
JAPAN'S SOFTWARE DISRUPTORS

De-ageing is a Hollywood visual-effects technique used to make an actor look younger. It works by rendering a digital twin attuned to the mannerisms of the real-life actor in question. For iconic actors looking to bat off retirement this is a godsend. Nullifying time is one sure way to keep the filmography ticking over, perhaps indefinitely. Japan Inc should take note.

Japan's demographic challenges are well rehearsed. The National Institute of Population and Social Security Research, a government think tank, projects that Japan's population will fall from its 2008 peak of 128 million to 88 million by 2065, with senior citizens making up over a third of the population. Japan must act decisively to disarm this ticking demographic time bomb.

Hollywood stars such as Al Pacino, De Niro and Pesci are not the only ones turning back time to prolong their careers. Companies are also dabbling with de-ageing by employing admittedly less glitzy enterprise software solutions. This is a trend that has accelerated recently, as companies were forced to rethink working practices in light of the pandemic.

These tools offer Japan Inc not only a temporary cure to the corporate fall-out from coronavirus, but a countermeasure to the chronic issue of dwindling demographics. This is de-ageing in the business sense and is an increasingly important theme running through our specialist Japan funds, in particular in the small-cap area.



PAPER PUSHERS AND PRODUCTIVITY

Japan is a place of peculiar paradoxes: although home to global powerhouses in robotics, automation and precision engineering, its inhabitants appear deferential to neo-luddite-like desires. There appears to be an anachronistic affinity for paper and the humble fax machine. Cash remains king and printing is pervasive! Although arguably inefficient, these practises do provide a significant amount of employment: about 20 per cent of Japan's workforce comprises office assistants and clerks, roughly double the equivalent of the US and UK.

History is at least part of the explanation. Japan's two-century-long self-imposed period of isolation from the mid-1600s to the mid-1800s thoroughly stifled the flow of new ideas and resources. Entrenched ways were bred out of isolation. Japan's job-for-life economy is another explanation. Building up a cryptic filing system is much easier in paper form. If only you can understand something, then you have some bargaining power and a decent riposte should human resource heavies swing by unannounced.

There is nothing wrong with a paper-based economy per se. Having jobs for people to do seems like a desirable thing, although, of course, there are trade-offs. It is productivity that really matters though it is often overlooked – everyone could be employed to do nothing and paid handsomely for it in bits of paper.

In Japan such a debate is less philosophical. The country is running out of working-age people. Its trend unemployment rate is too low, not too high. How can time and resources be freed up? We like businesses that are intent on addressing this all-important question.



STAMPING OUT INEFFICIENCIES

The hanko stamp is a decades-long piece of Japanese administrative tradition. Documents are authenticated with a hand-pressed stamp or seal instead of a signature. Japan's unique fusion of old and new is part of its charm. But charm is no safeguard against the unexpected. The recent pandemic is an unfortunate case in point. People, paper, and time-intensive processes suddenly became all-the-more burdensome when offices went into lockdown. Some whisper that Japan's corporate handbook needs to be updated, others shout.

Bengo4, an online legal platform and one of our portfolio holdings, is firmly in the shouting camp. Its CloudSign service enables contracts to be digitally signed and stored. Time is saved, costs are reduced, and compliance is strengthened. Its customer book has roughly doubled over the last year as organisations reassess the costs and benefits of manual processes. This reassessment is no doubt quickened by Covid-19, but was already in the works. For CloudSign, the competition is paper and the opportunity open-ended.

CloudSign is an offshoot of Bengo4's core business: bringing information and transparency to people seeking legal advice, historically an underserved area in Japan. One common trait we look for in businesses is an ability and willingness to add spokes over time. Bengo4 typifies this with its habitual willingness to take risks and to experiment without any fear of failure.

DO-IT-YOURSELF SOFTWARE

Japan Inc underinvests in information technology (IT) and is one flipside of high corporate cash balances. For managers with limited resources, IT is often shelved for next time. Gauging the return on IT investment is difficult. Typically, upgrades yield incremental and diffuse benefits. Over time, such benefits compound but this doesn't fit neatly into an Excel spreadsheet. Underinvestment in IT is by no means unique to Japan, but given Japanese demographics the implications for the country are likely more profound.

