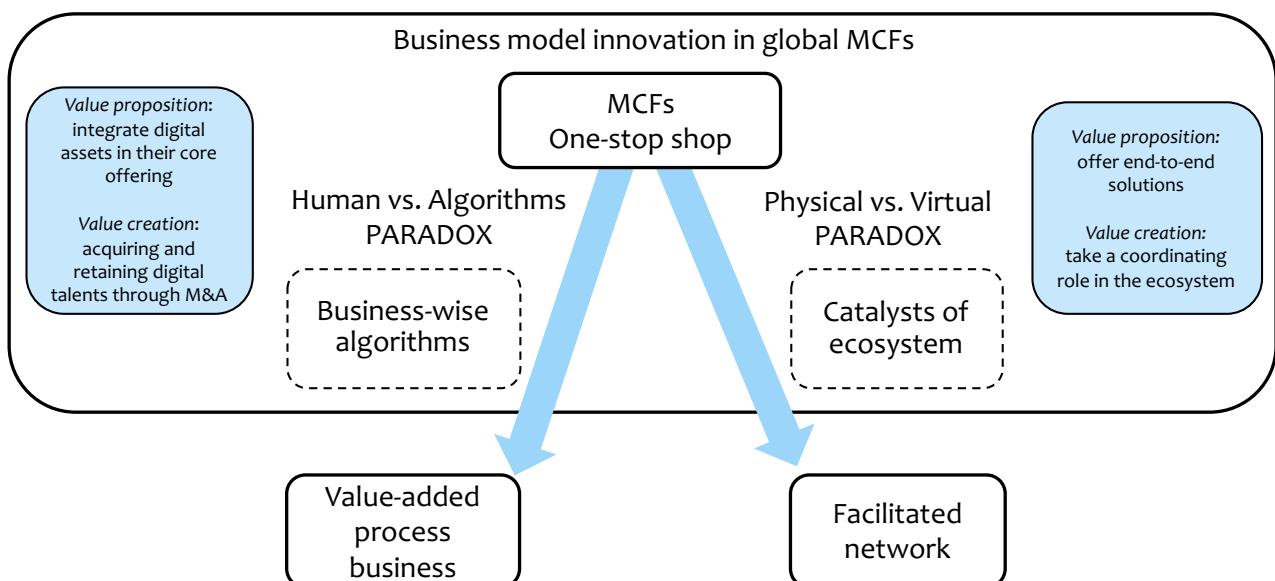Accenture, Deloitte (both moving toward solution shop)

FACILITATED NETWORK

• Structured to enable the exchange of products and services

• Customers pay fees to the network, which in turn pays the service provider

EXAMPLES
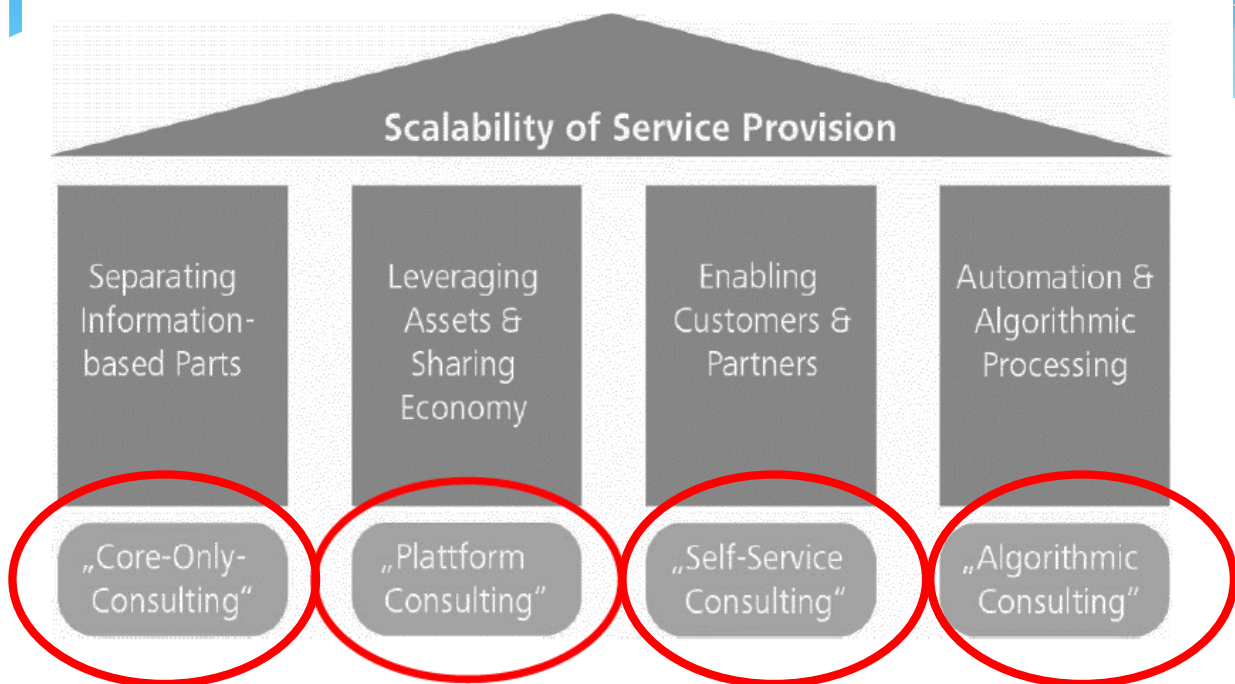OpenIDEO, CEB, Gerson Lehrman Group, Eden McCallum, BTG

