



Young Bangalore Chamber of Industry and Commerce

# YUVACHAKRA

Pragati | Unnati | Prerna

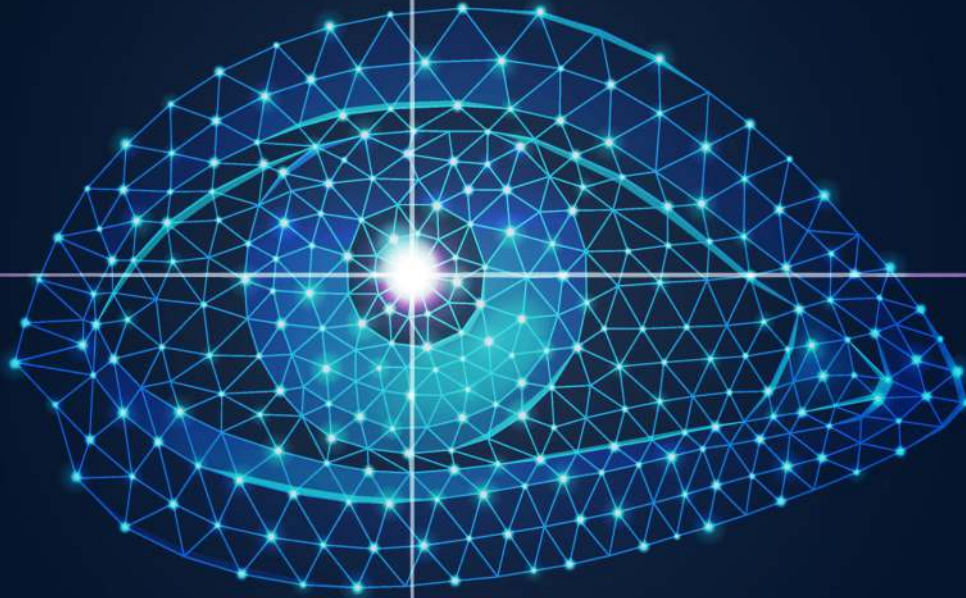
NEWSLETTER



3<sup>rd</sup> Edition | October, 2021



**WOMEN**  
IN THE INDUSTRY



## MISSION

Namma Karnataka-  
Gateway to Future India

## VISION

Look Beyond

Together We Should



## PURPOSE OF **YBCIC**

YBCIC is here to Enable, Equip and Encourage the youth of India to become resourceful citizens who run the New India, working for as well as creating jobs for others in various business sectors.

We will focus to generate mass employment opportunities, upskill the youth to make them suitable for various industry sectors and corporates, make the youth aware of the needs of this society to help them thrive and largely encourage and empower them with entrepreneurial skills.”



## PRESIDENT'S MESSAGE



My warm welcome to another edition of Yuva Chakra. Today, I am very pleased to say that there are strong rays of hope around us. For the first time in last one and half years, we have a strong notion of getting back to normalcy as far as most aspects of our lives are concerned. It is heartening to see our children have started getting back to schools. Wholesome education has a significant component of our ability for in-person interactions and relationship. Developing ones' Emotional Quotient is probably one of the most important skills in succeeding in today's world. And that needs us to be back to schools and our offices and start our non-virtual interactions again. Goes without the need of any mention that academics and skilling also need hand-on and that is often not possible without physical presence in labs. We are happy and hopeful that all these will come back to us in full normalcy real soon.

There is a special message that I would like to pass to our young friends. Our society is balanced between genders. However, historically, the extent

of education, development and participation in various aspects of life and career are not. We need our women friends to grow academically, professionally and in participation in all aspects of life as equals to men and even surpass. To make this happen is the responsibility of all of us, jointly and collaboratively. I am a strong proponent of bringing and growing our women colleagues in workforce. My earnest request and encouragement to all our women friends to show all your courage and strength and take on newer and bigger challenges. And to all my male friends, we should extend all possible support in achieving this. Only when our women grow, our society grows, our country excels. In this edition of Yuva Chakra, we portray stories a few such women, who broke all barriers and achieved great heights. These women are our inspirations, that anything is possible. The Industry is turning around and there is more focus on start-ups and growth of start-ups. Further the improvement in start-up eco system is critical for the success of Start-ups. BCIC is embarking on a new initiative of creating mentoring councils for the benefit of Start-up entrepreneurs and very soon you will get invite to join.

BCIC is embarking on multiple initiatives. In the past period, we have furthered our reaches and collaborations deeply amongst the central and state governments. We have opened a nodal center in Mysore, we have now

established our presence in Japan and have a number of countries in pipeline where we want to establish our presence to support joint trade relations. In all, we are extending our eminence greatly.

As the new president of the Chamber, I am looking forward to a great year. All our expert committees are poised very well to represent their business domains to the central and state ministries and carry on with awareness amongst the industry on trends, technologies and innovations. There will be a continuous stream of webinars throughout the year on various contemporary topics. Our target will be to conduct at least 6 signature conferences this year and also contribute significantly through research papers.

I wish all our members and readers of Yuva Chakra. Have a great year ahead.

Jai hind!

**K R Sekar**  
President, BCIC

## MESSAGE FROM IMMEDIATE PAST PRESIDENT, BCIC

Thank  
you



**Mr. T R Parasuraman**  
President & Wholetime Director  
Toyota Industries  
Engine India

*Dear friends,*

My warm greetings to each one of you. I express my profound gratitude for your whole-hearted support in every step and endeavour we undertook together during the last presidential year.

I am proud to say that with teamwork, perseverance and support, Team BCIC continues to thrive and achieve its goals of delivering programmes of high value and content to our stakeholders and members in particular. We were able to notch 200+ events in spite of a challenging year. My special thanks to all chairs/co-chairs/ mentors and committee members for this outstanding achievement and contribution to the growth of BCIC.

In every aspect, the efforts of Expert Committee members who have lent their invaluable time, knowledge and skill to drive the growth of BCIC is truly adorable. The voice and guidance of the members received in navigating through turbulent has been invaluable.

To start with our mission was

made very clear to all the stake holders “Namma Karnataka the gateway to the future India”.

All our activities were clearly linked to the mission. To solidify the mission, we added important committees such as “Start to Sustenance”, “Young BCIC”, MSME council, ICT & Electronics, international business and External affairs, CSR & member outreach to augment and accelerate the theme.

Though, we had several challenges during the year including the loss of our kith & kin, the impending adverse nature of Covid-19 pandemic was transformed through team consensus into an enduring opportunity. The support received from corporates, through their CSR initiatives, in the times of need was worth noting and laudable. The empowering of Expert Committees made all the difference in synergizing the network platforms and allowed hearing the voices of the stakeholders. We looked at every challenge as an opportunity.

The development of human resources at office was a key focus area. Team building was given due importance. In line with corporate practices, the performance and competency appraisal system was introduced to reward performing staff members and to identify potentially competent people for taking up future challenges and to develop them to take up higher challenges. The staff members put in their very best

to have a seamless transition to the ‘New normal’ of holding meetings and events virtually and embrace digital era. I very much appreciate their efforts. I am sure these efforts will provide them the necessary confidence and increased capabilities to strengthen the Chamber going forward.

