



Confederation of Indian Industry

STRIDE[®]

Science • Technology • Research • IP • Design • Entrepreneurship
Journal of Technology Leadership and Innovation

June 2022, Volume 2, Issue 1



From India for the World



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Preface

CII had launched STRIDE, CII Journal of Technology Leadership and Innovation, an industry first from CII. The inaugural issue was released by Dr Jitendra Singh, Union Minister of State (Independent Charge) Science & Technology; Minister of State (Independent Charge) Earth Sciences; MoS PMO, Personnel, Public Grievances, Pensions, Atomic Energy and Space on **16 December, 2021**.

The Journal is named as 'STRIDE', which also abbreviates for the core themes and focus areas of the journal - Science, Technology, Research, IP, Design & Entrepreneurship. The Journal is a multidisciplinary, peer-reviewed, special expertise periodical. It broadcasts and presents 'unique, original & impactful' technologies and innovation accomplished by industry, researchers, academia and the Indian science and technology ecosystem at large.

The second edition of the STRIDE journal will be focusing on Design. With design playing an integral role in India's big leap towards AatmaNirbhar Bharat, the Confederation of Indian Industry is strategizing for a new orbit in shaping design for India's growth trajectory. This Journal explores the opportunities and scope of design and innovation ecosystem of India. Design can assist in developing solutions for energy efficiency, sustainable living, water conservation and waste minimization in our homes, workplaces, public buildings and in our everyday activities. It highlights and reinforces unique strengths of Indian industry and by bringing together considerations of form, function, aesthetics, culture, engineering and lifestyle, the design process helps solve problems & creates new value and markets and shape up the future of India (& world) in the coming decade.

The papers featured in the journal will have technology leadership perspective oriented with key focus on design, innovation and IP. The Journal will also feature successful design case studies from industry, and a section on worked-upon-design ideas. The design ideas presented are planned to be the blue-prints of design (not necessarily unique in every case) which can be picked up for incubation and development by any industry, research lab or design innovation centre across the nation. In doing so, and in the process of publishing blueprints of these untested-design ideas, the journal is also envisaged to become a national repository of design and innovation ideas, while enabling collaborations.

We would like to thank our patrons from the Government departments, leading industry leaders, eminent designers and academicians, and international experts with whom we had a series of interactions to converge on the expectations and eventual features of this journal. We look forward to having further views and feedback to help us in improvising and continuously evolving the journal and its impact.

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Co-Innovate @ Brunel: Design Innovation Support as a Driver of Business Capacity

Vanja Garaj

Director of Research and Reader in Design

Abstract

This paper presents Co-Innovate, a design innovation support programme run by Brunel Design School, Brunel University London. Established in 2012 and funded by Brunel and the European Regional Development Fund/ Greater London Authority, the programme is made up of two complementary projects: Brunel Co-Innovate Journeys and Bridging the Gap. The projects are both aimed at using design innovation to grow the business capacity of Greater London-based companies, with the former supporting SMEs and the latter start-ups. The projects deliver the support in three different formats: 01) educational workshops centred around the design innovation-related knowledge transfer from the academia to the business community, 02) mentoring on design management and business development strategy and 03) collaborative projects whereby the businesses taking part work with Brunel Design School students and academics to develop their product and service concepts into the near market-ready solutions. Since the establishment, Co-Innovate has supported approximately 500 companies, successfully facilitating their business growth and thus stimulating the Greater London economy by design.

Main Text

Brunel Design School at Brunel University London manages several different design innovation support programmes for businesses - with the common goal of stimulating the business capacity growth by design. The programmes vary in terms of the types of companies they target, the particular nature of support being available and the level of engagement of the School's academic and professional staff and students (Cosco and Garaj, 2020). Arguably, the most successful of these programmes is Co-Innovate (Brunel University London, 2021), which has been running continuously since 2012 and consists of two parallel projects: Brunel Co-Innovate Journeys and Bridging the Gap.

