

## Getting Back to the Future

The role of management services in the alphabeta generations by Dr David Parker.

n an article published in *Management Services Journal* almost 25 years ago, the reported results of an industry study concluded that for most organisations, improvement initiatives and interventions had failed, wholly or partially, to deliver on their promise (see Figure 1).

One wonders if the results would be the same today? After reading the article once again, the problems of some of today's businesses seem to have changed very little. But arguably, the future will be very different. Moreover, the role of management services and our practitioner skills will be in much greater need. Saying that, what will the future be recognised for? Can we predict with any confidence the next generation's needs – the alpha-beta generations? How will society, business and commerce change from that of today? What are the likely scenarios?

### **Looking Back**

The survey conducted in 1997 explored 35 organisations. The questions asked, and subsequent results, epitomised contemporary issues impacting on productivity, sustainability, and resilience. In many ways the topics addressed reflected the role

and focus of management services professionals (certainly mine); many of who were Baby Boomers (b. 1946-64).

At that time, improvement initiatives and project-based interventions flourished: Total Quality Management, Business Process Re-engineering, Six-sigma, Value-engineering, Just-intime, Kaizen, Simulation, Balanced Scorecard, Process Mapping and Reverse-logistics, to name only a few that reflected my activities. Moreover, and as the research results identified, such initiatives were only ever thought to be partial solutions. Islands of improvement was the term used by pundits. Industry feedback confirmed that the outcomes were poorly integrated and out of step with organisational-wide issues. Businesses wanted viable-total-system solutions that, back then, were still in early development.

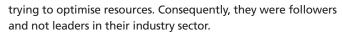
In the survey, several organisations stated that they wanted an enterprise-wide, integrated, ongoing continuous improvement culture. This meant moving away from project-based, isolated initiatives, to an open-learning organisation that continually improves in all that it does. Moreover, they recognised their failing in not having external intelligence gathering systems and

## **Research & Development**

# West of England and South Wales Diagnostic Study (Phase One)

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Most firms regarded themselves as too internally focused and myopic. Analysing their customers' needs was an occasional activity – and usually abdicated solely to the marketing function.

Of significance, was the lack of an integrated strategic plan to clearly define the future direction of the organisation and the development of specific processes and resource needs. Interestingly, most companies adopted a hybrid approach, resulting in a differentiated strategy and low-cost position.

The key questions asked in the survey (see Table 1), it might be argued, still have relevance today. Such questions establish a marker of where a company currently is, and where it wants to be in the future. But not how to get there. The operational tactics to achieve the outcome, however, was another matter. That particular research led to a suite of enabling mapping techniques that provided methods (business tools) that identified potential improvements for the organisations. These tools were a combination of complementary hard analytic approaches, holistic in nature, while adopting an interpretive soft-systems prism for evaluation. By necessity, the framework encompassed the total enterprise, including logistics, service quality and systems theory techniques.

This retrospective glance back in time, whilst useful in establishing management services approaches and methods for improving organisational endeavours, does not answer the critical question: What of the future? Will our armoury of systematic



analytics still be relevant for future generations of management professionals? Will our underpinning scientific management theory that has served us so well to date, still be relevant in the future?

Influential on my own formative professional development were two exceptional expansionist thinkers: Edward deBono (1933-2021) of lateral thinking fame: "If it isn't broken then break it; everything can be improved"; and Alvin Toffler (1928-2016), a futurist with emphasis on the effects of technology on cultures<sup>2,3</sup>. Both men had the ability to take a seed of an idea and develop possible future scenarios. Today, we have a plethora of clues of what the future holds for alpha and beta generations. Clearly, the future will be one very different to that of today; yet still needing the analytics and soft systems provided by management services for continuous improvement in productivity.

### **Generational Profiling**

Behavioural geneticists and social scientists<sup>4</sup> enjoy defining and profiling societies; arguing that we are constructs of the time in which we live; and become sufficiently different, one generation to another as a result of multicomplex forces at play. The world constantly changes, and so do we. The most obvious example of changes and the consequential impact on society would be the internet, mobile phones, even credit cards. Looking further back, we might include automobiles, commercial flights, television and supermarkets. Every generation would have been impacted from these types of changes on their lifestyle. Generations can therefore be epitomised and described by change.