We enhanced the value generation to our stakeholders and members through free events and programs in these challenging times. There was vibrancy of positivity in the way things panned out as one Team BCIC!

Taking BCIC beyond Bangalore, by eyeing nodal offices in Mysore, Dharwad within Karnataka State and moving offshore to set up an office in Tokyo is a strategic seed sown to reap rich harvests in future. The understanding reached with Bangalore Cluster for Science and Technology, through Indian Institute of Science, Bangalore will bring in closeness in working between Industry and Institute and is a significant step to enhance the brand BCIC. Through this initiative I am sure many of our industries and educational institutes will stand to benefit significantly.

In times of adversity, teamwork becomes the driving force. Not to mention, the collaboration of our Chambers with other industry bodies/associations in Karnataka amply demonstrates our capabilities, cohesive thought and joint wisdom. BCIC is blessed with wealth of knowledge and

## MESSAGE FROM IMMEDIATE PAST PRESIDENT, BCIC

Thank  
you

experience through our thought leaders, domain experts in various fields across various industries. This has to be channelized, thought out well and planned following effective systems and processes to reach the desired goal, with a strong mind and conviction towards continuous improvement and maximizing value to all our stakeholders.

We tried to bring in systems and processes for the strengthening the office BCIC . To manage the financial health better in a more professional way, treasurer role was assigned to one of the office bearers and all the decisions were made through a consensus approach involving all the stakeholders .In summary we could end up in a good financial health in spite of a challenging year . My special compliments to Dr.Ravindran in carrying out the treasury role efficiently and reporting the financials in a systematic way .

In spite of the challenges due to the pandemic we had lot connect with the members through social media, online events, golf tournament, musical night etc and BCIC was clearly visible in social media, press and government bodies . We had several face to face discussions with various ministers, bureaucrats and senior officers of various

departments in matters of concern affecting the trade and industry. We also had an excellent communication with other trade bodies like CII, ACMA, IMTMA, FKCCI, CASSIA etc.

The frequent and regular reviews with the office team and with the chairs/ co chairs of various expert committees helped us in taking timely reflections and smooth progression of planned activities.

Another great milestone was the new address of BCIC and was a very historic moment to team BCIC. I would like to thank all the past presidents, EC committee and members for the whole hearted support in accomplishing this milestone. I would to convey my special thanks to past presidents Mr. Devesh Agarwal and Mr. Girish for initiating the journey and support.

Though we could prioritize and complete many activities, still many more needs to done and I am sure the successive Presidents will take it to perfect levels in the near future!

Further I would like to thank my SVP Mr.Sekar,VP,. Dr. Ravindran and Deputy Secy General Prithvi and our advisor Mr.Murali who supported and guided me from time to time in

carrying out my duties and responsibilities. Also my special thanks to Ms.Roopaa, Mr. Shyam,Ms. Nanditha and other office staff for their hard work and dedication.

I would be failing in my duty my If I don't thank Mr. Yanagisawa MD of Toyota Tsusho India Pvt. Ltd. for sparing their VP Mr. Murali, free to BCIC for 2 years Last but not the least my special thanks to Mr. Hayashi MD of Toyota Industries Engine India, Mr. Vikram Kirloskar, Vice Chairman, TKML for the great support and guidance during my tenure as the President.

Finally request all of you to continue your support and guidance to my successor Mr. K R Sekar and I am sure BCIC will scale to greater heights under his dynamic leadership.

I once again sincerely thank all of you for your great support and guidance !

Wishing team BCIC the best of everything in all your future endeavours!

Jai Karnataka!

Jai Hind!

*Best wishes and Regards*

**T R Parasuraman**  
(Immediate Past President)

# EDITORIAL DESK

*Editorial*

## THEME OF THE MONTH

# WOMEN IN THE INDUSTRY



**Bindu Sagadevan**  
Founder and Director,  
Paleetu Educon and Enablement Services  
Yuva Chakra Editorial Team

*Dear Young friends,*

As you all step into new academic year, with the new norm continuing, remember to give a pat to yourself, you deserve it.

With so much being spoken about diversity, inclusivity, this edition of Yuva chakra we wanted to break some myths around Women making it big in the STEM (Science Technology Engineering and Mathematics).

So, this edition is for every young lady out there, to read stories from all over the globe to know the challenges you thought were only in India is actually universal – yes, US, Canada, Australia and of course India – listen to the ladies who have sustained in the STEM career stream for decades and still there with ambitions to make it big and may be bigger! This edition is also for every young man to know that he has a duty to motivate his

peer group young women; The edition also is for every parent to know your daughter has a seat up there, do educate, enable, encourage and empower them.

Pilot, Tech Architect, people leaders, sales experts – we have it all covered for you

And we didn't want to leave you guessing for the next edition ...so we have a curtain raiser on our next edition, don't miss to read about happening industry sectors that have borne the tough times well and look forward to serve the customers diligently come what may!

Read on ....

India leads in the WOMEN in STEM grads as compared to US, UK or France!

### Women in STEM jobs:

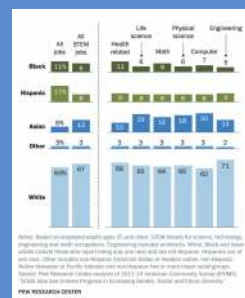
It is evidently noted that the fields of Science Technology Engineering and Mathematics have always shown a lower women strength historically; With scholars, corporates, all types of organisations and policy makers focusing on this aspect to bring in diversity in these streams, we are still not at the numbers that we would have wished to see.

The good news, however is that India has more women grads in comparison to countries like US, UK and France (ref: India has more women STEM grads than US, UK or France | India News - Times of India (indiatimes.com)); According to a data published by World Bank , the percentage of females in STEM stands at 43% , in comparison to US at 34% , UK 38% , Germany and France at 27 and 32% respectively.

Now it remains to see, with the rise of the females in the STEM education, will we see the same rise in careers in STEM as well. Do not miss out on the article at

Black and Hispanic workers remain underrepresented in the STEM workforce - Pew Research Center

A quick glimpse of an interesting graph from the PEW research .....



Home and Work, the balancing act may be tough, but remember as the going gets tough, the tough get going...read on for inspiring stories and articles

*Stay positive and Think Progressive*





## PILLARS OF YOUNG BCIC



### YBCIC COMMITTEE MEMBERS



**Manas Dasgupta**  
Head of Wealth Technology,  
ANZ Bank  
Chairman – Young BCIC



**Richa Sarna**  
Head of Public Relations, Indus  
Business Academy (IBA)  
Co-Chair Person – Young BCIC



# STARTUPS



**Dr. Ravindran L**  
Managing Director and CEO  
Wealthmax Group of Companies

Globally, India is standing third currently in terms of startups which have attained the unicorn status.

