



D4.8 Recommendations

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Abbreviations and Acronyms

Brunel	Brunel University, London
CRETHIDEV	Creative Thinking Development
EC	European Commission
EU	European Union
HEI	Higher Education Institution
IIIT-D	Indraprastha Institute of Information Technology- Delhi
POLIMI	Politecnico Di Milano
RIMT	RIMT University
UAEGEAN	University of the Aegean
WP	Work Package
WUD	World University of Design



1 Introduction

The recommendations on *“How Design & Innovation Centres are useful for the economic development of India”* has been developed by all project partners based on the background paper and feedback gathered at the roundtable discussion event. The document will be available both in an electronic and paper format. The recommendations will be spread among relevant stakeholders both through mails, regular meeting and will be presented at the final conference and printed.

1.1 Roundtable Discussion Agenda

The virtual roundtable discussion titled *“The Design in India: how new Design & Innovation Centres can provide sustainable economic growth”* was organised to disseminate outcomes of the DESINNO project on 28th June 2022. The background paper was circulated to all participants in advance. It served as a starting point for discussion. The main aim of the roundtable discussion event was to gather feedback, opinions and suggestions from relevant stakeholders in order to create recommendations and action plans for the future utilisation of DESINNO project’s deliverables, namely the Design and Innovation Centres as well as the new/improved courses.

The agenda of the roundtable discussion was:

- Welcome – Explaining the purpose of this event
- Project overview presentation – Focusing on main results for the three HEIs
- The presentation of the main results
 - New/Improved Design Courses
 - New Design and Innovation Centres
 - Pilot projects – collaborations with the Industry
- Discussion based on the background paper, which contains five main recommendations:
 - Establishment of design hubs in HEIs around the country to bring together grassroots innovators and Industrial designers;
 - Investing in the education in fields of digital design as the country becomes more connected;
 - Incorporation of design thinking, strategic design and service design in the DNA of Indian companies;
 - Integrating traditional craft practices in contemporary design practice;
 - Fostering grassroots innovation and scaling up such innovation to industrial products
- Wrap-up – Summarising key points and thanking participants for their valuable time and inputs. (The feedback template was distributed at the end of the event.)



2 Participants

The roundtable event was attended by twenty-five (25) expert participants coming from the industry and academia. These stakeholders cover a large range of design expertise both in terms of application in the market and education. They are all outside the DESINNO consortium and they are listed in the following table.

No.	Names	Job titles/Organisations	Emails
1	Er. Deepak Garg	Core Champ Pvt Ltd	erdeepak61@gmail.com
2	Nimmi Rangaswamy	IIIT-Hyderabad	nimmir@iiith.ac.in
3	Sarabjeet Singh	Principal architect	sarabjeetsinghlotey@gmail.com
4	Loveneesh Bansal	BSD Infotech	loveneesh@bsdinfotech.com
5	Kevin David	American Embassy School	k david@aes.ac.in
6	Nachiketa Charkhwal	frog	nachidesign@gmail.com
7	Sumit	Software Developer/Unacademy	sroy8091@gmail.com
8	Rajiv Kumar Maheshwary	Freelancer	rajivkm.ldh@gmail.com
9	Vivek Kant	IITB	vivek.kant@iitb.ac.in
10	Partha Pratim Das	DTU	parthapratimdas@dtu.ac.in
11	Enord	IIITD-IC	-
12	Gargi Sharma	American Embassy School	gsharma@aes.ac.in
13	Amit Sharma	Axiom India Pvt. Ltd.	axiom@axiomindia.co.in
14	Ankur Sardana	Nautankibaaz Improv Collective	ankur.sardana@gmail.com
15	Venkatesh Rajamanickam	IITB	venkatra@iitb.ac.in
16	Sumit Dey	Product Designer	sumitdey@gmail.com
17	Sangeeta Sharma	Om Parkash Bansal Modern School	edu.sangeeta@yahoo.co.in
18	Dr. Santosh Bali	Chitkara University	santosh@chitkara.edu.in
19	Avnish Gautam	Tata 1MG	avnishpd@gmail.com
20	Shaminder Singh Sohi	Chandigarh University	shamindersohi5@gmail.com
21	Kapil Jindal	Hitech Solution	kapil.jindal85@gmail.com
22	TS Bedi	Desh Bhagat University	talwindersinghbedi@gmail.com
23	Prof. Ashima Banker	Chandigarh University	ashimadhairya@gmail.com
24	Aman Mittal	SMT Machin India Pvt Ltd, Barhmaand Edutain Pvt Ltd	info@cardanshaftsindia.com

