

Growing Seeds of Innovation through Strategic Corporate Venturing

Alongside other market changes wrought by the rapid advance of digitalization, recent years have also seen a growth of interest in corporate venturing, in which large companies invest and offer support and collaboration to external startups as a means of fostering open innovation. James Mawson, who presides over Global Corporate Venturing, a data provider in the corporate venture capital industry and publisher of digital magazines, makes the point that investments by large corporations in startups has grown rapidly over the past decade, with investments totaling around USD129 billion in more than 3,000 such companies during 2020 alone. Another recent trend has been that many of these corporations are going beyond simple investment, instead seeking strategic opportunities through collaboration and partnering with startups.

Hitachi Ventures GmbH was established in 2019 to serve as the strategic CVC arm of Hitachi, with offices in Munich and Boston. It has been investing in startup companies, primarily in Europe, Israel, and North America, operating through the Hitachi Ventures Fund for CVC investment and paying close attention to the affinity between its investments and Hitachi's own strategies and business units. By collaborating with leading startups in a wide variety of industries and combining their innovative technologies and business models with Hitachi's own technology and customer base, the objective is to foster innovations that can help resolve the challenges facing both customers and wider society. Hitachi Ventures conducted reviews of more than 1,200 startups during FY2020 and has already invested in seven of them.

Hitachi is also seeking to contribute to the operations of its customers and to help provide people with a better way of life by delivering a mix of social, environmental, and economic value, leveraging its distinctive mix of experience and expertise in the OT, IT, and products needed to deliver this value to develop advanced services and grow jointly with its startup partners. The Corporate Venturing Office at Hitachi is accelerating its contribution to the global innovation ecosystem, having already entered into more than 15 collaboration projects with startup companies.

Why are corporate ventures important today? What is necessary for corporate ventures to be successful? *Hitachi Review* invited James Mawson along with Stefan Gabriel, CEO of Hitachi Ventures GmbH, and Kenichi Funaki, chief of the Corporate Venturing Office, Hitachi, Ltd., to discuss these questions and the value that strategic corporate venturing can add to corporates.

Significance of Corporate Venturing in Corporate Strategy

Funaki: My first encounter with a startup company can be traced back to about fifteen years ago. When I was engaged in research on supply chain management systems in the 2000s, I visited a startup from the University of Michigan. The company was developing a supply chain network design platform. The purpose of my visit was just benchmarking and I was fully satisfied with their technologies for simulation or optimization, and then said good-bye. However, it was a huge mistake. Even at that time, the company had already adopted a subscription model. Their customers subscribed to the platform and could benefit from optimal supply chain strategies generated from data gathered on the platform that was provided by the subscribers themselves. Had I had the foresight back then, I would have realized that the core of the company was not its technologies, but its business model. Unfortunately, I missed

the chance. Since then, I have believed that the seeds of innovation can come from someone else. Now, the company has become a global leader in this space.

In 2019, Hitachi established Hitachi Ventures GmbH (HVG) in Munich, the Corporate Venturing Office in Tokyo, and the Corporate Venturing Fund in December of the same year. We have already entered into 1,800 deals and investigated about 900 companies worldwide. The Corporate Venturing Office has had numerous discussions with Hitachi business units or group companies about such businesses, with a total of more than 500 such discussions covering 400 companies. We have also launched more than 15 collaboration projects with startups globally, ranging from the co-development of technologies to joint go-to-market initiatives with new service concepts. HVG, meanwhile, has made successful strategic investments in seven companies to date.

Gabriel: There are thousands of startups that have excellent skillsets and technologies, and the opportunities for collaborating with startups in relevant niches in highly technical,



James Mawson

Editor in Chief, Global Corporate Venturing

Editor of Private Equity News, part of Dow Jones and The Wall Street Journal in London for nearly four years from 2006 until May 2010 when he launched Global Corporate Venturing as an independent title from Mawsonia Ltd., his own publishing company. Global Corporate Venturing is the media publication and data provider for the corporate venture capital industry. It has a unique database, GCV Analytics, and it runs multiple global events. This was followed by the launch of his second publication, Global University Venturing, in January 2012 to help students and faculty and academia more broadly launch or develop their entrepreneurial businesses and work with external peers. Mawsonia's third title, Global Government Venturing, was launched in May 2014 and rebranded as Global Impact Venturing in February 2019.