Edutech, foodtech and e-mobility have made substantial contributions but the lion's share is held by fintech and e-commerce companies.

The past year witnessed emergence of 28 unicorns with 40% in the edutech and fintech sectors.

Now, there is the learning for the Minicorns.

Only through devising a customer centric business model after bifurcation of customer segments should

one create products and solutions in order to meet solutions to attend to customers problems.

Branding strategy plays a part in giving shape to value propositions but that comes a bit later.

It is necessary that customer acquisition strategy is properly backed up by market execution strategy with online and offline efforts complementing each other.

Technology will be an enabling factor around which most firms have created internal organisational processes and embarked on customer acquisition strategies.

Minicorns have a lot of learning to do from these Unicorns to have possibly built business models which can add value while being sustainable.

Minicorns have to orient themselves to questions from venture capitalist and then focus on prospects and growth plans so that at a later stage managing business and raising funds both at the same time do not become a hindrance.

Venture capitalists provide expertise based on their experience in various sectors and have a network of like-minded individuals and firms who can add value to these Minicorns by effectively screening them in the initial rounds and help them succeed later.

It is still possible that many problem statements remain unaddressed especially in Edutech, fintech and mobility segments.

According to data from venture intelligence, USD 12.1 billion of VC investments have followed Indian startups so far in 2021 compared to USD 11.1 billion dollars in 2020.

In our view, the emerging segments of the future could be Insuretech and Wealthtech segments.

All in all , over a decade possibly the Minicorns of today will possibly outbeat the Unicorns of tomorrow and become Decacorns.



## LAUNCH OF BCIC STARTUP CLINIC



The BCIC Start-Up Clinic Advisory Council is Chaired by Mr. K Jairaj, ISA, Retd., former Additional Chief Secretary, Government of Karnataka; Members of the Council comprise BCIC Office Bearers, distinguished leaders from industry and profession who will be mentoring and guiding start-ups to grow and scale and ably support them in their growth trajectory including:

- Foster Entrepreneurship and Help Build SME's of the future
- Strengthening ecosystem for start ups
- Outreach: 3 Impact Events with target of attendance of 500 Start ups in 3 phases

Enable Funding /  
Mentorship/ Infrastructure /  
Investors Support

Dr. C N Ashwathnarayan, Hon'ble Minister, Higher Education and IT, BT and Science & Technology, Skill Development, Entrepreneurship

and Livelihood, GoK inaugurated BCIC's Start-up Clinic for 2021-2022 on September 28, 2021

Bangalore Chamber of Industry and Commerce, the premier and apex Chamber in the State of Karnataka, virtually inaugurated the Start-up Clinic to benefit emerging pool of entrepreneurs, encourage innovations and move seamlessly towards a digital society.

Mr. K Jairaj, Retd. IAS, Chairman of the Start-up Advisory Council of BCIC gave a key note address and said that this Start-up clinic is unique and one of its kind in our country. He recalled the good response to the Start-up Awards of BCIC during last year, in which more than 200 start-ups participated in the event to have a vibrant start-up culture.

Mr. K R Sekar, President, BCIC welcomed the gathering

by thanking Dr. C N Ashwathnarayan, Hon'ble Minister, Higher Education and IT, BT and Science & Technology, Skill Development, Entrepreneurship and Livelihood, GoK, the Chief Guest for the event. He said India is ranked in the top 3 countries in the world for start-ups, and Bangalore is the Start-up capital for India. Many unicorns have originated from Bangalore. This augurs well to the Honourable Prime Minister's vision on Atmanirbhar Bharat. Many of the Past Presidents and eminent professionals are Mentors to these Start-ups giving guidance at the proposed monthly mentoring programmes free of charge. Sekar also explained the working of BCIC Start-up clinic. BCIC start-up clinic comprises of discussion with Mentor council for all the start-



## LAUNCH OF BCIC STARTUP CLINIC



up to share their challenges and the Mentor council will provide them advise and support and mentoring the young start-ups. The Mentor Council of BCIC comprises of experienced and seasoned professionals in the areas of HR, Business Strategy, Scaling up, Finance, Tax and Regulatory etc. The Start-up community can avail the professional guidance of mentors of BCIC and seek their support in any areas on which they need guidance. This is a unique and first of the

kind initiative by any Chamber of Commerce,

Minister Ashwathnarayan congratulated the Office Bearers on taking charge on their new assignments. BCIC has been working closely in framing Govt. policies, supporting during Covid-19 pandemic times and coming forward to design a new curriculum to Polytechnic students. This start-up clinic is essential for the youth in concreting and shaping their ideas. Govt. also has come out with many schemes in

many educational institutions by promoting incubations, IoT etc., Government will provide all support to BCIC and facilitate these initiatives of BCIC.

Mr. T R Parasuraman, Immediate Past President complimented the Minister's efforts in promoting start-ups, and expressed his best wishes and thanks to Team BCIC.

The BCIC Start-Up booklet on Start-ups was also launched at the event.

## START-UP AWARD 2nd Edition of Emerging Stars

<b>Registrations Close</b>	<b>12th December, 2021</b>
<b>Completion of First Round Screening</b>	<b>1st week Jan, 2022</b>
<b>Completion of all Final Round Presentations</b>	<b>2nd week Feb, 2022</b>
<b>Complete Jury Moderation to finalize winners</b>	<b>1st week March, 2022</b>
<b>Gala Awards Event – Start-up Summit</b>	<b>March, 2022</b>

For more details visit:  
<https://awards.bcic.in/>



For nomination details, visit: <https://awards.bcic.in/>





## INTERVIEW



### Women are flying high in STEM ... and we mean it, *literally*

**Myth:** Its tough for women to fly high in this challenging biased society!

**Breaking the Myth:** **Archana Kapoor** , flying high literally; From BSc Computer Science to the cockpit, she did it!

Archana Kapoor, 28 years in AVIATION

#### Tell us Mam, how did the inspiring Udaan happen?

I am from the first batch of women pilots in the Indian Air Force, who joined the Air Force Academy in July 1993.

The passion for wearing the uniform and flying, came from my father who was himself a retired Air Force Helicopter pilot. So, for me joining the IAF in his footsteps was a childhood dream-come-true.

Even though, nearly 28 years have passed since I have been involved with aviation, there is never a dull moment, and I enjoy pursuing my hobby as my profession.

I am presently a Type Rated Instructor on the Airbus 320 aircraft with India's most preferred airline, Vistara. I have also held the post of a Senior Flight Operations Inspector at the Directorate General of Civil Aviation for over 3 years.

The wealth of experience in both the military and the civil, make me who I am.

#### What is your message to the young women aspiring to make it big in STEM?

My message to young people who wish to join the Armed Forces is that, being in the Forces is not just a career option...it is a way of life. A very balanced, yet thrilling and satisfying way of life, which changes you from within. Builds confidence and fearlessness. So, go and

chase your dreams, and discover the finer version of yourself.