Additionally, thirty-five more participants have been attended from the organisations representing the DESINNO consortium. The list is as follows:

No.	Names	Organisations	Emails
1	Rohit Kothari	WUD	rohit.kothari@wud.ac.in



2	R.P.Singh	RIMT	ravinderpal@rimt.ac.in
3	komal gahletia	WUD	-
4	manish sharma	RIMT	manishsharma@rimt.ac.in
5	Pushpendra Singh	IIIT-D	psingh@iiitd.ac.in
6	Ajay Singh Rana	RIMT	ajay.me@rimt.ac.in
7	"WUD OUR" 2022	WUD	-
8	Rajat Verma	WUD	rajat.verma@wud.ac.in
9	Akshay Raghuvanshi	WUD	akshay.raghuvanshi@wud.ac.in
10	Manu Narain	-	-
11	Design and Innovation Lab	-	-
12	Indrani De Parker	IIIT-D	indranideparker@gmail.com
13	Shakun Preet	-	-
14	Jasmeen Gill	RIMT	jasmeengill@rimt.ac.in
15	Sanjay Gupta	WUD	sgupta34@gmail.com
16	Balbir Singh	WUD	balbir.singh@wud.ac.in>
17	Busayawan Lam	Brunel University London	busayawan.lam@brunel.ac.uk
18	Aparna Gwande	WUD	-
19	Rajan Shripad Fulari	WUD	-
20	Philip Azariadis	UAEGEAN	azar@aegean.gr
21	Neena Zutshi	WUD	-
22	Aastha Deshpande	WUD	aastha.deshpande@wud.ac.in
23	Abhinav Saxena	WUD	-
24	Anoop Ratn	IIIT-D	anooprtn@iiitd.ac.in
25	Faye Plakantonaki	CRETHIDEV	fplakantonaki@gmail.com
26	Farminder	RIMT	-
27	Yash Desai	WUD	-
28	Silvia D'Ambrosio	POLIMI	silvia.dambrosio@polimi.it
29	Dr Satish Saini	RIMT	-
30	Gaurav Sharma	WUD	gaurav.sharma@wud.ac.in
31	Abhijeet Mishra	IIIT-D	abhijeet@iiitd.ac.in
32	Preeti Yadav	WUD	-
33	Prashant Patil	WUD	-
34	Ambika Magotra	WUD	-
35	Sachin Srivastava	WUD	-

3 Summary of Roundtable Discussion

This section summarises all key points made at the roundtable discussion event. It will be divided into five sections according to the discussion topics. Finally, the conclusion will be drawn.

3.1 Topic 1: Establishment of Design Hubs (Design and Innovation Centres) in HEIs

One of the key outcomes of the DESINNO project is the establishment of the Design and Innovation Centres at IIIT-D, RIMT and WUD. These Centres act as a hub to bring together students and faculty with grassroots innovators and industrial designers. At the roundtable discussion event, participants were asked to share their thoughts, opinions and suggestions on how these centres could be utilised to support different stakeholders. The discussion began with an exploration of what “*innovation*” meant in the Indian context – e.g., radical or incremental innovation, change of mindset, etc. As the Indian context was a starting point, the conversation expanded onto the dilemma of how these centres could **support internationalisation while promoting Indian culture and utilising its rich history**. The panel reckoned that advanced technology could go hand in hand with craft and traditional cultures. In order to ensure a proper integration of design, innovation and culture, there is a need to introduce traditional craft to young generation in a meaningful way, e.g., make sure that it is relevant to them. Several participants emphasised that the “*change of mindset*” need to happen in the wider society: local communities, industries and the general public. It is important to enhance appreciation for design and the notion of “*made in India*”. Strong recognition and “*sense of pride*” of design in India would help ensure that design is truly connect with different stakeholders (namely school and university students, local communities, industries and the general public). An example of IKEA featuring designers in their catalogues was given as a simple, yet effective means of enhancing recognition and raise awareness about design among non-design audience.