Source: Christensen et al., Consulting on the cusp of disruption, Harvard Business Review, Oct. 2013

New MC business models IT enabled

Business model innovation in global MCFs

Value proposition: integrate digital assets in their core offering

Value creation: acquiring and retaining digital talents through M&A

MCFs
One-stop shop

Human vs. Algorithms
PARADOX

Business-wise algorithms

Physical vs. Virtual
PARADOX

Catalysts of ecosystem

Value proposition: offer end-to-end solutions

Value creation: take a coordinating role in the ecosystem
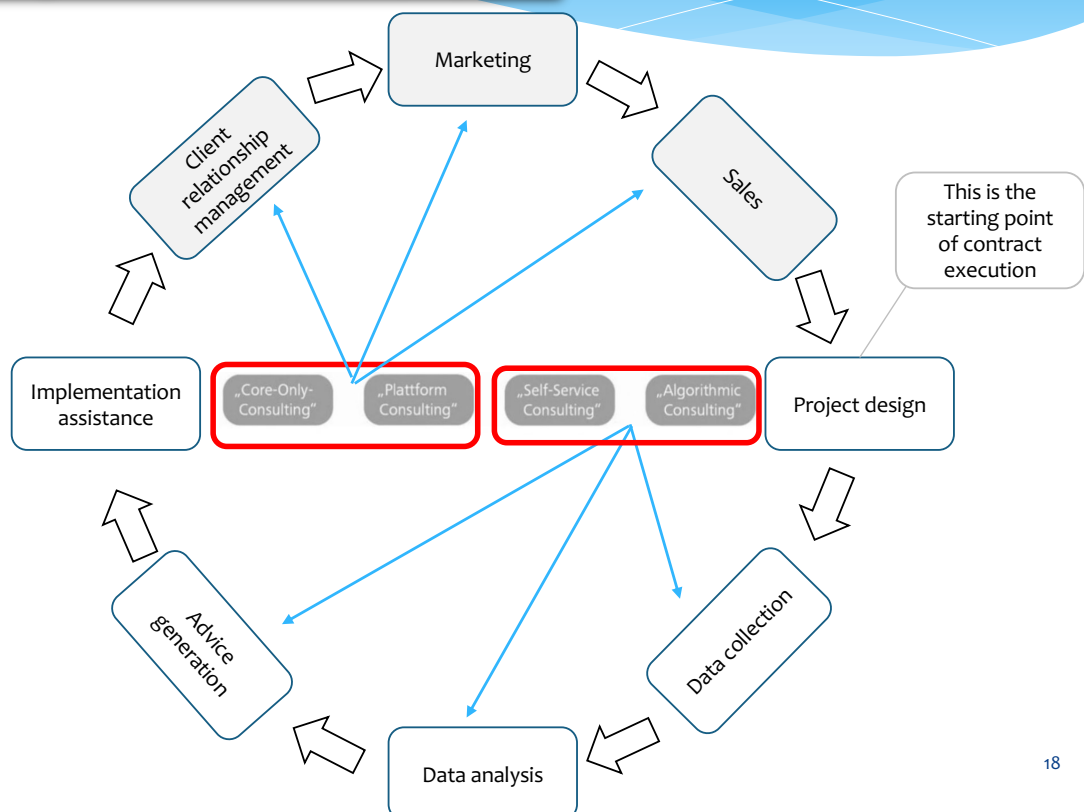
Value-added process business