#### Do you think there is gender bias?

Yes, I did come across gender bias, in my professional life and outside it as well. I overcame it by focussing on myself rather than others' point of view, and invariably things changed with time, in all situations







## INTERVIEW



### Banking Financial Services Women have made it to the TOP ...read on



**Myth: It's tough for women to reach the CXO positions, unless you have a fabulous qualification from ACE institutions!!**

Breaking the Myth: **Lisa Ryan**, university only after age 20, lot of part time studies, an MBA... and in 25 years a CTO!!!

Lisa Ryan, CTO, Hume Bank Australia – 25 years in STEM

**Nearly 25 years in the industry, so many varied roles in technology and all the way to a CTO of an Australian Bank; How easy or difficult was the journey when you look back Lisa?**

It was definitely not easy, but I'm not one to take the easy path. I had a very unconventional beginning in my career, not attending university until my early 20s, and then after several years of part-time study, I transferred directly into an MBA based on my work experience. My path into Technology was the result of project work in systems implementations, which provided a platform for learning what systems and applications can enable for businesses, and how to bridge the great divide between the front line and the IT department. I have been very fortunate in my career to have strong leaders that have believed in me, and created the environment to challenge me and watch me grow. I didn't get every job I applied for, and some I was bitterly disappointed to be rejected, but I soon learnt that there was other – even better – roles that come up, so I learnt that everything happens for a reason and to be patient. In

saying that, it was important to have a life plan and a future dream, so you have something to work for and aspire to.

What are the top 3 hurdles according to you for a woman to sustain in STEM? (Science, Technology, Engineering and Mathematics)

- i. Gender: STEM is still a male dominated industry and it can be difficult to find opportunities to prove yourself if the field you are working in is still evolving in gender diversity. Be patient, we are starting to see positive shifts.
- ii. Sponsor: Find a manager or leader who can be your support and recommend you for roles or placement. Someone who respects what you do and believes in your skills. Listen to them and respect their advice and guidance when considering future paths.
- iii. Work Life Balance: Having a family, aging parents, successful career, continued learning and maintaining friendships is a difficult balance. Find your balance, and trust where your choices take you – life is a

constantly changing journey and getting it right required a continuous improvement approach!

**What is your advice to young women seeking to become enterprise Architects/Technology leaders?**

Follow a career path in STEM if it is what interests you, but don't be afraid to try new things, industries or roles that may not be an exact fit to what you want, as they may show you what you never thought possible. Look at each role in three components: "stuff" I know I love, "stuff" I can learn, and "stuff" I don't like. I try to look for roles that focus on the first two and definitely provide me with learning every day. If your role ever has more than a third in the "don't like" category – it's time to start looking.

**As I know you, you are a graceful, soft woman leader anyone would love to work with; Amidst all the chaos and rush, how do you stay so calm, attend to family and make it big at work?**

Thank you Bindu, I'm humbled by your kind words. There are no tricks or easy



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solutions to this, but with every career you develop your own knowledge, and the ability to assess situations with experience and hindsight. Sometimes this is easier than others but remember to rely on your team, trust your peers, respect your leader, and always follow your instinct. For me, having children was the biggest impact to my career and I knew I needed to balance my love for them, with

the love for my career. It can be done, but accept that you won't be the person you were before children. It's different as you can't suddenly work late, or on weekends, but it also builds empathy, priorities and adaptability. My career is something that needs to work for my life, so to find balance, I find outcome-based roles with flexible working, and ensure that I bring my whole self to work. I'm proud to say I

am a CTO for a regional Australian Bank, but I'm also a proud mother, a caring daughter, a best friend, a mentor, a board director, a Lego enthusiast, a keen learner, and hopefully a relatable story for all girls wanting to follow their dream in a STEM career.



## Women Suit Software testing jobs very well due to their innate skills

Women are extremely good and successful not just at maintaining order at home but in the software quality too ; Taking a paragraph from “Why more women should work in Software Testing | IWD 2020 (brightest.be)” that read “Women sometimes have a certain skill for planning and structuring their lives – the 5-year plan! We just know what we want, where we want to go or what we want to achieve and will try to arrange our lives and careers to reach that goal. All this while considering well calculated risks. Even the messiest and most chaotic amongst us, are able to set their priorities straight and go for it! As it happens, planning, a certain degree of structure and setting priorities based on risks, whilst avoiding or mitigating those risks, are some of the core qualities of a good Software Tester.”Did you know of this dedicated website for women testers ? checkout the website [www.womentwhotest.com](http://www.womentwhotest.com)



**Myth: It's tough for women to sustain when you are from a conventional religion/region community, conservative family and to manage work and home**

Breaking the Myth: **Umme Farzana**, while there was a path to get married and “settle down” taking a conventional path, she stands up proud managing the delivery for multiple projects across Europe and APAC, with complete support of maternal and paternal family

Umme Farzana – Sr. Program Manager, IBS Software Pvt Limited – 22 years in STEM

Breaking Barriers: Breaking the tradition and achieving your goals, I wouldn't say it's easy but exciting. Many challenges and learnings on the way. We have to stand up strong for what we believe is our strength, to face every odd on the way and never gave up . Working and earning a living is as much your right and essential as much it is for the other gender, irrespective of religion, region or any categorisation.

Killing Low self-esteem: There are times you want to give up; Specially in a career stream like software quality assurance, all you see is defects, escalations,

red milestones and there is a possibility to becoming very negative about work itself, but the I have never regretted being in this stream. I feel proud and confident that I have a career of my own and able to manage the home and kid as well. Yes; there are times you will struggle to prioritise. If I look back, I have always prioritised my work and career while I knew I am not compromising on my home front. There are times when I would get confused, I would run to my mom and my good friend to seek opinion and clarity. So basically, never shy away from asking for help,

that's important; Don't try to be the superwoman, try to be the rational lady.

Diluting Discriminations: To be frank, I did see the discrimination many a time in last 20 years. If they have the thought that only men are bread winners of a family and they deserve more, then clearly there is an issue. You will have to strive harder to prove yourself and fight for what you deserve or find a better unbiased place to work. On the other contrary I have also seen leaders going the extra mile to guide and support women at work. So,



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it's a mixed feeling for me. I had a struggle in my initial management ladder. Now I feel I have my space to learn and grow.