Stefan Gabriel

CEO, Hitachi Ventures GmbH

For over 20 years he had responsibilities in manufacturing engineering and global strategy at BMW Group Powertrain and led "Future Automotive Concepts." After working as president of 3M New Ventures, the corporate venture capital (CVC) arm of 3M Ltd., he took up his current position in 2019. Prior to that, he was Senior Executive Advisor for several Fortune 500 companies, engaged in the operation and improvement of CVC units that foster open innovation to enhance corporate value, enable sustainable growth, and support the development of business models and strategy. He has received multiple awards for investing in innovation. He has a master's degree in mechanical engineering and, since 2010, has been Visiting Professor of Enterprise and Innovation at the University of Huddersfield, UK.



Kenichi Funaki

Deputy General Manager, the Corporate Venturing Office, Hitachi, Ltd.

Having previously engaged in research into plant design, production systems, supply chain management (SCM) systems, and service design, he is currently engaged in the formulation and implementation of strategies for open innovation through collaborative creation. He has also previously worked on the development of production control systems for computer products and SCM systems for semiconductors; mechanical maintenance, repair, and operations (MRO) parts; and apparel. He took up his current appointment in 2019. He holds a doctorate in engineering and has served as a lecturer at the School of Information-Oriented Management, Sanno University; a Research Executive at the Supply Chain & Logistics Institute at Georgia Tech; an Associate Professor at the Graduate School of Information Science and Technology, Hokkaido University; and at the Faculty of Urban Liberal Arts, Tokyo Metropolitan University. Accomplishments include winning the 2009 Practice Award of the Operations Research Society of Japan, 2013 Best Practice Award of the Japan Industrial Management Association, and 2014 IEOM Outstanding Industry Award.

scalable markets are immense. It is so important for corporates to learn from selected startups while at the same time helping them to execute their business plans and scale their businesses, also offering assistance with growth in new regions by partnering. I know strategic corporate venturing is one of the big trends in the corporate venture capital (CVC) world and for sure will foster Hitachi's strategies and add valuable business.

Strategic corporate venturing activities are particularly important from the point of view of corporate strategy. Corporate strategy is very complex, and it must be adapted to fast-changing disruptive markets. Corporates need some input to understand and adapt, and even to adjust their business development and skillset. They need to be "open for innovation." Before making major mergers and acquisitions (M&A), or investing hundreds of millions of dollars in research and development (R&D), it is more effective to first challenge business growth strategies, including the input of startups looking into the new territory of disruptive markets. You can then invest and provide resources accordingly.

HVG is the strategic corporate venturing arm of Hitachi Ltd. Located in Munich and Boston. We scout out exciting, innovative, and leading startup companies, mainly in Europe, Israel

and North America, looking for companies that have strategic relevance to Hitachi and address society's key technological, social, and environmental challenges in the target areas of Hitachi Group. Through investment in those startups, we aim to facilitate the establishment of value-adding collaboration and strategic partnerships between our portfolio companies and Hitachi businesses. To do so, we need to use all of our networks. In that regard, the Global Corporate Venture (GCV), which is presided over by James and has data and networking capabilities covering more than 3,000 of the world's top 5,000 corporates, has greatly helped in conducting corporate venturing activities.

Mawson: As the chief of GCV, a media publication and data provider for the CVC industry, it is a great pleasure to be here to discuss strategic CVC. There has been a sustained and rapid increase in both the number of corporations investing in and working with startups and the amounts invested over the past decade. Corporations were involved in deals worth USD129 billion last year in more than 3,000 startups according to GCV Analytics data. To win strategic business opportunities and to put Hitachi at the forefront of global open innovation, corporate venturing will be the key.

Gabriel: While proactively scouting out opportunities in upcoming ecosystems, HVG looked into more than 1,200 startups just in the last financial year, evaluated 100, and then invested in seven of them. In parallel, we always promote collaboration between startups and relevant Hitachi business units and even customers. The better we understand clusters, search areas, markets, and the growth drivers of technologies, the better we can provide strategic guidance, advise on business opportunities, and collaborate or partner with startups. We sometimes even work on real customer projects (what is most exciting for startups!) or experiment in new frontiers. Besides, corporate venturing as a tool fosters entrepreneurship in corporate organizations, bringing changes to corporate culture and open innovation strategy as we challenge and discuss strategies and then add value from outside-in.

