

Morinosuke Kawaguchi, MEGATRENDS 2014-2023 **Table of Contents**

www.morinoske.com

Theme	Chapter	original Japanese title, page no.	Summary
1. Trends in developed countries and mature markets	Senior labor force utilization	1. シニア労働力活用 43	With rising life expectancy the labor market demographics are changing. One of the challenges is how to best make use of the senior labor force's experience and talents, also in the face of lifelong learning and graduation into new jobs even at later stages in life.
	2. Senior support	2. シニア支援 47	Associated with higher life expectancy are business opportunities centered around taking care of and supporting the elderly along the different stages of aging. Large corporations are already developing different service, logistics and product solution beyond the obvious idea of nursing.
	3. Working women	3. 女性の社会進出 52	With more women entering the labor market, a whole system develops around them aimed at supporting them. Especially the balance between career and family is giving rise to new concepts, with some of the business initially catering to working women seeing a rising popularity among men.
	4. Dilution of family structures	4. 家族の希薄化 57	Family structures have seen a drastic changes in just a few decades, and traditional patterns are falling apart or become diluted, giving rise to both new social structures with the demands as well as requirements for bridging gaps that have emerged.
	5. Market for the elderly	5. 高齢者の消費 61	This chapter looks into the consumption trends among seniors with significant disposable income. Opportunities in this sector, such as in health/anti-aging, leisure or traveling that cater especially to the elderly, are abundant.
	Child education market	6. 幼児教育市場の変化 65	With fewer children per family, a special emphasis is put on the quality of raising them. This proves particularly true in education which is seen as the best investment in a child's future. To foster education and intellect is becoming especially desirable thanks to which the child education or edutainment market has yet to peak.
	7. Pet market growth	7. ペット関連市場の拡大 69	Pet ownership, especially in urban areas, is booming, and pet visibility is increasing both in public areas and even at the work place. With a growing group of owners that are spending increasing amounts of money on their pets, pet-friendliness and pet services are two major components in winning over the customers even in sectors only indirectly related to this market.
	8. Aging infrastructure	8. 老朽インフラ対策 74	Mature economies are facing rising costs in maintaining their infrastructure which is more and more subject to deterioration. This is paired with the challenge which infrastructure has to be neglected out of cost-performance reasons as rural population density is decreasing. Outlooks toward modernization technologies, monitoring solutions and planning topics form part of this chapter.
	Intergenerational labor gap	9. 世代間格差対策 79	As especially tangible in the years after the financial crisis, the gap between adults that retain jobs and young, unemployed people is increasing. This chapter explores the different models of dealing with this gap including work-sharing concepts, company concepts and the future role of governments.
	10. Immigration business	10. 移住ビジネス 84	Both immigration and migration pose challenges for countries. While the retired may choose to live in less expensive, nonetheless attractive countries that are starting to prepare for the influx of senior long-term tourists, the immigration of labor force offers equal business opportunities.
	11. Tourism business	11. 観光ビジネス 91	Tourism contributes hugely to a country's GDP and may even be the most important source of foreign currency. In a global competitive environment where branding the attractiveness as tourist destination is key, new forms of tourism including health, social, green or education are developing.
	12. Education business	12. 教育ビジネス 96	This chapter analyzes the global education business for adults. In the case of Japan, competing with the academic top brands is by now near impossible. However, for those needing to catch up there is a large, untapped potential in e.g. skill schools and licensing.
	13. Dutch-style agriculture	13. オランダ型農業立国 101	Dutch agriculture shows that there is still is massive business in the first sector, even for developed countries that lack extensive farmland. Engineering and new business models come into agriculture that, just like the Dutch model, are market-oriented and connected to the value chain (food processing, service and gastronomy industry) and may resemble the Japanese keiretsu. In this case, the profession of the farmer becomes both rewarding and desirable again.
	14. Space satellite and space business	14. 衛星・宇宙ビジネス 106	Satellite launching has become a lucrative business and the market is seeing high growth due to the wide range of application for satellites. While this launching market is divided among the big players EU, China, US and Russia, opportunities arise from the entire industry.
	15. Military and national security technology	15. 軍事技術の強化と輸出解禁 111	Japan is gradually opening up to the hardware military market as a component maker, especially for components not directly related to the weapons themselves. Outside the traditional arms industry, the market which will see most movement is the one for cyber military and cyberwar solutions.
	16. Analog technology	16. アナログ技術への回帰 116	This chapter explores opportunities of analog technologies which still has its merit and in some cases even advantages over digital systems.
	17. Healing function in the society	17. 癒やし機能への欲求 122	Increased stress and pressure to perform are but a few examples why the demand for healing functions are increasing. To keep the own productivity up, a counterbalance is needed. While physical exercise has given rise to gyms, latest neuroscience discoveries facilitate a whole new range of opportunities to take over a "healing function" in society.
	18. Unisex and Feminization	18. 女性化とユニセックス化 127	Modern society becomes increasingly flat, barrier-free - and diluted. This applies not just to social groups, but also to gender roles. Parameters are pointing in the direction of unisex, gender neutralization and feminization. The rise of the male grooming market can thus be seen as a trend towards gender homogeneity. Products and services are adapted to also cater to the other gender, or both at the same time.
	19. Jimotee communities	19.「ジモティー」 「ヤンキー」化する若者 132	"Jimotee" or "hometown lover" refers to a counter-movement to the open society. The term refers to Japanese with less than average disposable income that stayed in their communities and neighborhood, with little interest outside their home turf. With their near-field peer-to-peer culture, they play key role in the stabilization and rejuvenation outside urban centers.
2. Growth opportunities in emerging economies	20. Export of urban infrastructure	20. 都市インフラ輸出の拡大 155	Urbanization in developing countries is advancing rapidly, paired with the need for not only "turnkey" city concepts. Infrastructure planning is multi-layered, beginning from roads, buildings, utility system and communication to finally the branding concept. New Shibuya or New Venice are terms that reflect the need to avoid "soulless" cities, and export of already established city brands poses huge opportunities.
	21.1 Re-discovery of Japan's	21.1. 昭和日本商材の再活用 160	Refers to a perticular type of Reverse Innovation which utilizes old Japanese products or services from the
	Showa period innovation 21.2 Reverse Innovation	21.2. リバースイノベーション 165	time when Japan was an emerging country. The term refers to adapting products and services to appeal to developing and emerging markets, to re-tell the story in the country's context and parameters. Most examples come from top-down (usually selling a cheaper version at lower quality), but some examples show bottom-up opportunities that have gone from local cheap to global premium.