This suggested that the centres should play a key role in **public engagement** and **raising awareness** regarding value of design. Some participants recommended that the centres could connect with existing networks/initiatives led by the government in order to support the capacity building activities in terms of design and innovation across the country. Besides, it was suggested that the centres could work with secondary schools to help promote design to younger generations.

During the discussion, several participants pointed out that there was a need **to build capacity in terms of technology** (e.g., machinery and tools) **and people**. The concerns about existing barriers that currently prevented the general public to engage with design were also raised. For example, one participant observed that ‘*glamorising design too much*’ could make it unapproachable and, therefore, prevent people from engaging with design. It was suggested that gamification and other forms of interactive engagement could help overcome the fear of engaging with design and technology. In addition, “*jugaad*”, which is a flexible problem-solving approach that explores how to use limited resources in an innovative way, was recommended as a way to engage people (especially local communities and the general public) to the design process and design projects.



3.2 Topic 2: Invest in Digital Design Education

As the digital revolution has impacts on India as well as the rest of the world, Indian designers should be trained in the fields of Human-computer Interaction (HCI). As a result, one of the courses improved as part of the project was the Human-Computer Interaction (HCI) course at IIIT-D. The improved course focussed on research-informed design practice, with a particular emphasis on the User Centred Design (UCD), encouraging students to develop a sophisticated understanding of the stakeholders involved. The panel agreed with this approach as they acknowledge that user acceptance was essential. However, a few concerns were raised. It was observed that while young generation were quick to embrace digital technology and show interest in developing web-based products/services (e.g., apps), the majority of Indian population was not connected to the Internet. Subsequently, there was a debate whether the focus should be on physical products rather than digital ones. It was pointed out that a good **combination of digital and physical solutions** (e.g., product-service system) could help solve problems in an innovative way. The conversation about combining digital with physical solutions led to the discussion about how design could be used in many different domains, e.g., technology, policy, etc. Subsequently, design should be used in an integrative manner. Besides, the priority should be placed on **making digital technology accessible**. It was acknowledged that **new innovation should work alongside existing systems** (which were referred to as '*legacy*' from the past). In addition, it was observed that '*emotional*' issues should not be neglected. As problems become more complexed, there is a need to help young designers overcome the fear of not getting solutions right first time around.

3.3 Topic 3: Incorporate Design Thinking, Strategic Design and Service Design into the DNA of Indian Companies

The DESINNO project contributes to the modernization and internationalization of Indian HEIs by the development of improved university courses that comply with certain content and pedagogical approaches. The improved courses focused on service design and strategic design have been developed as deliverables of the project: 1) Service Design course for WUD; and 2) Integrated Product Design course (which incorporated strategic design) for RIMT.

At the discussion, the lecturer who led the Service Design course was asked to reflect on his experience. He described that it was about orchestrating different design elements harmoniously. In order to sing from the same hymn sheet, a holistic approach as well as a clear sense of direction (e.g., vision and mission) were required. Moreover, a good understanding of existing situation (the current status quo) was also needed. It was observed that a **sense of purpose** was key. While it is important to engage audience emotionally, technical aspects should not be neglected. This conversation led to discussion about the importance of technical subjects, such as Math and Science. Without a good understanding of technical subjects, it would be difficult to turn ideas into reality. Since good working relationships between designers and organizations are required in order to get access to their visions/missions and strategic plans, it could be challenging in some cases. Participants pointed out that students should be encouraged to **work collaboratively with clients** and not heavily rely on web-based materials/information. The engagement with clients would help students develop **critical thinking skills**, e.g., how to frame questions. This could also be seen as a **self-development process**. Furthermore, this journey could help them develop appreciation



