Resumé – Dr. Anuja Agarwal

Name: Dr. Anuja Agarwal (BSc, MCA, PhD)

Author of the book – Design Thinking: A Framework for Applying Design

Thinking in Problem Solving. (2024). Cengage Publisher.

Designation: Adjunct Professor at KJ Somaiya Institute of Management | Founding Dean - Sitare University (Pro Bono)

(Ex-Associate Dean – Technology Management & Digital Transformation, MPSTME, NMIMS

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Brief CV-

Having learnt Design Thinking at some of the top names in the area, namely Stanford D-School and IDEO, followed by her PhD thesis in Applying Design Thinking in Management Education, Dr. Anuja Agarwal has developed expertise in an end-to-end process of Applying Design thinking to design Innovative solutions that solve problems, and how do the companies manage the Innovation process to make it sustainable.

Dr. Anuja Agarwal is currently an Adjunct Faculty (General Management) at KJ Somaiya Institute of Management, Mumbai. She has over 31 years of experience in Academics, teaching Computer Science, Design Thinking, and Innovation Management, at the Postgraduate level in reputed Universities in Delhi and Mumbai. She has been a visiting faculty at Maladalen University in Sweden and SJMSOM at IIT Bombay for teaching 'Innovation Management'. Her forte is applying Design thinking for problem-solving.

She has conducted several Management Development Programs for middle and senior management officials in various companies to help them solve problems and bring out Innovative products and services.

She is a Delhi University Graduate in Computer Science, a Masters in Computer Application from DAVV, Indore and Ph.D. in Management Studies from Mumbai University. Her PhD thesis is in Design Thinking and Innovation, the first PhD awarded in that area. She has recently authored a Best-seller Book Titled "Design Thinking: A Framework for Applying Design Thinking in Problem-Solving", published by Cengage Publishers. The same has been adopted by some of the top B-Schools in India, including some of the IIMs.

Besides more than 30 Research papers in International and National Journals in her research area, she has co-authored Book Chapters in International publications. She has authored Case Studies for companies in the Banking sector, FinTech and Social Organizations that use Design Thinking for Problem-solving and Innovation. Anuja has led Design Thinking-based research

projects at the grassroot level, during her tenure as the Head of Rural Management program and the Business Design Program in her previous organization.

Her teaching and Research is mainly in the following areas -

- i. Design thinking Applying Design Thinking for Problem-solving and Innovation.
- ii. Innovation Management Process driven approach to nurturing a culture of Innovation in large organizations
- iii. Technology Management Leveraging Technology for Business and societal goals
- iv. Digital Transformation

She has been a Speaker at the Smart City Conference in Barcelona, Spain and has won awards for best Academic Program on Smart Cities at the BW BusinessWorld Smart cities conclave for two consecutive years. She was a part of the team that developed a low-cost product concept to help manage 'Freezing' in Parkinson's patients and won the Kyoto Design Lab Innovation Prize at Sheffield Hallam University, England. She was a recipient of the Distinguished Women in Management Award in 2018.

She has been a Board Member of the International Association of Management of Technology (IAMOT) and a Mentor at Atal Incubation Centres at NMIMS University and Bhabha Atomic Research Centre (BARC), she has mentored several startups and helped them file patents for their creations.

Presently, Dr. Anuja has joined a mission of providing world class Computer science education to bright underprivileged children in India, as her pro-bono assignment as the Founding Dean at Sitare University.

Detailed Résumé

Academic Qualifications-

Exam	Year of	Board/ University	Class
	Passing		
Doctor of Philosophy	2009 - 2014	Mumbai University	Degree awarded
Masters in Computer	1989 - 1992	Devi Ahilya Vishwa	First
Application (MCA)		Vidyalaya, Indore	(90.4%)
B.Sc. (Computer Science)	1986 - 1989	Delhi University-	First
		Hansraj College	(70%)
Senior school certificate	1986	C.B.S.E	First
(class XII)			(83%)
Secondary School	1984	C.B.S.E	First
certificate (class X)			(76%)

Work Experience:

- Present December 2022 -	Founding Dean at Sitare University – A first of its kind University that provides world class Computer Science education to bright underprivileged students for FREE (at 100% scholarship). Adjunct Faculty at KJ Somaiya Institute of Management, Somaiya Vidyavihar University, focus on Research and Teaching in the area of Design Thinking,
November 2015 – November 2022	Associate Dean – Technology Management at Mukesh Patel School of Technology Management & Engg, led the flagship MBA program. I was the In-charge Director of the Centre of Excellence, managing the Administration and execution of MBA Business Analytics Program (2020 – 2021). Launched MBA (Digital Transformation) at NMIMS. Conducted several MDPs on Design Thinking and Innovation. Mentor at the Atal Incubation Centre at NMIMS as well as BARC. Research Guidance: One student has been awarded PhD under my guidance in 2022. Guiding 6 more PhD research scholars in the area of Technology Management at MPSTME, out of which 2 more are about to submit their thesis.
	Teaching Subjects: Design Thinking and Innovation in Business, Technology Management, Management of Innovation & Technology, Information System Management
Dec 2005 - Oct 2015	Sr. Associate Dean & Vice President – Strategy at Welingkar Institute of Management (WeSchool), Mumbai New Programs Launched – a. PGDM (Business Design) (2006)– Post graduate Management Program with Design thinking & Innovation as the core. b. PGDM (Rural Management) (2012) - Post graduate Management Program to nurture Management graduates with insights about Emerging economy of Rural India. Primary Research conducted in rural India in collaboration with the 'Stanford Design for Change center' for the project- "Developing Strategies for alternate energy sources and building business ecosystems in Rural India". The projects were appreciated by the then President of India Smt. Pratibha Patil during the exhibition at Weschool in March 2012.

	Swedish Collaborations - Selected as Visiting faculty for Leadership & Design thinking at the Malardalen University in Sweden, under the Linnaeus Palme scholarship by the Swedish Government. In 2014, we organized India-Swedish collaborations for innovative energy solutions, under the India Sweden Innovation Accelerator Program in 2014. MDP on Design Thinking & Innovation for Mahindra Finance, L&T, Kirloskar, Hyatt Hotels.
Aug 2002 – Dec 2004	Faculty consultant (Computer Science) to Bombay Scottish School, Mumbai
Jan 2000 – Sep 2002	Sr. Lecturer – Hamdard University, New Delhi. Teaching Computer science subjects to MCA students
July 1998 – Jan 2000	Lecturer – Ramlal Anand College, Delhi University. Teaching Computer Science subjects to students of BCA
Feb 1998 – July 1998	Lecturer – Kirori Mal College, Delhi University Teaching BCA students
April 1994 – July 1998	Programmer cum System Analyst at Lucknow University Computer Centre . The job also included teaching Computer Science Subjects to BCA and BSc Students, as a part time faculty

Publications

Books

Design Thinking: A Framework for Applying Design Thinking in Problem Solving. Agarwal, A. Cengage Publishers. (2024)

Book Chapters have been contributed in – Handbook of Design Management (Berg Publishers, UK), Handbook of Research on Blockchain Technology, Algorithms for Intelligent Systems, Innovations in Computational Intelligence and Computer Vision.

Research papers-

1. A fuzzy approach to assess Blockchain for Sustainable transformation of Healthcare. Shukla, R.G., Agarwal, A., Shekhar, V. et al. SN COMPUT. SCI. 5, 44 (2024).