An arbitrary and convenient generational boundary (for ease of discussion) might be simply stated as seven generations: Builders (1925-45), Baby Boomers (1946-64), X's (1965-79), Y's Millennials (1980-94), Z's (1995-09), Alpha's (2010-24), and Beta's (2025-2040).

Encompassed within each of the generations there are significant life-changing developments. Some might say for

the better or, even, worse. For each generation we might classify key differences through the prism and array of selected categories including, as examples: personal traits, occupations, technologies, and education etc. The key lies in understanding the characteristics that define a generation. Moreover, building a matrix makes for a fascinating Boxing Day activity! What generation first had the Rubric's Cube? (Answer on last page).

The problem of conducting empirical research to identify data representing the future is, that most respondents draw heavily on current experiences when looking forward to anticipating future scenarios. With that said, I asked several people with knowledge and experience of strategic planning to complete a blank matrix depicting what might describe each generation. Their combined result is depicted in Table 2(a). Interestingly, for the most part, their descriptions of generations – Builders (1925-45), Baby Boomers (1946-64), X's (1965-79), Y's Millennials (1980-94), and Z's (1995-09) were similar to published attributes and personal characteristics as shown in Table 2(b).

### The Big Picture

Generation alpha is already a growing and lucrative consumer market. In 2018 we saw the first of millennials' children enter primary school. Significantly, these children will be the wealthiest, most highly educated and technologically connected generation to-date. While their parents, the millennials, are digital nomads and migrants, their children, alphas and betas, will have a digital comprehension that is ingrained and second nature. Generations alpha and beta are the first to be truly integrated with smart technology throughout their lives – voice recognition devices will be the mainstay of daily life; keyboards and driving licences all redundant. Gen Z's grew up when social media was being established, and mobile technologies were in development – for gen Z's the digital app-based services are useful devices. For alphas and betas, it is a lifestyle.

Institutions and businesses will need new ways of interacting and communicating with alphas and betas - radically different to their parents' channels of communication. New business opportunities will arise, driving the need for slick-agile supply chains and logistics models. In education and training, alphas will be frustrated by an auditory structured curriculum, preferring instead a visual, interactive hands-on method. They will acquire problem solving skills and experience from peer-to-peer learning. Connected classrooms will be the norm. Virtual-reality expanding the class-room to any place, anywhere. Clearly this goes far beyond current 'progressive' schools that have shifted from the traditional forms of interacting methods, by anticipating the incoming alpha students. We see the use of iPads rather than textbooks, and online sharing work with teachers and classmates. A global reach and network to match the business world will be commonplace in education and training models.

Generation alpha, and even more so gen beta, will grow up interacting with AI, robotics, numerous digital platforms, as well as humans. Such skills will underpin their learning needs. As will be their want, speed must be of the essence. For them, boredom and frustration will be the antithesis of creativity and accomplishment. A focus of their social consciousness will undoubtedly be the environment. Even more than their predecessors, generation alpha will have through personalised online newscasts, access to a myriad of social issues, particularly



Do you need to build more effective strategies to gain business excellence?

Do you want to achieve corporate goals by aligning continuous improvement with your business strategy?

Do you want a culture that fosters continuous learning, advocates flexibility, and is driven by customers' expectations?

Do you want a management team with skills that can handle ongoing change to bring about bottom-line gains?

Do you need a framework of measures that quantifies the benefits of continuous improvements?

Do you want an effective way to resolve trade-offs where there are resource constraints?

Do you have a robust process to understand markets and competitors?

Do you believe that your channels of communication and integration between teams needs an overhaul?