people as individuals. The humanistic approach (e.g., empathic design) was recommended. The conversation about self-development touched upon the *'fear of failure'* again. Participants expressed concerns that many students/young designers *'play it safe'*. This might be because the stake appeared too high. There is a need to develop the **culture where failure is accepted and an experimental approach is encouraged**. In addition, the team approach should be promoted. Since people work in teams in reality. The students should also be encouraged to **engage with the back end of the design/innovation development process** to help develop better understanding of practical issues (e.g., production). This could also ensure that they work closely with the clients.

The lecturer who led the Integrated Product Design course was asked to reflect on his experience as well. He described that it brought together different subject areas, namely design, engineering and business. Collaborations with the industry were also required. The panel acknowledged that it was challenging to introduce students to different subject areas. It was recommended that the **inclusive and student-centered approach** should be the way forward.

3.4 Topic 4 & 5: Integrate Traditional Craft Practices into Contemporary Design Practice, and Foster Grassroots Innovation

The DESINNO project support the integration of traditional craft practices into contemporary design practice through the Craft Design course at WUD. This course focuses on the role of the designer in supporting grassroots innovation and makes use of existing artisan networks. It takes advantage of the newly formed Design and Innovation Centres to prototype and showcases the solutions to the wider audience who may be interested in investing in and developing these craft-based products.

The participants suggested that craft products could link to **place/region** identity. New tools and technologies could help as well as the engagement with designers could help craft products be **more relevant to modern lives**. Nevertheless, it is important to maintain the sense/spirit of craftsmanship. A few participants expressed concerns about financial value of craft products. To increase value in the eyes of consumers, craftsmen need to develop a **storytelling** skill, which could help buyers appreciate *'human value'* in craft products. Generally, the panel agreed that traditional cultures could go hand in hand with modern lifestyles. There is a need to help craftsmen scale up their work. A good use of business model could help them achieve cost efficiency. Furthermore, several participants suggested that the **support for craftsmen and grassroots innovators could be linked** and possibly delivered through the *'jugaad'* approach.

4 Recommendations

4.1 Summary of Key Recommendations from the Event

The key points captured from the Roundtable Discussion event could be summarised as follow:

- Several dilemmas/challenges was raised, e.g., how to enhance internationalisation and promote Indian cultures at the same time; how to build capacity on both technology and people; how to introduce new innovation while embracing the legacy from the past; how to achieve the right balance between physical and digital; and how to embrace complexity of real-world problems without overwhelming students and/or young designers.
- The recommendations to most challenges/dilemmas listed above seem to focus on a **people** – for example, better engagement with the local community, clients and the general public.
- These Design and Innovation Centres could play a key role in **raising awareness about design through community and public engagement** by showcasing design work in different domains. This could help non-designers develop appreciation/recognition and sense of pride in Indian design. The centres could organise engagement activities alongside existing government initiatives and networks as well as involve secondary schools that are interested in design.
- Careful considerations should be put in place when communicating value of design to the non-design audience, since it should be overly glamorised. Design should be **accessible to people**. This could eliminate fear and barriers currently preventing people from engaging with design.
- Many recommendations also suggest **integrative approach** as a way forward – for example, creating a good combination of physical and digital solutions, linking support for craftsmen and grassroots innovators together through the '*jugaad*' approach. While the academic members of staff and students could help them scale up their practices and ensure that their products stay relevant to modern lifestyles, the centres could provide technological support. This suggestion was well aligned with the project approach, since grassroots innovations have been identified as an important factor for the design development in India.
- **Improved/new design courses should promote collaboration** with the industry and other key stakeholders, e.g., start-up entrepreneurs, craftsmen and grassroots innovators. Strong engagement with clients can help students develop critical thinking and other soft skills (e.g. storytelling). As students are expected to learn more subjects due to the complexity of real-world problems that they have to face, the **student-centre** approach should be adopted to ensure that students are at the centre of curriculum development and delivery.