- Cyber Suraksha: a card game for smartphone security awareness.
 Pintu Shah, Anuja Agarwal. Information and Computer Security (2023). (ABDC category 'B' journal)
- 3. Sustainable Water Resource Management Solutions using Design Thinking Principles and Innovative Hollow Shaft Technology: A Case Study at Village Kheware in Maharashtra. Anuja Agarwal, Naimesh Tungare, DG Jha. 13th International Conference on Sustainable Waste Management & Circular Economy & IPLA Global Forum 2023.
- 4. Blockchain Design Elicitation for Healthcare: A VFT Based Approach. S. Shukla, R. G. Shukla and A. Agarwal, 2023 IEEE 12th International Conference on Intelligent Data Acquisition and Advanced Computing Systems: Technology and Applications (IDAACS), Dortmund, Germany, 2023, pp. 938-941, doi: 10.1109/IDAACS58523.2023.10348731. 2023.
- 5. Leveraging Blockchain Technology for Indian Healthcare system: An assessment using value-focused thinking approach. Rashmi G. Shukla a, Anuja Agarwal a, Vidhu Shekhar b. The Journal of High Technology Management Research (2021).
- 6. Feasibility of Adoption of Blockchain Technology in Banking and Financial Sector of India. Anuja Anuj Agarwal., Mahendra Parihar., Tanvi Shah. ADVANCES IN INTELLIGENT SYSTEMS AND COMPUTING [INTERNATIONAL], Vol. 1189, no., pp.479 487 (2021).
- 7. Cybersecurity Behaviour of Smartphone Users in India: An Empirical Analysis. Pintu Ramesh Shah., Anuja Anuj Agarwal. INFORMATION AND COMPUTER SECURITY [INTERNATIONAL], Vol. 28, no. 2, pp.293 318 [EP] (ABDC category 'B' journal) (2020)
- 8. Clinical Data Driven Decision Support in Healthcare Informatics. Milind Godbole., Anuja Anuj Agarwal. INTERNATIONAL JOURNAL OF ENGINEERING RESEARCH AND TECHNOLOGY [NATIONAL], Vol. 13, no. 1, pp.107 116 (2020)
- 9. New Paradigms In Higher Education Integrating For Synergy In Management And Relevant Technology Education. Anuja Anuj Agarwal., Dasika Chaitanya. INTERNATIONAL JOURNAL FOR RESEARCH IN ENGINEERING APPLICATION AND MANAGEMENT [NATIONAL], Vol. 4, no. 5, pp.591 600 (2018)
- 10. A framework to explore the Grassroots in Rural India by Design Innovation Thinking. Anuja Agarwal, Sten Ekman, Annalille Ekman. INTERNATIONAL DESIGN CONFERENCE DESIGN 2012 [INTERNATIONAL], Vol., no., pp.1 11 (2012)
- 11. Design Inspired Innovation for Rural India. Sten Ekman, Annalille Ekman, Anuja Agarwal. INTERNATIONAL CONFERENCE ON ENGINEERING DESIGN, ICED11 [INTERNATIONAL], Vol., no., pp.1 10 (2011)
- 12. Impact of Including Design Thinking competencies in Management education: An Experimental Study. Anuja Agarwal. 2012 INTERNATIONAL DESIGN MANAGEMENT RESEARCH CONFERENCE [INTERNATIONAL], (2012).
- 13. Software tool for supporting ethnographic research in design and innovation projects in management education. Minakshi Agrawal; Anuja Agarwal; Aparna Krishnamoorthy; Pradeep Pendse. 2010 INTERNATIONAL CONFERENCE ON TECHNOLOGY FOR EDUCATION [INTERNATIONAL](2010)

(The Other 20 publications can be produced upon request)

Case Study

Case Study titled "Modern Health Tech & Ancient Ayurveda" published by the William Davidson Institute (WDI Publishing), University of Michigan. 2024.

Intellectual Property

Received the "Certificate of Registration of Design" from the Patent Office, Govt. of India, for the Innovative "Jewellery Box with AI powered personal stylist".

Awards

- 1. Third Place in 2024 Health Tech Global Case Writing Competition organised by William Davidson Institute (WDI).
- 2. Kyoto Design Lab Innovation Prize, by Design4Health conference held at Art & Design Research Centre, Sheffield Hallam University, Sheffield, England
- 3. Innovative Smart Solution Knowledge & Intellectual, by BW BusinessWorld
- 4. Order of Merit award for Academic Program on Smart Cities, by BW BusinessWorld
- 5. First Position in the new ventures category in the International Case Masters competition, by IIM Ahmedabad.
- 6. IconSWM-CE Excellence Award 2023 for Best Paper Presentation

PhD Guidance

2 students have been awarded PhD under my guidance.