IT can be an enabler for business agility. When done right it breeds flexibility and sharpens the flow of information, a profit driver rather than a cost centre. That said, there are many hazards to navigate when it comes to IT procurement. One is the disconnect between buyers, sellers, users and developers, which stretches out project lead times and inhibits feedback loops. This disconnect is exacerbated by the fact that the majority of IT staff in Japan work for pure-play IT firms. In the US, the reverse is true, with IT know-how spread more evenly through the economy at large.

Cybozu, an enterprise software business and another portfolio holding, is attempting to change the rules of the game. Its flagship product, Kintone, is a do-it-yourself

enterprise software platform. The user becomes the developer. Its intuitive and code-free interface means data-management applications can be built in a matter of days and easily tweaked as needs change. This is a new flavour of software development – cheaper, quicker, and more accessible.

Having a great product is rarely enough. The challenge becomes to convince others of its merits and to relentlessly strive for improvement, both incremental and wholesale. This gets at the mindset of a business. What are its priorities? What does it stand for? These questions are not new, just difficult. Over the long run, they are what matter in defining possibilities and probabilities.

In many ways, Cybozu is the antithesis of stuffy corporate Japan. Its employees are actively encouraged to set their own hours to suit other commitments. Working from home is favoured, a body-blow to Japan's chronic presenteeism. Generous childcare leave is afforded to new parents, unheard of in Japan and particularly important for keeping females in the workforce, not to mention retaining knowledge and skills over the course. Cybozu thinks carefully about its social purpose. It does things its own way.



START FROM THE CUSTOMER AND WORK BACK

A lack of forward-thinking investment in processes and systems ultimately hurts the customer. The real estate industry in Japan is one example among many where too many businesses treat the customer experience as an afterthought. GA Technologies, a real estate-focused technology business and portfolio holding, is working on multiple solutions to declutter and standardise the interactions between various parties in this industry.

The mortgage application process is one area that GA Technologies is targeting. Mortgage seekers in Japan face a torrent of forms and time-consuming in-branch meetings. GA Technologies' Renosy platform is recalibrating the state of play. It allows loan applications and sale agreements to be handled digitally. Lenders can plug into datasets stored on Renosy on behalf of applicants, who are spared from having to fill in details multiple times. With less paper and fewer people involved, review times are shorter and the whole buying process is more streamlined. The customer is front and centre, while lenders and estate agents benefit from having access to the curated data they need in one place.

GA Technologies' clever technology serves two purposes. First, it supports its own customer-facing services and helps to build lasting goodwill. Second, its software modules can be packaged up and sold on to other third-party businesses. This makes the opportunity even more compelling as a technology supplier to a sizeable and people-intensive industry that is ripe for change.

DATA AS COLLATERAL

Data can be both an asset and a liability. Too much data can be overwhelming and impinge on decision making. Mishandled data can be crippling for the reputation and inner workings of a business. But data can also be an asset and a source of competitive advantage. Insight can be gleaned, and new opportunities unearthed. There are often more subtle benefits as well.

Infomart, an online ordering platform and a portfolio holding, connects buyers and sellers in the food industry. Restaurants can search for suppliers, place orders, and receive invoices. Infomart's platform replaces transactions taking place over the phone, via fax or in person. Complex ordering processes become much more straightforward and less error prone. The industry as a whole becomes much less wedded to stale legacy relationships with information more transparent and accessible.

Infomart has a unique feed into its customers' business. It sees who is ordering what from whom and for how much. It sees who is paying on time and who is not. This is valuable information that Infomart can harness to further bolster its range of services. It has teamed up with GMO Payment Gateway, a payment services business and portfolio holding, to offer a one-click payment option for outstanding invoices. Balances are settled by GMO Payment Gateway which in turn assumes the to-be-paid invoice. Infomart customers benefit from the cash-flow flexibility this provides to both buyers and sellers.

Infomart has a knack of coming up with new ideas. We don't pretend to know what might come next, only that the opportunity set for Infomart is bounded by nothing but its own ambition. The food industry is merely its first port of call, as it grows and matures in line with the country's changing profile.

YOUTHFUL JAPAN

Japan, like all countries, faces well-documented challenges. Its demographics are not in its favour. Its chronic underinvestment in IT means inefficiencies are rife. But with problems come solutions. And over time comes change. We are increasingly enthused by the number of, often founder-led, businesses in Japan deploying technology to make other businesses work better. Just as Hollywood's finest are coming to realise that with the right tools they can be youthful once again, so too is Japan Inc.

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