Table 1: Key questions used in 1997 survey

Generation	Personal Traits	Occupations	Technology	Life-style/Living standards	Education/Learning	Aspirational Goals
Builders/Silent (1925-45)	Stoic; Financial prudence; Interpersonal respect; Determined; Resilient; Excellent work ethic; Sensible; Resourceful and practical; Self-sacrifice; Traditional values; Thriftiness.	Social-economic class system. Job for life. Trade focused. Industrialisation. Women not expected to be in workforce	Post WW2 advances in communication; Heavy industrialisation.	Fairly austere; Council housing; Christmas a special time; Similarities to previous generation	Basic 3-Rs. University for the wealthy/elite; Apprentices and Trainees;	Steady employment; Self-employed
Baby Boomers (1946-64)	Strong work ethic; Self-assured; Competitive; Goal-centric; Resourceful; Team player; Self-disciplined; Economically influential.	Flow-over of class system. Haves and Have nots; Trade apprentices still common. High spec manufacturing. Women's rights	Exponential growth in solid-state electronics; Colour TV's, Moon landings	Personal grooming; Beginning of home ownership; Overseas holidays	Good education but still segregated as before; National Health System	Follow in dad's footprints. Buy a house. Travel the world. Save the planet. Green Peace.
X's (1965-79)	Independent; Self-sufficient; Values diversity; Like a challenge; Resourceful; Attracted to gadgets; Cynical; Disaffected with politics; Values independence; Strives for work-life balance	World transitioned to a consumer economy. Nations specialise into shipbuilding, cars, aviation. Tourism gains. Glass ceilings. Globalisation of large business.	Dawn of the Digital-age; Entrepreneurship; New industries; Mass production; Flexible manufacturing systems; Efficiency v effectiveness; Productivity interventions; Focus on unit costs; Mechatronics.	Home ownership; Ongoing career development to support loans and better lifestyles.	University education available to all. Attracted to teaching profession; Collaborative learning	Individual personal goals. Enter the entrepreneur. People begin to believe they can make their own mark in the world.
Y's/Millennials (1980-94)	Self-expressive; Confident; Narcissistic; Creative; Seeking self-validation; Social media addicts; Difficult to manage and lead; Socially minded	Highly tech savvy; Service industry increases to >70 % More women in workforce also taking high positions. Global markets, partnerships in industry. Discrimination Acts	Increased computing power /miniaturisation; Household robotics; Quantum mechanics and Al; Machine learning	Christmas can be almost every day. Online retailing; Shrewd consumers; High debt/ credit card maxed	Higher education levels are now seen as necessary for certain jobs. Equal opportunities. The Internet breaks down barriers on many fronts. Most highly educated generation	Dual incomes; Living the dream; Social and racial equality.
Z's (1995-09)	Digital natives; Politicised; Environmental activists; Pragmatic; Racial diversity; High-incidences of single parenting; Blurred roles; Technological innovators.	New industries open up. Opportunities restricted only by your imagination. Trade and industry relegated to developing economies. Equal opportunities.	Kids are brought up on tablets and apps; Developments dominated by mega Tech Networks; Al; Robotics; Quantum computing; Blockchain.	Economically tied to parents; Wary of the future; Pioneering vision; Entrepreneurial	Online MOOCs learning; Follow the sun personal tutoring;	To design a new app and become rich; Be an online influencer; Own holiday home
Alpha's (2010-24)	Hands-on; High-contact social awareness; Authentic leaders; Socially engaged in causes	Gig economy; Skill-based career; Gig project-based contracts; Bio-chemists; Social Welfare Officers; Geoengineering	3-D printing; Electronic wallet; Smart domestic appliances; QR personal data capture; Bio-metrics; Internet of things; Crypto-currency	e-Health; Glamping in exotic locations; Nomadic; Internationalists; Highrise living	Experiential grounded learning; Most knowledgeable in history; Multiple digital platforms; Extensive networkers	Become more globally connected; Enhance social interaction; Maximise positive opportunities
Beta's (2025-2040)	Butterfly attention span; Natural affinity with Al, robotics and pharma-bots; Highly optimistic and adventurous; Wealthy; Less socially engaged	Over 90% employment in the creative industries: software, leisure; healthcare/therapeutic; environmental custodians; WFH and local business hubs	Hydrogen automated personal vehicles; Bio technology; Thermal desalination; Renewables; Al; M/c Learning; Scramjet; Space-X travel	Cyber social interaction; Around- the-clock living; Hypersonic travel; Shared domiciles	Virtual-sensory- emersion- learning; Life-long knowledge development; Skills passports (3 years duration); Bespoke learning; Social-media main-stay to information	Self-actualisation determines direction taken;

Table 2 (a): Generational periods - Differentia

What will the future be recognised for? Can we predict with any confidence the next generations' needs – the alpha-beta generations?