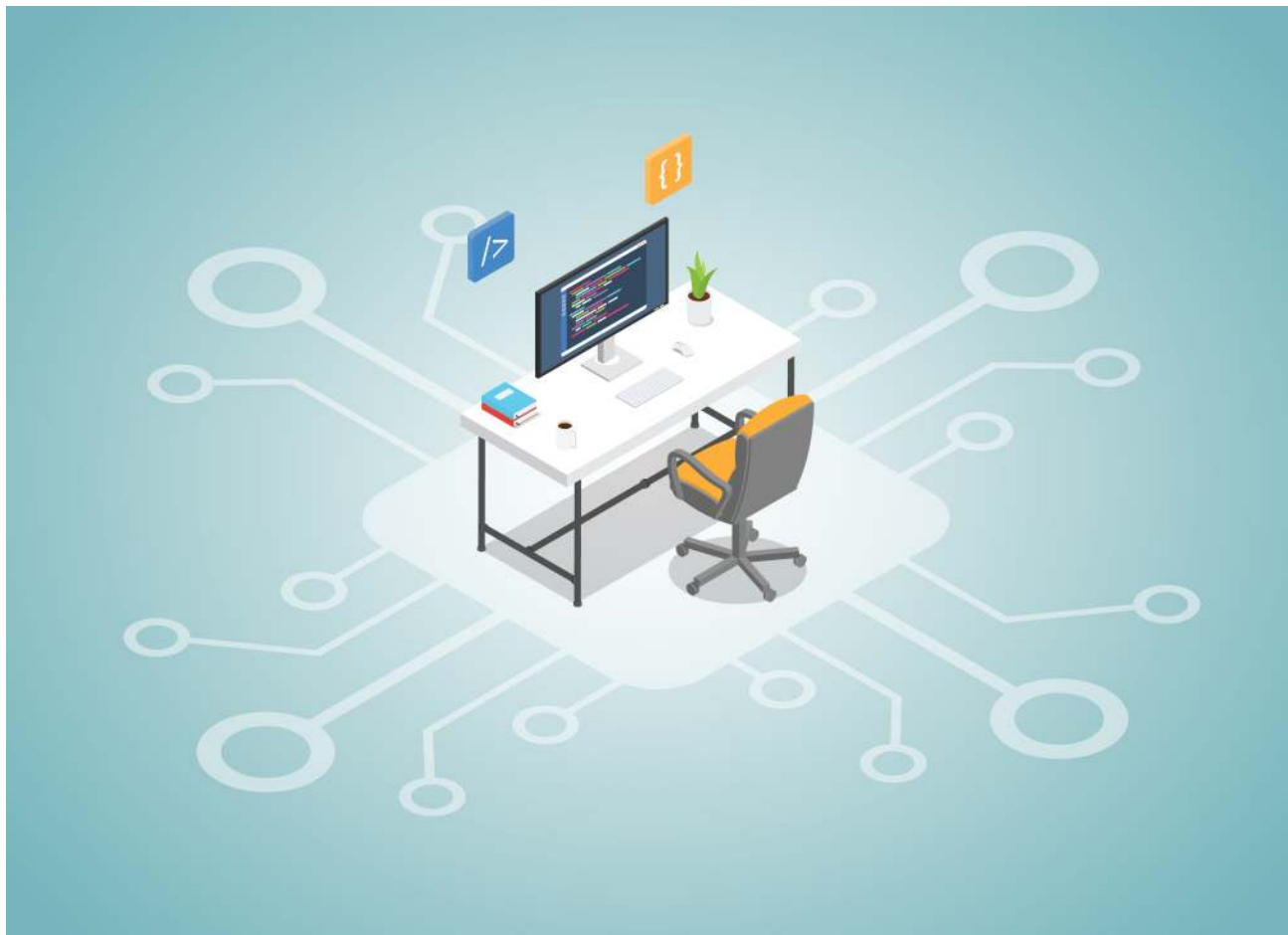
The career path of Software Quality: When it comes to software testing or business analyst jobs, With robust technical skills, woman possess soft skills and strong people skills which is critical for teams to come together for project delivery; So we are best suited and super successful in such jobs that demand high

people quotient. We have inbuilt instincts for leadership. Communication and interpersonal skills are never a problem. So, what should stop you

We have to create opportunities and avenues for fresh minds to take up software quality roles right from college levels. Set a platform where they appreciate how software testing can take them through paths of Business analysis and eventually to business solution architects or large software

delivery program managers.

In my job that demands late work hours, frequent travel within and outside the country, I try have balanced it all , but never denied a work travel or growth opportunity that knocked my door; Travel helps with regaining my dynamism and energy. Interacting with customer directly gives you more opportunity to learn and contribute.





## SOFTWARE ARCHITECTURE

Women have all inherent skills to become architects

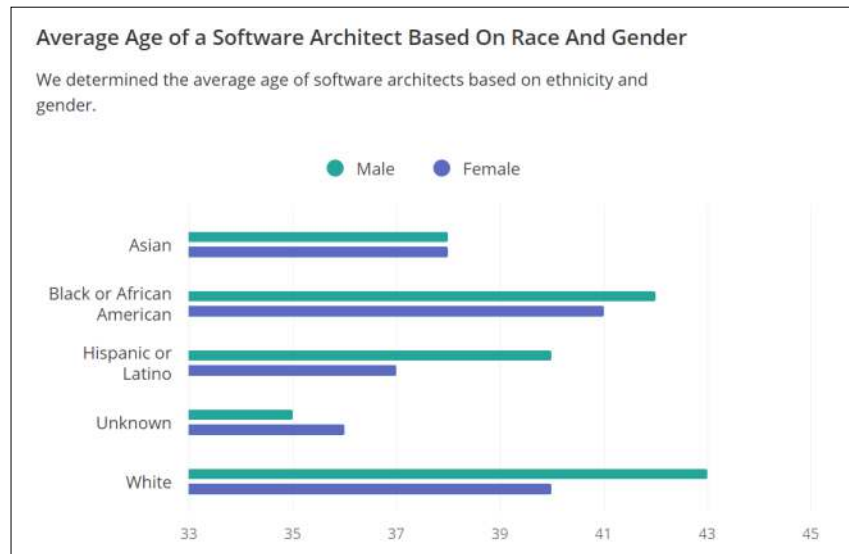


Architecture is a tough, creative and job that demands in depth knowledge in any sector. It requires vertical and horizontal capabilities of thinking. In the software industry too it is a foundation role and all other team members are highly dependant on this role; So this is a high demand and high visibility role with big individual accountability. It is great news that in Asia the ratio of female architects to male architects is nearly equal as compared to other parts of the world.

Read some very interesting statistics at

[Software Architect Demographics and Statistics \[2021\]: Number Of Software Architects In The US \(zippia.com\)](https://www.zippia.com/software-architect-demographics-and-statistics-2021/)

Women have an eye for details. Global research and studies have said that women tend to grasp more information through their senses and store a lot of it in the brain; This enables them to pay more attention to details than counter parts do. This



detail-oriented approach is a key factor for being an architect; On the other extreme, an Architect has to have a big picture view too and given that women are known to use both their left and right brain, and do not skew towards one side, this enables women have a big picture, which is an important attribute to build enterprise architecture.

Architecture also requires

multitasking in thought process- there are lot of parallel aspects to be considered while designing a solution. It's a world known fact that women are good at multitasking.

Given these what should stop young women from pursuing architecture route



## INTERVIEW



Here is the story of a software architect who has grown all the way to supporting partners in implementing the software platform

### Myth: It's tough for women to be Architects/play core tech roles and grow in one company

Breaking the Myth: **Diane Smith**, a product SME, a rapid growth from a Lead System Architect to Partner Delivery Success Manager in ONE company for 15 years, knows the product in and out!!