Mawson: From the data, we can see a couple of interesting trends. First, the more established and experienced corporate venturing units, perhaps with an experienced leader, are responsible for about 80% of the corporate venturing deals and activity. In addition, the top 20% of firms, "the Powerlist leaders" we call them, have been involved in corporate venturing activities for more than 10 years and they are responsible for the majority of activity, in particular, the majority of successful activity.

Of course, what makes corporates "successful" is their strategy. Some seek greater economic return and others seek strategic returns, which means to discover the value of existing business units and identify new business opportunities and growth drivers. In any case, corporates need to find more viable startups for successful corporate venturing that will also lead to financial returns. So it is clear that delivering on strategic goals also delivers financial goals whereas it is not always the case that if you focus on the financial goals, they will then lead to strategic benefits. When we look at the data, the more successful corporate venturing units are increasingly thinking about how their strategic component fits and works, while also trying to be independent from the management point of view in order to enable more effective allocation of capital.

From our perspective, the leadership of Hitachi within the global corporate venturing leadership society plays a great role in speeding up the cycle of scale-up and adoption of important fundamental technologies addressing societal issues, such as climate change or new energy forms, and it very much feels like Hitachi contributes to that wider ecosystem development.

In 2020, even though COVID-19 adversely affected societies and economic activity, we saw a record number of corporations begin their corporate venturing activities. So for them, role models that they can learn from, such as HVG, will be important.

Hitachi's Style of Corporate Venturing with More Collaboration

Mawson: How did Hitachi's corporate venturing activities begin and why is collaboration more important than investment and return for you?

Funaki: Actually, Hitachi has been actively collaborating with start-up companies for some time. Even in the last couple of years, Hitachi announced multiple partnerships with startups in various areas, including a new work style offering and in the field of regional medicine. Collaboration with start-ups who have innovative ideas is very important to the agile delivery of new value. Therefore, we plan to further strengthen collaboration through corporate venturing activities. For example, we recently announced a partnership with a startup company that provides a genome analysis platform^{*1}. By investing rather than simply partnering, we can create future growth together. Hitachi has also welcomed several startups to the Lumada Alliance program^{*2} and we aim to provide maximum value to our customers through collaborative creation at the newly opened Lumada Innovation Hub Tokyo^{*3}.

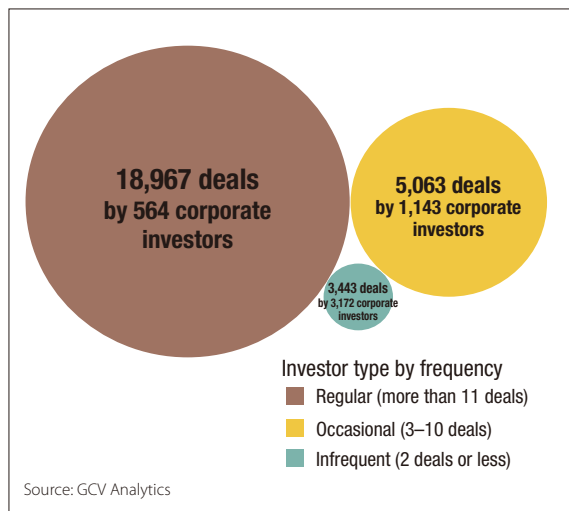
Gabriel: I have observed for many years now, and have learned from my global activities in corporate venturing, that there is a need for strategic returns like these that cannot be measured but are really important and most valuable. On the other hand, financial success is necessary to gain significance in the startup environment and also to show how Hitachi is a "good investor."

It is true that Hitachi is always actively collaborating with startups, with evaluation and decision-making on investment happening in parallel. Therefore, the number of collaboration projects is often much higher than the number of investments. Nevertheless, we need to learn from this if we are to understand megatrends and identify disruption from adjacent markets before investing funds and resources. That is why

^{*1} "SOPHiA GENETICS and Hitachi Announce Collaboration to Advance Data Driven Precision Medicine," <https://www.hitachi.com/New/cnews/month/2021/03/210325d.html>

^{*2} Hitachi's open innovation ecosystem utilizing Lumada

^{*3} "Hitachi Establishes Lumada Innovation Hub Tokyo to Accelerate the Lumada Movement through New Collaborative Creation with a View to the Post-COVID-19 World," <https://www.hitachi.com/New/cnews/month/2021/03/210322a.html>



Deal Flow by Investor Type Categorized by Deal Frequency (2011–2020)

A small number of corporations are responsible for the greater part of regular deal flow.

strategic venturing is a significant value-add to corporates.