### 1930s 1940s 1950s 1960s 1970s 1980s 1990s 2000s 2010s Silent **Baby Boomers** Generation X Millennials **Generation Z** Born 1981-1996 Born 1946-1964 Born 1965-1980 Born 1997 - 2012 Generation Workaholics, Independent, self-directed, Confident, multitaskers; Digital natives; short Born 1928-1945 materialistic, driven sceptical of authority; idealistic; expect feedback attention spans, Rule followers, duty, adaptable, focused and rewards at work; seek loyalty, development by personal success; creative, open-minded; optimistic, team-oriented, on results, motivated work-life balance; want motivated not by and learning; embrace technology but by need for security; meaningful work, corporate money but by flexible self-reliant, engaged, lifestyle; committed to expect respect for prefer direct personal prefer working alone; social responsibility, communication technologically literate sustainability and diversity; social responsibility; their experience. technology experts enjoy working in small structured teams

climate change and environmental sustainability. Consequently, global warming will be at the forefront of their hearts and minds.

Business too must step up and face the reality of the paradigm shift needed to engage with gens alpha-beta. Organisations will need to understand how to appeal to and engage with this highly tech-savvy workforce. Already, alternative work arrangements have become more common in the broader, often gig, economy. We are seeing business leaders and entrepreneurs rapidly trying to plan and optimise their own workforce culture, pressured by the need to improve service, move faster, and find new skills. Even the aspirations of millennials and gen Z are far different from previous generations. A recent study<sup>6</sup> found that 70% of gen Z workers want their work to support their personal interests. The social model where you work to retirement over a 40-year period, to a more 'open ended portfolio experience' model will not be acceptable to alpha-beta generations.

For those born between 2010 and 2040, generation alpha and beta, the demographic and economic environment will be shaped by a range of factors. For example:

- Parents' age at birth of their first child is continually rising.
   More first children are born to parents aged 30-35 than to those aged 20-25. In the near future this means that many more people who are well into their 50s will still be seeing their children through higher education and the employment search trauma. Consequently, dependency on parents will last longer: KIPPERS (kids in parents' pockets eroding retirement savings).
- People will be reducing full-time employment much earlier, so the children may still be at home when the parents have retired.
- The divorce rate will remain high, as will the start-up rate for second marriages. Children of second marriages will often be born when their parents, or at least the father, are well into their 30s and sometimes 40s.
- Seniors will live far longer, hence a much higher proportion

- of people in their 50s will have parents who are alive. These parents may need financial support.
- The average age of those taking out a mortgage for the first time is currently 31 years of age. There is a strong likelihood that the house will not have been purchased in their lifetime and alpha-beta dependents will take over the mortgage.

The emersion of generation alpha-beta into the digital age cannot be represented by a self-effacing descriptor: the glass generation<sup>7</sup>. It is as erroneous as digital pioneers (gen Y) and digital natives (gen Z) – both having learned to use computers at some stage during their adult life. Significantly, gen-alpha is the first to be born into an advanced technological society for the entirety of their lives. Their 'glass-fronted devices' will be their main medium of communication, incorporating voice recognition data input and facial authentication.

### **Society's Green Shoots**

Already we are seeing an evolution across numerous fronts in society, not least in our living longer. Interestingly, the associated consequences are now coming to the fore<sup>8</sup>. In the UK there are more than 10 million people aged over 50 in employment<sup>9</sup>. This means that over 50s now make up nearly one third of the entire UK workforce, up from around one in five (21%) in the early 1990s. Looking ahead, by 2035 (gen Beta), the projection is that more than 30% of the population will be over 65 years old.

In the aged-care sector we are witnessing a better quality of life that supports purposefulness, and economic independence. Alpha-beta gens will experience shared-housing, giving greater companionship, reduced living costs, while remaining in familiar communities and supporting one another. Generations alpha-beta will have decades of high-quality life beyond 60 years. As they are digital natives, they will embrace a raft of smart assistance life-styles, such as assisted technology living (ATL) that will literally open new doors for 4th-age living at home.