Diane Smith Knowles – Partner Delivery Success Manager, Pegasystems, US– 15 years in product engineering

### Nearly 15 years with Pegasystems, the journey of Diane from a technical architect to Alliance enablement executive, variety of roles and commendable growth; Was it easy Diane?

No, it was certainly not easy! I had to do a lot of growing and stretching along the way. I was able to jump from position to position because of previous experience, but for each “jump” along the way, I had to

extend myself in areas that were not always comfortable. Along with that, I had several moments of humility.

For example, in my first assignment as the Lead Architect for a big health insurance company in the US, there were a few areas of technology I hadn't worked with before and multiple teams I had to work with. I could not hide that I did not have the experience in that area of

technology. I had to admit the gaps in my experience and VERY quickly come up to speed and still portray confidence and expertise in front of the client.

### What are the top 3 hurdles according to you for a woman to sustain in STEM? (Science, Technology, Engineering and Mathematics)

“Sustaining” in STEM is all about staying up on the latest technology, research, and approaches & methodology, regardless of your field. The top three impediments I can see are:

1. Lack of time to stay current on the latest technology.
2. Choosing to stay with what you know.
3. Doing too good of a job in your current role and not thinking of the next level

### What is your advice to young women seeking to become enterprise Architects?

Firstly, be curious. The wonderful thing about the time in which we live in is we have access to limitless knowledge just a few click away. Between YouTube, LinkedIn Learning, Reddit, free and subscription



## INTERVIEW

learning sites – pretty much – the entire internet, you can learn whatever technology or domain you want. Then, get experience building something with that technology, whether it's a web site, a mobile app, or some other type of tech and show it off! You can do that through participating in hackathons, or maybe implementing something for a friend or organization you work with. If you can work with someone more experienced in a technology, take advantage of that opportunity. Once you gain expertise with one

technology, learn another piece of technology, and then another. Rinse and repeat.

However, it's not enough to just be an expert in implementing a broad range of technology (aka "full stack development"). The Enterprise Architect also knows how to compare technologies to choose the solution and approach that best suits the current need AND positions the future solution to be maintainable, testable, and reusable. So, after becoming proficient in individual technologies, you need to

develop the ability to contrast possible ways of solving a problem and propose the one you believe best suits the problem at hand, now and in the future.

Lastly, you need to be able to teach and mentor others along the way. You will become very busy in your role, so investing the time in one or two people can yield huge dividends, for you and those you are mentoring. You can't do it all yourself! This is probably one of the most important lessons I've learned in my career.





**SALES  
CHALLENGING BUT  
HIGHLY REWARDING**

**SALES**

**According to a 2020 Harvard business Review article Women are the Future of B2B sales!!!  
Read more at [Why Women Are the Future of B2B Sales \(hbr.org\)](https://hbr.org)**

Agreed, sale is not easy; But it's THE crux of the revolving economy; One sale in corporate means jobs and salary of many; Then what should stop us from getting on to such a challenging and noble job profile?

The general reasons people shy away from sales is not good at building customer relationship, need to travel a lot, odd working hours due to customer meets and journeys etc. But the digital world has changed the sales methodology completely. B2B sales these days happen with zero in person meet!! And to add to this the pandemic and the "Work from Home" has shown us that remote selling is possible.

Here are some quick

summaries from what top 50 sales women across the globe said

(Top Women in Sales (2021) | Clodura. AI)

**Benefits of a Sales job**

- Freedom
- Flexibility
- Travel opportunity
- Networking
- Financially rewarding

Challenges that could pull you down

No response from customers: don't get affected, persistence matters, also know when to let go off to be able to focus on opportunities with larger possibility of conversion

Failure: be willing to take responsibility of the bad that

could happen from sales

Tricky situations: Handle with care, seek support, talk to mentors

**Why women?**

Some key inbuilt attributes in women that makes them well suited for sales roles:

Ability to build trust: win customers

Good at nurturing relationships: engage and sustain customer relationship

Strong listening skills and solution mindset: Ability to understand and solve customer's problem

Patience: Ability to work through and follow up the time consuming sales cycle, from lead to prospect to cle





## INTERVIEW



### **Myth: It's tough for women to be in Tech Sales, it's a tough job!**

Breaking the Myth: Jen, a brave relentless lady leading high performance teams who help organizations differentiate their business and drive innovation through unique applications.

**Jennifer Doyle** – VP Sales, Appian, Dallas US – nearly 20 years

### **Nearly two decades in IT Sales, a successful sales leader, was the journey easy Jen?**

I like to describe my journey much like a hike. At times it was very challenging. However, these times often led to the most beautiful views and accomplishments. Other times were less challenging, and I was able to enjoy the hike and appreciate what was around me. Any successful leader will experience both ups and downs within their careers. It's important to challenge yourself, learn from every experience – good and bad – and never get complacent. When you are bored, it's a sign to move on to the next challenge.

### **What is your advice to young women seeking to come to technology sales teams?**

Start challenging yourself now. If you are in school, lean in to take the harder classes – Math, Chemistry, Physics. If they have advanced courses – try them. I also think it is important to participate in something non-academic, like sports, theatre, or music. The goal is to challenge yourself to try new things as early as you can. This will help you get comfortable with succeeding in new and

unfamiliar situations. Many people, especially women, will shy away from the challenge for fear of not being perfect. This is an issue. It is important to continue to challenge yourself at this level – study Math, Chemistry, Physics, Engineering (STEM!). Having success (not perfection) in these subjects, proves to future employers that you are able to learn complex lessons. And if you can excel in these courses, you can certainly take on new challenges in the workforce. I studied Chemistry at the University. I had good grades – not perfect grades. However, this gave me the opportunity to interview with IBM, where they hired me as a Mainframe Systems Engineer. I admit, I never used Chemistry in this role. However, it gave me the foundation and confidence that I needed to learn Computer Science and Mainframe technology in my new role at IBM.

Challenging yourself and trying new things should not stop once you get your first job. While you are in that role, get certifications, collaborate with co-workers to learn about their roles, help take on special projects. Once again, these experiences will lead to new opportunities. **Throughout my career, I intentionally sought roles that would lead to new experiences, and yes, it was uncomfortable to try something new. I started as a mainframe systems engineer, transitioned to mainframe Sales, became a manager, took on new teams selling new technologies, changed companies to sell complex services engagements, and most recently joined a company to be a VP of software sales. Every time, I felt uncomfortable. Now I embrace this feeling, because I know if I am uncomfortable then I am learning something new – and this is the most important advice I can give.**



## INTERVIEW



**Dr. Lakshmi Jagannathan**  
CEO, DERBI Foundation

I am currently the CEO of DERBI Foundation, a not-for-profit technology business incubator hosted by the Dayananda Sagar Institutions, Bangalore. I have been driving innovation and entrepreneurship in the campus for more than 10 years. In the course of my journey, I have enabled hundreds of inspired individuals to tread the path of entrepreneurship.