- ■著者・川口盛之助
 ■A4変型判、上製本、カラー、529ページ(4巻構成)
 ■CD-ROM(本体に掲載された図表データを収録)
 ■価格: 450,000円 + 税
 ■発行: 日経BP社
 ■発行日: 2013年12月27日

メガトレンド 2014-2023 Megatrends 2014-2023

- □ Author: Morinosuke Kawaguchi
 □ Book title: Megatrends 2014–2023
 □ A4 size, hardcover, color 529 pages in 4 volumes with CD-ROM
 □ Price: 450,000 Yen = about 4,500 US dollars
 □ Publisher: Nikkei BP in Japan
 □ Published on December 27, 2013



Morinosuke Kawaguchi, MEGATRENDS 2014-2023 **Table of Contents**

www.morinoske.com

Theme	Chapter	original Japanese title, page no.	Summary
3. The negative impact of fast growth	22. Pollution prevention and purification technology	22. 空気や水の汚染防止・浄化技術 185	Business opportunities can generally be sought in three areas: Monitoring and analysis, reduction or prevention, and purification. Trends show how e.g. monitoring functions are outsourced to the crowd, whereas new technologies generate new approaches in anti-pollution and purification.
	23. Food safety challenges	23. 「食の安全」問題 190	Food safety not only relates to combating the risk of food poisoning and contamination. There are also psychological safety checks to consider that relate to culture (e.g. halal) and diet (e.g. sugar content). Apart from this zero sum aspect of prevention, there is also the plus sum aspect check where food may not contain what was promised.
	24. MDR bacteria measures	24. 多剤耐性菌対策 196	Our environment and health system facilitates the rise of Multiple-Drug-Resistance (MDR) bacteria with the threat that illnesses believed to have been defeated will return with antibiotics and vaccine being largely ineffective. The markets either lie in the monitoring/measuring technology or in the shift from anti-biotics to pre- and pro-biotics.
	25. BoP Business	25. ユースバルジと BOP ビジネス 200	Base of the Pyramid (BoP) business models see job creation, micro crediting and facilitation of sustainable eco-systems as key to business. Aid-oriented but still aiming at profit, BoP business models specifically target the poorest socio-economic groups and are seen as vital for sustainable development.
4. Market effects on government function	26. Global zone competition	26. 世界的な特区競争 216	In order to prevail in the global competition, it is not countries but special zones that will increasingly compete against each other in areas such as IT/high tech, education, tourism or the financial industry. The question remains which areas will have highest chance at succeeding and attracting global investments.
	27. Globalization and production maturing	27. 開発〜製造〜消費のグローバル 化 221	Globalization has also meant that developed countries retain R&D while production is outsourced to less cost-intensive areas. In this production lifecycle, the outsourcee is gradually able to recognize requirements and innovations until finally graduating into a specs designer himself. In such situations, solutions for emerging markets can be re-applied to mature markets.
	28. Dilution of public and private sector	28. 官民の境界希薄化、 民間委託 228	The barrier between the public and private sector is fading. In the future, tasks traditionally performed by governments will be outsourced to companies or the public in a shift from big to small governments. Good corporate citizenship and CSR will have a growing impact, while examples such as FixMyStreet reflect how monitoring tasks are being handled by citizens rather than authorities.
5. Rise of sustainable values	29. Energy efficiency	29. エネルギー効率向上 244	Achieving energy efficiency is one of the main challenge related to sustainability. One dimension encompasses all solutions for actual consumption reduction. The second comprises the intelligent combination of two systems (as seen in the hybrid engine). The third and latest dimension points at relational interaction of systems.