Funaki: We always have to be open and fair to such external innovators. We must change our mindset and business practices and think about ways to support them. I have learned three things in particular from this experience.

The first is that we should not put undue emphasis on our startup being a world leader. When it comes to seeking a collaboration partner, we tend to carefully assess how this startup is superior to others and what particular advantages it possesses. In my experience, however, this is not something we should worry too much about. No company that is addressing a new challenge starts out as number-one. Rather, there are usually a large number of companies in the world trying to solve the same challenge. So, we should instead make the most of the time we have with them and get collaboration underway quickly. Our attitude needs to be one of supporting the startup in its activities and seeking to become a market leader in partnership.

The second insight relates to the maturity of startups. We are often asked “at what stage is your target?” However, I think this is less important for strategic corporate venturing activities. Consider the example of a startup seeking to make use of data in its possession to generate new value. There are many cases of such startups that have already reached a certain level of maturity, already holding such data in sufficient quantity and quality. But if what you want is to create new value in ways that the market has never before imagined, you can

work with younger startups that may have more innovative ideas and ambition. The required degree of maturity in startup companies will vary depending on the goals and objectives of open innovation.

Finally, when collaborating with a startup, multiple-step scenarios are needed to grow together. Of course, collaboration with short-term results is attractive, but by sharing medium-to-long-term scenarios that bring future growth for both parties, we can strengthen relationships and work together to solve problems.

Gabriel: When selecting an investment target, HVG first tries to understand the ecosystem as well as different business models and technologies. We evaluate the targeted startup companies, start a strategic discussion with the business units and Corporate Venturing Office, and develop a landscape of multiple technologies in the space according to Hitachi’s strategy and interests. In one recent example, we invested in four startups in the precision medicine cluster which is in line with Hitachi’s plans of “building and providing solutions globally through digital platforms.” Regardless of the maturity of the targeted startups, we consider what kind of value-add the company will bring to Hitachi in terms of technology and business model as we seek to take advantage of promising opportunities. As is often the case with CVC investments, we do minority equity stakes of less than 20%, but keep some reserve for follow-up investment depending on the success of collaboration and business execution. The purpose of today’s strategic CVC is not to absorb startups, but to learn and grow together through strategic collaboration. Startup companies benefit not only from the financial support, but also from access to Hitachi’s businesses and global network.

Mawson: Actually, only about 3 to 10% of startups sell to one of their corporate investors, and most startups typically have multiple CVCs as part of their shareholder base. Therefore, it is unlikely for a startup to sell to one of their corporate backers even if M&A has been the likeliest route for profitable exits for entrepreneurs. However, as you both said earlier, a method of providing medium-to-long-term support rather than acquisition is being established. The key to strategic corporate venturing is to ask what startups are looking for? Whether they want capital, customers, product development, or an exit, big corporations can be good at meeting those demands of startups. It is, however, very difficult for experienced CVC teams to find a company that can actually collaborate well from among the huge number of startups. The role of the team is very important.



Gabriel: I think you are right. We always figure out what startups need, but at the same time, what we need to add for Hitachi's growth. We have had conversations with almost 2,000 startups so far, receiving huge interest and excellent feedback. I am glad that all startups say: "We like to work with Hitachi." Over my last two decades in corporate venturing, it is now more than ever that I see CVC becoming a strategic tool for corporates. Our mandate is to add value to corporates' business growth, also encouraging more startups to work and partner with big Hitachi. However, it is still not easy to motivate a business unit to work with a small startup that has just started its business. Avoiding inefficient investment requires a lot of experience and leadership as well as energy and passion, and with the trust we get from the corporate side, we are excited to continue our journey.

Funaki: I think we are fortunate, because Hitachi's corporate venturing activities are fully backed by our executives. As you say, getting our existing business units to embrace the brand-new ideas that startups bring to us is always a challenge. But if we can show them examples of successful collaborations, they should be interested.

Mawson: That sounds interesting. Mr. Funaki, what do you mean by the word "successful" — is it success in terms of increasing the competitiveness of your existing business division? Or is it success in establishing a new business?

Funaki: The ultimate goal of Hitachi's corporate venturing is to discover seeds of growth and to pioneer new business opportunities. But on the way there, you can learn a lot by looking at how startups think and act from multiple angles.

Gabriel: We want startups to understand that Hitachi welcomes exciting business opportunities and is open for innovation. In various sectors where Hitachi operates, including healthcare, the environment, and industry, we have made, and will continue to make investments to grow startup ideas, business models, and technologies to the next level, because this will lead to the sustainable growth of Hitachi. Unless we innovate technology and business models quicker and in a more partnering/synergetic way, we cannot achieve global success.