Both projects provide the support exclusively to businesses registered in the area of Greater London, with Brunel Co-Innovate Journeys targeting small and medium-sized enterprises (SMEs) and Bridging the Gap focusing on start-ups. To qualify as an SME and be supported under Brunel Co-Innovate Journeys, a business must have less than 250 employees, the annual turnover below £43 million (€50 million) and be more than 18 months old. To be eligible for support under Bridging the Gap, a start-up must not exceed the first anniversary of incorporation. At the start, the two Co-Innovate projects have been funded jointly by Brunel University London and the European Regional Development Fund (ERDF). Following Brexit, the ERDF's funding responsibility has been transferred to the Greater London Authority (GLA) and the future financial assistance for the programme is likely to be sought from the new UK Shared Prosperity Fund, which is currently being developed by the UK Government. The participation in Co-Innovate by SMEs and start-ups is free of charge.

The Co-Innovate design innovation support, both by Brunel Co-Innovate Journeys and Bridging the Gap, comes in three different formats: 01) educational workshops, 02) mentoring and 03) collaborative projects. The educational workshops are aimed at improving the competitiveness of participating businesses via the knowledge transfer covering different design-related and other relevant business topics, such as design thinking, digital branding and marketing, sustainability and intellectual property rights. The workshops are organised by the Co-Innovate administrative staff, with the delivery by Brunel academics and, in some cases, external experts, and usually take two connected sessions of up to 6 hours in duration to enable the topics to be explored in detail. The workshop sessions are typically attended by several different companies at once.

The mentoring aims to facilitate specific issues to do with the management of a particular product or service design project and/or provide guidance on the overall business

development strategy. Taking place in the “one-to-one” setting with a single business, the mentoring rounds are carried out in regular intervals over a period of between a few months to a year and delivered individually by the three project’s Innovation Directors for the SMEs partaking in Brunel Co-Innovate Journeys and by the Entrepreneurship Director for the Bridging the Gap start-ups. All having extensive experience in design management and general business support, the four directors are also responsible for developing links with the Greater London business community to recruit the businesses suitable to join the two projects. The mentoring support format is especially interesting for the start-ups enlisting to Bridging the Gap, with the total mentoring time per business for this project being on average much longer than for Brunel Co-Innovate Journeys. The SMEs tend to be more interested in the project-specific design management mentoring, while the start-ups usually balance the project design management with the business strategy support, which is only natural considering their development level.

An example of a successful Co-Innovate mentoring outcome is the start-up called Cosi Care, set up by the Brunel Design School alumna Lauren Bell. A graduate of the BSc Product Design programme, Miss Bell formed the business based on her major project work immediately after she graduated in the academic year 2017/2018 and enrolled it for the Bridging the Gap mentoring support soon thereafter. Cosi Care (www.cosi-care.com) manufactures and markets a set of innovative medical products facilitating the instant itch-relief for children suffering from eczema and other skin conditions. The products (Images 01 and 02) enable the children to relieve the itching sensation without scratching and damaging their skin. One of a number of start-ups emerging from the Brunel Design School, the Bridging the Gap mentoring contributed to Cosi Care getting off the ground and becoming an established company.

The collaborative projects are the most in-

depth format of the design innovation support provision available through Co-Innovate. The projects in most cases revolve around an early design concept by the supported SME or start-up, which the company wishes to develop into a market-ready solution in collaboration with the Brunel Design School students and academics. In the initial stage of a collaborative project, the company works with the Innovation or Entrepreneur Director to define the project design brief specifying the concept, its purpose, the relevant target users and the expected project deliverables. The brief is then taken into the collaborative process either as a group coursework assignment or an individual major project at the undergraduate or master’s level. The group projects are usually implemented as the design process module assignments for the MSc Integrated Product Design programme, seeing the MSc students work on the brief during one academic term under the supervision of several academic tutors. These relatively short projects generally produce a set of different high-level responses to the brief by a number of student teams and, as such, function as the crowdsourcing of ideas rather than delivering the final product or service solutions. In contrast, the individual projects, which are conducted as the major project by a MSc student or a final year student attending the School’s BA Industrial Design and Technology, BSc Product Design or BSc Product Design Engineering programmes, involve the student in working on the project under the close supervision of an academic for two academic terms and deliver a detailed solution that is often very close to being market-ready.