Discussion around the impact on society of artificial intelligence

Organisations will need to understand how to appeal to and engage with this highly tech-savvy workforce.

(Al) e-health-automation, for gens alpha-beta, alternates between the euphoric to the astounding<sup>10</sup>. There will be few areas where the impact of robotics is more profound than clinical healthcare, dispensing of medicine and surgery. There is nothing outlandishly futuristic about e-health-automation and robotics – as numerous examples of today's healthbots bear witness. Assistance in diagnosis (particularly supported by Big Data analytics, machine learning, and Al), aftercare, bespoke healthy lifestyle plans will be the norm. In all probability, it is in the health services sector that advances in technology will be the most pronounced.

All indications are that generation alpha-beta will be vicarious, highly curious about the world and the natural environment; coupled with a realisation that the potential for social media to embrace the wisdom of the crowd (make that: cloud) and create change for the better.

### The Future's Bright

In all likelihood, gen-alpha, 0 to 11-year olds and, more certainly, gen-beta, the as yet unborn, will embrace information and knowledge extensively via smart learning environments. Some of these are still in their proof of concept, while for other knowledge-transfer methods it is at the final honing stage of refinement. Both gens alpha and beta will have greater access to more information from a younger age than anyone previously. Machine-learning, virtual reality, and Al will ultimately bring simplicity to an otherwise highly complex world.

The 24/7 continuous connectivity to global networks makes alpha-beta's outlook on all things international, alarmingly precise. That, in turn, is especially relevant to our domestic geopolitics. However, on the downside, while alpha-beta are open to influences, much of it will be filtered information – either intentionally screened or through personal bias. Digital ubiquity supports deluge communication channels (that makes today's mass media look placid by comparison). In the case of alpha's, they would have been born in a period of record births, totalling almost two billion globally by 2024. It makes them the largest

generation in the history of the world. Undoubtedly marketers' wildest dream. Making gen-alpha a wealthy target of similar desires and aspirations.

Generation alpha and beta have only experienced inter-intra digital connectivity. All forms of technology and personalised-customisation are second-nature (note: not mass-customisation used today when attempting to meet the personal requirements of a customer's preference). Never before has a generation been afforded such seismic shifts in social and commercial norms. Saying that, clearly the COVID pandemic has escalated things to a new norm. We have experienced forced change that has created significant impacts on every layer of society: education, work, recreation, and social interaction. Arguably, it has been social isolation and restrictions in relational norms that have had the biggest negative impact on our well-being. Perhaps alpha-betas will have greater resistance to future change as a result of living in an advanced-technological society (?).

In this wireless-wifi world, alpha-betas technology will be developing and expanding at an exponential rate – as will their networks, associations, and ubiquitous vocabulary. Mobility, flexibility and adaptability will be key operative requirements to support their fast-moving lives. Today the average time spent in an occupational role is about three years. In the future, project-based, temporary short-term contracts will be the norm. Many future occupations we can only speculate on, but almost certainly geoengineering, environmental services, biochemistry, healthcare and therapeutics, artificial intelligence, and leisure will all feature large.

Generation alpha, and more so beta, will flourish in a world that has few limitations from today's discriminations: age, disability, race, ethnicity, sex, gender identity or religion. Globalisation will be driven by digital connections in virtual networks, linking individuals to their professional and personal contacts. Augmented by satellite technology, this is the utility of our future generations, and which will underpin all aspects of smart cities, societies and economies.

### Adaptive Management Services

COVID has focused our minds on the limitations of the previous norm, and has required alternative ways to operate both commercially and socially. Businesses and consumers globally have experienced disruptions to every facet of daily life. While, hopefully, this is a unique and limited event, it has highlighted the structural pressures on our somewhat arcane business models. Moreover, it has highlighted that we have become increasingly reliant on technology and e-commerce for resilience and sustainability.

To meet current and future business needs, our profession must complement our current strengths to embrace the skills of the technological revolution that we are heading towards. Skill-sets must include: the internet of things (IoT), machine learning (ML), artificial intelligence (AI), virtual reality, and Big Data analytics. The focus will be on increasing manufacturing productivity and provide tailored personal experiences in delivery of services. The pandemic has emphasised and shaped consumer expectations around speed and dependability; with the key differentiation between companies being simple, unique personalised ordering and reliable delivery via e-commerce channels. The tyranny of distance is no longer a barrier. Customers are expecting

organisations to do more to demonstrate environmental and sustainability strategic intent. Organisations that fail to satisfy customers' needs will commercially fail.