What Leads to Successful Corporate Venturing and Collaboration?

Funaki: Hitachi has set goals of simultaneously increasing three types of value – social, environmental, and economic – that improve the quality of people's lives and increase value for customers. In the case of environmental value, Hitachi announced "Hitachi Carbon Neutrality 2030" and became a Principal Partner of the 26th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP26), demonstrating our commitment to carbon neutrality and our objective of achieving world-class environmental, social, and governance (ESG) performance as an innovator challenging climate change. However, it is difficult for Hitachi to achieve these goals alone. Since its inception in 1910, Hitachi has always held to its corporate philosophy of "contributing to society through the development of superior, original technology and products." Our uniqueness resides in the fact that Hitachi is one of those few companies that combine operational technology (OT), IT, and products. Through collaboration with startups, we would like to contribute with high-value-added solutions that combine these OT, IT, and products. That is why we should be a part of the innovation ecosystem and work with a variety of startups, both in terms of technology and business models. Through the corporate venturing community, we would like to learn about various movements that are spreading around the world, including in the environmental and healthcare fields.

Gabriel: Through my corporate venturing activities over many years, I have met and had the chance to talk with many exciting startups, senior executives from big corporates, as well as people running CVC arms. Strategic alignment is very meaningful, but on the other hand, relationships are complex, somewhat "political," and always involving a big effort and cultural experience; especially in a large corporate organization where strategic decisions have a huge impact on how to cope with global social, health, and environmental challenges. In



Corporate Venturing Symposium Held by Global Corporate Venturing

this respect, the global GCV platform with its unique database and analytics is a great tool to facilitate strategic discussion and cooperation in the venture community.

Mawson: Thank you for those kind words. GCV tracks the activities of more than 3,000 companies around the world, tracking who is doing what and what strategies they have for innovation. Held in California, London, Tokyo, São Paulo, and other places, our events are attended by many corporates that want to collaborate through a global innovation platform.

Like Hitachi, many advanced investors such as good corporates, hedge funds, and sovereign wealth funds tend to focus on economic, social, and environmental perspectives and those kinds of investment are called “impact investing” or “triple bottom line investment.” Today, corporate goodwill and externalities are not measured solely by financial reporting, profit, and loss. The next GCV symposium will be held in London on 3–4 November, and many companies are strategically conducting corporate venturing activities aimed at achieving the United Nation’s Sustainable Development Goals (SDGs) because sustainability issues discussed at COP26 are likely to impact their business. How can we achieve Net Zero^{*4} beyond changes such as improving efficiency and improving the operation of products or services? How do we understand the impact of current businesses and supply chains on the climate? There will be a huge possibility of changes.

The GCV Institute offers training programs not only for corporate venturing unit personnel, but also for business units and executives. Understanding today’s strategic changes will be a strength that will help improve the capabilities of the entire corporation, including the corporate venturing unit. According to a survey by PitchBook Data Inc., investment through corporate venturing over the last decade has

exceeded USD1.78 trillion. This is more than the total over all prior decades and shows that corporates are now able to invest more to improve their sector as a whole. That means they can innovate faster and innovate more.

Over the last decade, venture investment in startups has increased five-fold. We expect total assets to grow another five-fold over the next decade. This will raise stock prices and create much larger companies. It is an exciting time.

Funaki: It is very indicative. I believe that Hitachi needs to take the lead in such innovation to solve major social and environmental issues in the future. To that end, we must consider not only one-to-one collaboration, but also the gathering together of partners with a common vision to work together on addressing problems.

Gabriel: While the companies participating in the World Energy Council all come from different backgrounds, they share the same future challenges and a similar perspective. To identify the key factors for reaching the next level, where to invest, and with whom to collaborate. HVG is contributing to this strategic dialogue. We have a strong network with other CVCs and investigate similar portfolios. We also exchange our findings and interests with other strategic CVCs and sometimes even co-invest. Of course, you need to pay attention to the information you disclose to corporates, but these strategic dialogues can be very helpful in selecting high-value-added investment targets.

Funaki: Yes, I totally agree and would like to continue working on corporate venturing activities in order to lead global innovation at Hitachi. Thank you for your time today.

^{*4} A target of completely negating the amount of greenhouse gases produced by human activity