Facilitated network

Source: Business model innovation and digital transformation in global management consulting firms, 2021

Alternative approaches to new digital business models for MC firms

Scalability of Service Provision

| Separating Information-based Parts | Leveraging Assets & Sharing Economy | Enabling Customers & Partners | Automation & Algorithmic Processing |

„Core-Only-Consulting" „Plattform Consulting" „Self-Service Consulting" „Algorithmic Consulting"

Source: adapted from Werth & Greff, 2018

The management consultancy cycle

- Marketing
- Client relationship management
- Sales
- This is the starting point of contract execution
- Implementation assistance
- „Core-Only-Consulting" „Plattform Consulting"
- „Self-Service Consulting" „Algorithmic Consulting"
- Project design
- Advice generation
- Data collection
- Data analysis

AI impact on MC activities
(according to ChatGPT – May 2023 – 12 version)

AI has the potential to significantly impact MC industry in several ways:

1. Data analysis and insights

2. Automation of repetitive tasks

3. Enhanced decision-making support

4. Expertise augmentation

5. Client interaction and engagement

6. Industry-specific applications

Overall, AI has the potential to augment and transform the management consulting industry, enabling consultants to provide more data-driven insights, improve decision-making, and deliver enhanced value to their clients.

However, it's important to note that while AI can bring numerous benefits, there are also considerations and challenges. These include ethical implications, data privacy concerns, potential job displacement, and the need for human judgment and creativity in problem-solving.

The "Big Four" & AI
(not only in consulting)

All four firms have implemented AI solutions in a variety of areas, such as audit, tax, and advisory services, as well as other areas such as supply chain management, risk management, and human resources.

All four firms have reported improvements in accuracy, efficiency and effectiveness of their tasks, and their overall performance.

All four firms attempt to gain a clear understanding of the specific problems that can be solved by AI implementations.

All four firms have invested in the development of AI utility for their futures

Source: Amin Abolhassani, MScBA Thesis on Artificial Intelligence in MC - the Case of "The Big Four"

Examples of AI used by the "Big Four"

Deloitte has established Deloitte AI Institute
Connecting enterprises through perspectives and analysis to the entire AI ecosystem
https://www2.deloitte.com/us/en/pages/deloitte-analytics/articles/advancing-human-ai-collaboration.html

KPMG has developed several AI-based systems, such as KPMG Ignite
KPMG Ignite is a powerful blend of platform, portfolio and people designed to accelerate your artificial intelligence (AI) efforts.
https://advisory-marketing.us.kpmg.com/speed/ai-ignite.html

EY Has developed several AI-based systems, such as EY Canvas
Our global audit analytics platform allows analytics to be embedded into every significant aspect of the audit
https://www.ey.com/en_gl/audit/technology/helix

PwC has developed several AI-based systems, such as: DataRobot, PwC GL.ai or PwC Halo:
Reimagining your audit experience with Halo
https://www.pwc.com/mu/en/services/assurance/risk-assurance/tech-assurance/general-ledger-audit.html

Examples of disruptors in MC

GLG Professional Services as consulting platform
https://glg.it/professional-services-firms/

Business Talent Group as consulting platform
https://businesstalentgroup.com

Wikistrat – (expert) crowdsourced consultancy
https://www.wikistrat.com/

McKinsey Solutions
https://www.mckinsey.com/solutions

Inspirient for Advanced Analytics/AI
https://www.inspirient.com/

Quantumblack for Advanced Analytics/AI (McKinsey)
https://www.quantumblack.com/

IBM/Myinvenio for process mining
https://www.my-invenio.com

Salesforce for CRM
https://www.salesforce.com/?ir=1

SAP Analytic Cloud
https://www.sap.com/uk/products/cloud-analytics.html