As a profession, our strengths lie in our ability to embrace change. The future will require adaptability and flexibility; while pursuing simplicity in the face of ever-increasing complexity. Our professional resilience is couched in scientific theory of management; and this will continue to stand us in good stead. Management services will evolve to meet the demands of the post-digital era – the humanisation of technologies through interplay between digital, biological, scientific and cultural. What we can be assured of, is that there will be a need for our underlying philosophy and practitioner skills, underpinned by a history of experimentation. After all, we are and always will be problem solvers.

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Answer to Boxing Day Quiz! Gen X (1966-1979) were first to have Rubric's Cube.

### References

- 1. Parker. David. West of England and South Wales Diagnostic Study (Phase One). Management Services Journal; 1997, May edition.
- 2. deBono, Edward. Six Thinking Hats. 1985. Penguin Books.
- 3. Toffler, Alvin. Future Shock. 1970. Random House.
- 4. Plomin, Robert. Behaviour genetics. Encyclopedia Britannica, 11 Feb. 2019, https://www.britannica.com/science/behaviour-genetics. Accessed 15 September 2021.
- 5. https://www.oecd.org/forum/oecdyearbook/bridging-the-generational-divide-in-the-uk.htm Accessed 12 September 2021.[6. OECD Employment Outlook 2019 The Future of Work. OECD. Accessed 12 September 2021.
- 7. Fluxtrends. https://www.fluxtrends.com/meet-generation-alpha/ Accessed 22 Sept 2021
- 8. Parker, D. Downie, G. and Lewis, D. Live Long and Prosper? Boldly going into the Fourth-Age. Management Services Journal. Summer, 2019.
- 9. Parker, D., Downie, G. and Lewis, D. Hold the Gold Watch. Management Services, 2019 Spring.
- 10. Lovell Corporation, The 2017 change generation report: How millennials and Gen Z are redefining the future of work, 2017

### **Bibliography**

Corlett, Adam. As time goes by: shifting incomes and inequality between and within generations, Resolution Foundation's fourth report for the Intergenerational Commission. see www.resolutionfoundation.org. 2017 Gardiner Laura and Paul Gregg (2017), Study, Work, Progress, Repeat? How and why pay and progression outcomes have differed across cohorts, Resolution Foundation-Intergenerational Commission. See www.intergencommission.org

Hannon, K. Proof that the most successful entrepreneurs are older ones. Forbes August 5th 2018.

IFS. Elderly see incomes rise, whilst young adults see large falls. Institute for Fiscal Studies. See www.ifs.org.uk. 2013
Let's House Britain, UK Housing Crisis report 2014, see http://metrofinance.co.uk/

Lim, KTK and Yu, R. Aging and wisdom: age-related changes in economic and social decision making. Frontiers in Aging Neuroscience,

2015, 7(120).

Mori-Ipsos. Only a third of Generation Y think their generation will have better quality of life than their parents. Poll, see www.ipsos-mori. com/. 2016

O'Connor, S. World will have 13 'super-aged' nations by 2020, Financial Times, August 6, 2014.

Ozkal, D. Millennials can't keep up with boomer entrepreneurs, Ewing Marion Kaufmann Foundation, July 19, 2016.

Rivers, C & Barnett, R. The Age of Longevity: Re-Imagining Tomorrow for Our New Long Lives. New York: Rowman & Littlefield, 2016
Stillman, D and Stillman, J. GenZ @ Work: How the Next Generation is Transforming the Workplace New York: HarperCollins, 2017.
World Bank, Life expectancy at birth, total (years), accessed May 18,

World Economic Forum, We'll live to 100 - how can we afford it?, May 2017, p. 4.

World Bank, Life expectancy at birth, total (years). accessed June 18, 2021.

Yavari, F. and Vale, B. Alternative housing options for older New Zealanders: The case for a life-cycle study. University of Wellington. 2016



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