	30. (Natural) disaster protection	30. 天災対策 249	Natural disasters made headlines in the past years, Japan being one of countries most sensitive to this topic. Then there are man-caused disasters, both unintended and intended (terrorist attack, scandals, or sabotage to name a few). In prevention, calculation and preparation of carry-on-solutions lie a variety of opportunities to explore in the public as well as private sector.
	31. Shale gas impact	31. シェールガスによる 揺り戻し 254	The exploitation of shale gas particularly in the US is set to lead to huge changes not just in the energy sector, but also in the chemical industry, petrol combinats, automotive and plastics industry and even more peripheral industries such as the fertilizer industry. Shale gas may see the emergence of new strong players while traditional businesses are challenged.
	32. Food shortage	32. 食料不足対策 259	Food supply is essential and imperative, leading to new farming technologies to increase harvest, improve food mileage, increase food preservations, and emergence of substitution industries.
	33. Raw material shortage	33. 資源枯渇対策 264	Dealing with raw material shortage in conventional and non-conventional materials sees the emergence of new types of mining such as city mining and substitution trends, among many others.
6. Post-industrial society: commercialization of the mind	34. Consumables market	34. 脱売り切り消耗品化 281	Manufacturing and business model evolution explore opportunities in the separation of platform and consumables, with the latter the actual profit-maker. New business applications arise from this razor-and-blade concept, particularly but not at all limited to the digital industry.
	35. Maintenance Management and BPO	35. 保守運用ビジネス〜BPO 286	Business Process Outsourcing (BPO) comprises the shift from profit from manufacturing to profit from maintenance and leasing, especially when the platform has long lifecycles. BPO dig deep into the client's own system to become tightly linked to the business process, whether it is through maintenance, remote controlling or human-oriented care-service.
	36. Insurance and financial industrialization	36. 保険・金融業化 291	As insurance concepts permeate non-financial industries, they are most often heavily related to Quality Assurance. The need for guarantee, security and validation is the driver of this development. The opportunity lies in taking the position of the "ensurer", the one who built the trust to vouch for quality or validity of something in areas where such assurance is more and more required or information is overwhelming.
	37. Fabless manufacturing	37. ファブライト 開発へのシフト 298	Stemming from the semiconductor industry, fabless manufacturing is based on the idea that the company retains design, development and marketing of the product and that the winner is the one that designs the product specs, not the actual manufacturer. Many brands have moved into fabless production, showing that manufacturing is becoming powerless and that understanding of user demands is the key.
	38. Evolution of Marketing	38. マーケティング 手法の劇的進化 303	User data and commercialization of user data will have the biggest impact on Marketing as we know it. As more data can be is shared and can be captured, it also leads to the commoditization of hardware and software, leaving knowledge about the user as the ultimate real value from which ways to earn money is generated.



- ■著者・川口盛之助
 ■A4変型判、上製本、カラー、529ページ(4巻構成)
 ■CD-ROM(本体に掲載された図表データを収録)
 ■価格: 450,000円 + 税
 ■発行: 日経BP社
 ■発行日: 2013年12月27日

メガトレンド 2014-2023 Megatrends 2014-2023

- □ Author: Morinosuke Kawaguchi
 □ Book title: Megatrends 2014–2023
 □ A4 size, hardcover, color 529 pages in 4 volumes with CD-ROM
 □ Price: 450,000 Yen = about 4,500 US dollars
 □ Publisher: Nikkei BP in Japan
 □ Published on December 27, 2013