An interesting example of a collaborative project is Olus, a novel organic air-purifier using plant-based biodegradable filters capable of removing 99% of particulate air pollution (Images 03 and 04). Olus is the major project by Louie Duncan, a 2020/2021 graduate from the BSc Product Design Engineering programme who designed the purifier in response to the brief by the London-based Christian P Kerrigan Architecture. In addition to helping businesses



Image 01: Cosi Care by Lauren Bell, Academic Year 2017/2018

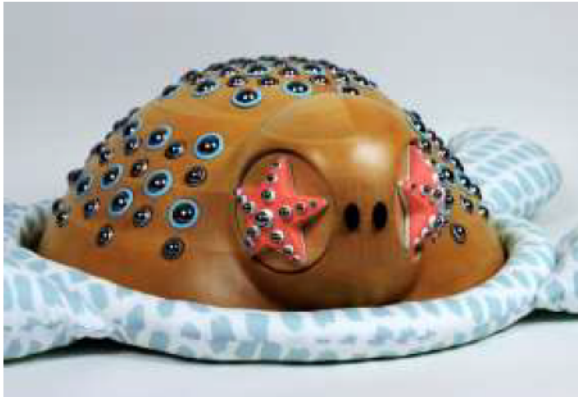


Image 02: Cosi Care by Lauren Bell, Academic Year 2017/2018

diversify and progress their design concepts, the collaborative projects also bring benefits to the students and academic staff getting involved in the collaborations. The students benefit from having an early experience of working with industry, which strengthens their professional skillset and CV, thus making them more employable after graduation. As for the academics, the collaborations enable keeping in touch with the real-world issues outside the academia, which adds to their relevancy both in teaching and in research. Over the years, the Co-Innovate programme has worked with circa 500 Greater London-based SMEs and start-ups, helping them improve their design management processes, successfully bring new products and services to the market and grow as a result. Although based in Brunel Design School and with the majority of the companies taking part being design-focused, Co-Innovate is also open for collaboration in other areas - with the

academic departments across Brunel University London, including engineering, healthcare, law and Brunel Business School and the eligible businesses with the support needs beyond design.

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Image 03: Olus by Louie Duncan for Christian P Kerrigan Architecture, Academic Year 2020/2021



Image 04: Olus by Louie Duncan for Christian P Kerrigan Architecture, Academic Year 2020/2021

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Logotypes:

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co-innovate



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Confederation of Indian Industry

The Confederation of Indian Industry (CII) works to create and sustain an environment conducive to the development of India, partnering Industry, Government and civil society, through advisory and consultative processes.

CII is a non-government, not-for-profit, industry-led and industry-managed organization, with around 9000 members from the private as well as public sectors, including SMEs and MNCs, and an indirect membership of over 300,000 enterprises from 286 national and regional sectoral industry bodies.

For more than 125 years, CII has been engaged in shaping India's development journey and works proactively on transforming Indian Industry's engagement in national development. CII charts change by working closely with Government on policy issues, interfacing with thought leaders, and enhancing efficiency, competitiveness and business opportunities for industry through a range of specialized services and strategic global linkages. It also provides a platform for consensus-building and networking on key issues.

Extending its agenda beyond business, CII assists industry to identify and execute corporate citizenship programmes. Partnerships with civil society organizations carry forward corporate initiatives for integrated and inclusive development across diverse domains including affirmative action, livelihoods, diversity management, skill development, empowerment of women, and sustainable development, to name a few.

As India completes 75 years of Independence in 2022, it must position itself for global leadership with a long-term vision for India@100 in 2047. The role played by Indian industry will be central to the country's progress and success as a nation. CII, with the Theme for 2022-23 as Beyond India@75: Competitiveness, Growth, Sustainability, Internationalisation has prioritized 7 action points under these 4 sub-themes that will catalyse the journey of the country towards the vision of India@100.

With 62 offices, including 10 Centres of Excellence, in India, and 8 overseas offices in Australia, Egypt, Germany, Indonesia, Singapore, UAE, UK, and USA, as well as institutional partnerships with 350 counterpart organizations in 133 countries, CII serves as a reference point for Indian industry and the international business community.

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