Socially relevant Projects undertaken with application of Design-Thinking process -

- 1. Project Developing Strategies for Alternate Energy based Business Ecosystems in Rural India An ethnographic study was conducted in collaboration with the 'Stanford Design for Change center'. The first phase of the project was carried out in collaboration with the Stanford Design for Change Centre. The goal of the project was to generate novel framework of solutions by understanding the existing patterns of energy consumption in rural India and identifying unique adaptive behaviour patterns. The project spanned 3 years with about 300 MBA students gaining valuable insights into the problems of the rural folk and possible opportunities. The project built empathetic skills and some students even went on to help the community via Innovations with potential for further scale up in the rural sector.
- 2. Project 'Jaggery to Jags' An initiative, "Exploring the Grassroots", was aimed at Applying Design thinking principles and Innovation models in Rural India. Under this initiative, she undertook a project, "Jaggery to Jags" for enhancing local income through high-end positioning of Jaggery in the market by making it available in convenient, attractive, micro-unit sizes and modern flavours, akin to Chocolate bars. She is currently working on the design of a mechanised system that can convert crude sugarcane juice into premium avatar of jaggery. The project outcome would create enhanced income in the

- hands of the farmer and catapult them to being higher in the value-chain through tech-based solutions for local production with efficiency.
- 3. Project GELL-AMAR **GE**nerating **L**ocal **L**ivelihood to **A**rrest **M**igration & **A**id **R**everse-migration project in Ladakh. The Framework of Design-Thinking was applied on CSR project of a large Indian Bank The focus was to study Project Management lifecycle for Community based projects, CSR fund utilisation strategy and Grassroot Leadership. The right framework around social projects such as GELL-AMAR, would provide a result-oriented, process-driven approach towards creating meaningful and sustainable solutions to societal problems.
- 4. She is currently working on Sustainable Water Resource Management Solution to enhance livelihoods. This Water Conservation Project at Village Kheware in Rural Maharashtra, is being worked upon as a combination of Design-Thinking Principles and Innovative Hollow Shaft Technology. The potential impact of the project would be on water availability, local livelihoods and stemming the migration of local youth from the area. The Case Study written on this solution received the Best Paper award at the International Conference, resulting in recognition of the work and attracting more collaborations to replicate this project and make it four times bigger in a couple of years.
- 5. Zero Waste City with 'Smart Taps' Project This project is aimed at reduction, segregation and collection of household waste, measuring to minimise energy & water consumption and educating people about hazards/impact of overconsumption. Under the subtheme of water conservation, she has designed 'Smart taps' that can change the behaviour of people to reduce their water dispensation and consumption over a period of time. Currently working to file a patent for the design.
- 6. Waste-to-value solutions benefiting farmer community she has written a case study of the work done by CSR arm of a leading organisation in India. The case study highlights how the framework of Design Thinking can be leveraged even in socially relevant circular economy-based projects. The case has received good feedback from Harvard Business School Publishing. Once published, the Case study would be a useful study material for MBA students across the world, demonstrating how a focused approach under CSR can make a real difference at the grassroots while creating a Sustainable planet.
- 7. Project 'Pace'- a personal metronome: At a 24 hour Design Challenge organised collaboratively by 'Lab 4 Living' (at Sheffield Hallam University Art & Design Research Centre) and the Kyoto Design Lab, her team designed a low-cost concept product to help manage 'Freezing' in Parkinson's patients. The team created Pace a personal metronome, to let the patient's own normal walking pace give him/her a subtle cue in the form of snuggly wrist band vibrating in the rhythm of the patient's own beat. In the scenario of 'freezing', the vibrating wristband shall provide him/her with the subtle beat reminding the brain for activity of walking and moving on, thus taking away the dependence on external cues. The band calibrates itself while the wearer walks at normal pace. Once calibrated, the wristband is in unison with the person's body rhythm and is ready to start providing the cues. It keeps ticking, providing the reassuring beats, hand-on-the-shoulder feeling to nudge the person to follow the natural pace.
 - The concept won the Kyoto Design Lab Innovation Prize at Sheffield Hallam University, England.
- 8. She has designed a Software tool for supporting Ethnographic Research in Innovation Projects which was presented at a conference, 'Technology for Education' held at IIT, Bombay.