Morinosuke Kawaguchi, MEGATRENDS 2014-2023 **Table of Contents**

www.morinoske.com

Theme	Chapter	original Japanese title, page no.	Summary
7. Communication between Real and Virtual	39. Augmented reality (AR)	39. AR(拡張現実) 320	This chapter outlines AR (Augmented Reality) in the broader context of digitalization of everything analog or physical. The chapter recognizes five different types of AR field including smart space and life navigation.
	40. The Robot car	40. 自動運転車 326	The automotive industry will be affected hugely by the robot car that is set to push the industry into commoditization. This chapter forecasts the impact in four different area, and how MRO will play a much stronger role in the future.
	41. Near-field service	41. おもてなしサービス 331	With Japan's globally renown service-oriented culture, this chapter outlines the so-called near-field service potential worldwide. It explores the possible geographical markets for near-field service, a service that is closely linked to the concept of "omotenashi" (hospitality) that takes place within the physical field of the customer.
	42. Direct brain communication	42.「脳直」 コミュニケーション 336	That technology is able to scan and interpret brain waves opens a whole new range of possibilities that will surely change the rules of the game. Whether in communication, design or product development, neuromanagement is set to emerge as a result from directly connecting to the brain.
	43. Digital manufacturing	43. デジタルマニュファクチャリン グ 341	The impact of digitalization and on-demand production on manufacturing are culminating in 3D printing. A technology at the starting gates, it will mean a huge step away from the traditional structure of manufacturing and engineering as we knew it.
8. On-demand business and production	44.1 Workers modularization	44.1. 企業と従業員 : 労働者のモジュール化 365	On-demand expertise is becoming the key everywhere. Utility rates of expertise are increasing on the back of interim management, freelancers or crowdsourcing, and companies are preparing to kill bottlenecks that prevent them from tapping into the expertise of the nomad workers.
	44.2 Organization of modularization	44.2. 企業と従業員 : 組織のモジュール化 372	How must organizations adapt to deal with higher flexibility, open structures and demand for more transparency? This includes new motivation, evaluation and remuneration models with associated KPIs to help increase transparency.
	45. Business platform design	45. ビジネスプラットフォーム 設計 377	This chapter outlines the transition of business success towards becoming platform operator and turning customers into prosumers as companies such as Apple, eBay and Amazon have successfully done in the past.
	46. Shared & flat value concepts	46. シェア&フラット 化する価値観 382	The flat structures that come with the digital society have come to question structures and information validity. However, the concept of share and bottom-up is giving rise to a new range of business opportunities.
9. Artificial ecology and human enhancement	47.1 Use of bio function	47.1. 生物機能利用 403	This chapter outlines the business use of organisms, from bacteria to animals, in a wide range of applications including sensory and detection, food, waste management and healthcare.
	47.2 Genetically modified organisms	47.2. 遺伝子組み換え生物利用 408	The ability to decode the DNA enables to modify the function of life forms - not through breeding, but through genetic engineering. Added value potential is apparent in agriculture and renewable raw materials or in the health and pharma industry.
	48. Biotech human enhancement	48. 人体強化(生物系技術) 412	Human enhancement through biotechnology applies to the physical (athletic), neuro, beauty and longevity level. So far it has been applied mostly in the case of people in need of support, though it increasingly becomes available to the average person and to a premium sector to which high-paying customers and athletes belong.
	49. Cybernetic human enhancement	49. 人体強化(非生物系技術) 418	As opposed to biotechnology cybernetics refer to the use of external, synthetic parts to enhance the human body or substitute human body parts and functions. Prostheses connected to the brain or wearable armors developed by the military are but two examples. Cybernetics will not just allow handicapped to reach the level of an average human, they are gearing towards above average performance, reflected by the world's first Cybathlon for bionic athletes that is set to take place in Zurich in 2016.
	50. Brain power development	50. 脳力開発 424	In this days and age of the information society, brain capability, the actual analytical and associative thinking, is the key. This chapter looks into the applications of directly improving the brain performance through brain development (e.g. so-called "smart drugs", stimulation, training) and brain assistance.



- ■著者・川口盛之助
 ■A4変型判、上製本、カラー、529ページ(4巻構成)
 ■CD-ROM(本体に掲載された図表データを収録)
 ■価格: 450,000円 + 税
 ■発行: 日経BP社
 ■発行日: 2013年12月27日

メガトレンド 2014-2023 Megatrends 2014-2023

- □ Author: Morinosuke Kawaguchi
 □ Book title: Megatrends 2014–2023
 □ A4 size, hardcover, color 529 pages in 4 volumes with CD-ROM
 □ Price: 450,000 Yen = about 4,500 US dollars
 □ Publisher: Nikkei BP in Japan
 □ Published on December 27, 2013