Through DERBI Foundation, we are supporting scores of early mid and stage entrepreneurs through preincubation, incubation and acceleration programs. We provide them deep mentoring, expert connects, prototype development support along with funding and grants. Of course, entrepreneurs leverage all this support along with networking and learning from their peers as well.

The Pandemic definitely was a disruptor and brought unforeseen challenges both for the incubator and for the incubates as well. With physical presence in offices becoming a rarity in the pandemic, not only rental

revenues for the incubator plummeted but also all the in-person events and activities came to a halt.

With multiple supply chains disrupted, startups had a steep decline in sales and early stage startups found it impossible to build solutions due to non-availability of components.

However the dark pandemic cloud had its own silver lining. While it disrupted the existing norms and businesses, newer opportunities emerged; newer industries sprouted. All businesses that could be done virtual multiplied their opportunities. The e-commerce platforms, online education delivery, telemedicine and teleconsultations etc are all case in point. Online and virtual ways of doing businesses, conducting meeting or organising events and conferences have become the norm and will continue to stay and grow. Obviously healthtech has taken the centre stage and deployment of technological solutions for solving healthcare problems will multiply.

Two obvious industries that this pandemic has impacted, whose repercussions will last permanently are healthcare and education.

Women as entrepreneurs and as Incubation professionals are still a small percentage in India. Still a long way to go to achieve a decent diversity ratio in the startup ecosystem. This is attributed to multiple reasons, including women playing multiple roles, glass ceiling in organisations, inability to raise funding for

women led startups to scale up, apprehensions about women taking up responsible leadership positions etc.

For any youth who wants to be an entrepreneur in India, the timing is apt. Bangalore is heaven for potential entrepreneurs, with more than 100 incubators, multitude of pro bono mentors, fertile investment community, it is now or never!

Not everyone can or does become an entrepreneur. With huge failure rates of startups, the entrepreneur needs perseverance and will power to sustain and scale up. Entrepreneurship is by choice and passion and not a logical decision making process. But yes, if someone is bitten by the entrepreneurship bug, even God cannot stop him!

## INTERVIEW



### Finally hear it from the HR Champion – A key member of the YBCIC, a key person for several tangible initiatives of the YBCIC : Her journey and her tips for women to sustain in STEM

#### Myth: It's tough for women to balance work and home!

Breaking the Myth: Anjana, 20 years with a Tier 1 IT company, playing all types of roles in the human resources and talent acquisition exclusively in STEM, heading

**Anjana K R** – Head Talent Acquisition for BFSI, TCS, India

#### Nearly 2 decades in the industry and with more than 7 years in Talent Acquisition in STEM, a successful Talent Acquisition leader, was the journey easy Anjana?

Thank you for the question. My experience has been entirely in the IT industry and I have handled multiple roles during the years, including geographies outside India. Be it Core Human Resources that includes Talent Management, Talent Development and Business Partnering or be it Talent Acquisition, it has been a trek that challenges one in many ways, both at a professional level and at a personal level. What I would like to say here is that when you add passion to your personal and professional goals, the game changes. It becomes a journey of learning!

#### Do you think there is gender discrimination in the industry in the STEM space, if yes tell us your personal experience and if no, tell us how the counter parts have been supportive to your growth?

I have been part of an Equal Opportunity Employer for more than two decades and am in a family where women are

treated with respect. Be it a man or woman, when it comes to work and life, the purpose is most important. My role as a professional would be to seek clarity on the set objectives and work with the diverse set of circumstances that each one of us face on day-to-day basis. Being inclusive of diverse views and thoughts are part and parcel of good decision making.

#### What are the top 3 hurdles according to you for a woman to sustain in STEM? (Science, Technology, Engineering and Mathematics) from the workforce that you have taken care of in your role.

- Lack of belief that one can pick up and sustain in STEM stream
- Anxiety on handling the work life balance
- Not keeping pace with the ever-changing advancements in this area

#### What is your advice to young women seeking a career in STEM?

It takes the right thoughts to lead one to right actions. Go after it and work towards gaining additional knowledge and continue to upgrade

oneself. Believe that you can do it and never hesitate on taking the initiative.

#### What is the key driver for your sustenance and growth in this industry?

- Learning continuously and being open to change
- Taking up new tasks over and above the normal
- Taking initiative, volunteering to help others and building credibility along the way
- Staying interested in what happens around, both within the Company and outside
- Being resilient

#### As I know you, you are a graceful fit woman, super mom and a diligent professional anyone would love to work with; Amidst all the chaos and rush, how do you stay so calm, contribute to BCIC/other initiatives and keep a good home?

- Know what you want to do
- Treat everyone in the family and work with respect. They deserve it.
- Let go of tasks that are not value adding and be part of wherever you are – office or home



# MANUFACTURING SECTOR



**A N Chandramouli**  
Chairman, Industry 4.0  
Expert Committee, BCIC

## INDIA'S MANUFACTURING SECTOR:

Our Honourable Prime Minister, Shri. Narendra Modi, has always mentioned the importance of the 3S- Skill, Scale & Speed- to take our Nation to the next level to a 5 Trillion \$ economy, in the next 5 years. The manufacturing sector as well as the service sector growth requires a huge manpower with the appropriate skills and that has to be accomplished at large scale and accelerated speed.

Manufacturing is the real

## Future Skills for Youth

value addition in the economy; Manufacturing is important driver of our GDP; Manufacturing is more sustainable than Service sector for GDP growth; Service sector enhances and enables the manufacturing sector and not the other way round. The target set in 2010 to take our Manufacturing to 25% of the GDP by 2020 is still far away. But there is a good news arising from our Demographic Dividend.

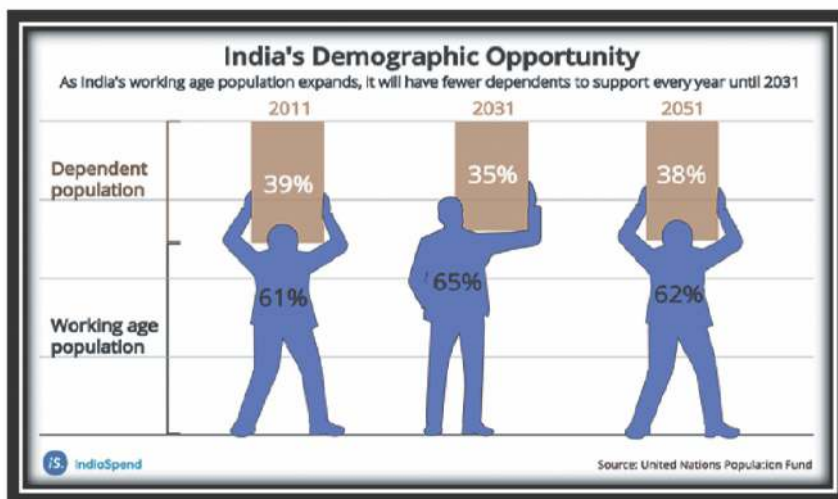
### DEMOGRAPHIC DIVIDEND:

Demographic dividend has historically contributed up to 15 % of the overall growth in advanced economies. According to United Nations Population Fund (UNFPA), "demographic dividend" means, "the economic growth potential that can result from shifts in a population's age structure, mainly when the share of the working-age population (15 to 64) is larger

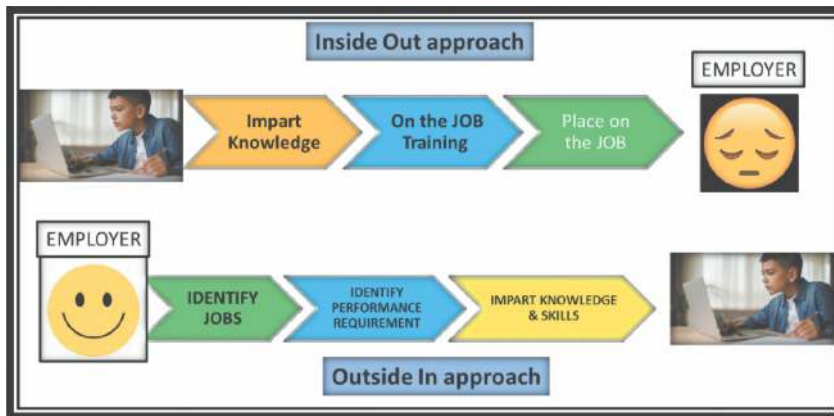
than the non-working-age share of the population (14 and younger, and 65 and older)".

India has one of the youngest populations in an aging world. At present, the median age in India is just 28, compared to 37 in China and the US, 45 in Western Europe, and 49 in Japan. The window of demographic dividend opportunity in India is available for five decades from 2005-06 to 2055-56, longer than any other country in the world. With more than 65% of working age population, India will rise as an economic superpower, supplying more than half of Asia's potential workforce over the coming decades.

Most of the new jobs that will be created in the future will be highly skilled and lack of skill in Indian workforce is a major challenge at present. Therefore, India may not be able to take advantage of the opportunities, due to a low human capital base and lack of skills. Skill development is vital to increase employability of young population. India's labour force needs to be empowered with the right skills for the modern economy. To fulfil this objective, Government has established the National Skill Development Corporation (NSDC) in 2012, with the overall target of skilling/ up skilling 500 million people in India by 2022, but we are far behind this target.



# MANUFACTURING SECTOR



## JOB CREATION:

The nation also needs to create ten million jobs per year to absorb the addition of young people into the workforce. Promoting businesses' interests and entrepreneurship would help in job creation to provide employment to the large labourforce. India's improved ranking in the World Bank's Ease of Doing Business Index is a good sign. Schemes like Start-up India and Make in India, if implemented properly, would bring the desired result in the near future. This demographic transition also brings complex challenges with it. If the increased workforce is not sufficiently skilled, educated and provided gainful employment, we would be facing "demographic disaster" instead. Higher education must reorient towards what the industry needs.

## HIGHER TECHNICAL EDUCATION:

The requirements of Industry vis-à-vis the output of engineering education has always been a matter of debate in terms of alignment,

relevance and suitability to create employable and useful human resources for modern manufacturing organisations. This requires an Outside-in approach.

Engineering education ideally must dynamically respond to the vagaries of a volatile, uncertain, complex and ambiguous industrial world which is continuously undergoing technological disruptions. The traditional engineering knowledge can at best support as a foundation on which the emerging pillars of new technology and new applications must be erected to complete the house of employable education.

## JOB ORIENTED APPROACH

Several aspects must be taken into account to make education oriented towards jobs especially with the dynamic changes in the digital era:

1. Understanding Industrial Job opportunities & Job Roles
2. Understanding Research opportunities & Job roles
3. Practical Skill Development with near job requirements
4. Experiential Learning in actual work environments
5. Simulated work environments per sector specific
6. Domain Knowledge, Skills, Performance parameters
7. Technology deployment skills for emerging Job roles
8. Soft skills including Cognitive and Team skills
9. Understanding Interconnected job requirements
10. Understanding Multidisciplinary research

-  **CUSTOMER ORIENTATION**- a crying need for all branches of engineering and management
-  **OPERATIONAL EXCELLENCE** – main contribution of engineers- quality, delivery, cost
-  **VUCA WORLD**- Volatility, Uncertainty, Complexity, Ambiguity
-  **MASS CUSTOMISATION** - inevitable outcome of VUCA in all SECTORS
-  **DIGITAL REVOLUTION** - the Internet world of the 4.0 era driven by DATA

# MANUFACTURING SECTOR



## EXTERNAL DRIVERS:

Mass customization and Digital technologies, for example, have totally changed the landscape of the new engineering applications including Flexible manufacturing Systems, Automation and data driven Smart manufacturing. Coupled with Experiential learning for students and Faculty development to address the industry needs become the mandatory requirements of the academic program.

Indian manufacturing has come of age and needs to adjust its manufacturing systems and technology and align with the global trends, albeit with a decade lag, as otherwise we will be left out in the world market of highly efficient manufacturing demands; Indian customer both in consumer and industrial sectors increasingly display a highly fragmented and individualized requirements challenging the conventional wisdom of mass production over the last 3 decades after liberalization.

**EMERGING SECTORS** such as Space, Aerospace, Energy, Medical and Defence require higher level technologies in process & systems. Typical processes and systems of the automotive revolution of the yesteryears needs to be upgraded, especially with the



advent of Electrical Vehicles.

## INDUSTRY 4.0:

Digital technology elements have a major impact on global manufacturing and India cannot be left out in this revolution driven by Internet of Things including Artificial Intelligence and Augmented Reality, especially with India's well known prowess in software enabled Technologies

## FUTURE JOB ROLES:

Many Job Roles in manufacturing sector are changing very dynamically in India and rest of the world. New age technology and connected processes are changing the execution of tasks in industry and skill metrics. Some of the new Job roles for Indian youth are growing in new areas such as: Digital Manufacturing, Factory Automation, Process Automation, Smart

Mechatronics, Digital Quality, Digital Design, Augmented reality, Additive Manufacturing, Cyber Security and Data Analytics.

## HIGHER TECHNICAL CURRICULUM requires review and include many below topics to make our youth employable:

1. Agile/Lean/Flexible Manufacturing Systems
2. Impact on Job Design and Job roles- Competency enrichment
3. Employee Involvement Processes- Cross functional , Group Kaizen
4. Innovation, Design Thinking, Kaizen, ToC, CoQ, TQM, TPM, JIT
5. Lean- Waste Elimination and Throughput time reduction in all processes
6. Digital Data driven Manufacturing systems
7. Data analytics - Descriptive, Diagnostic, Predictive, Prescriptive
8. Cost of Quality 4.0 – QMS paradigm shift by real time on line CAPA



# MANUFACTURING SECTOR



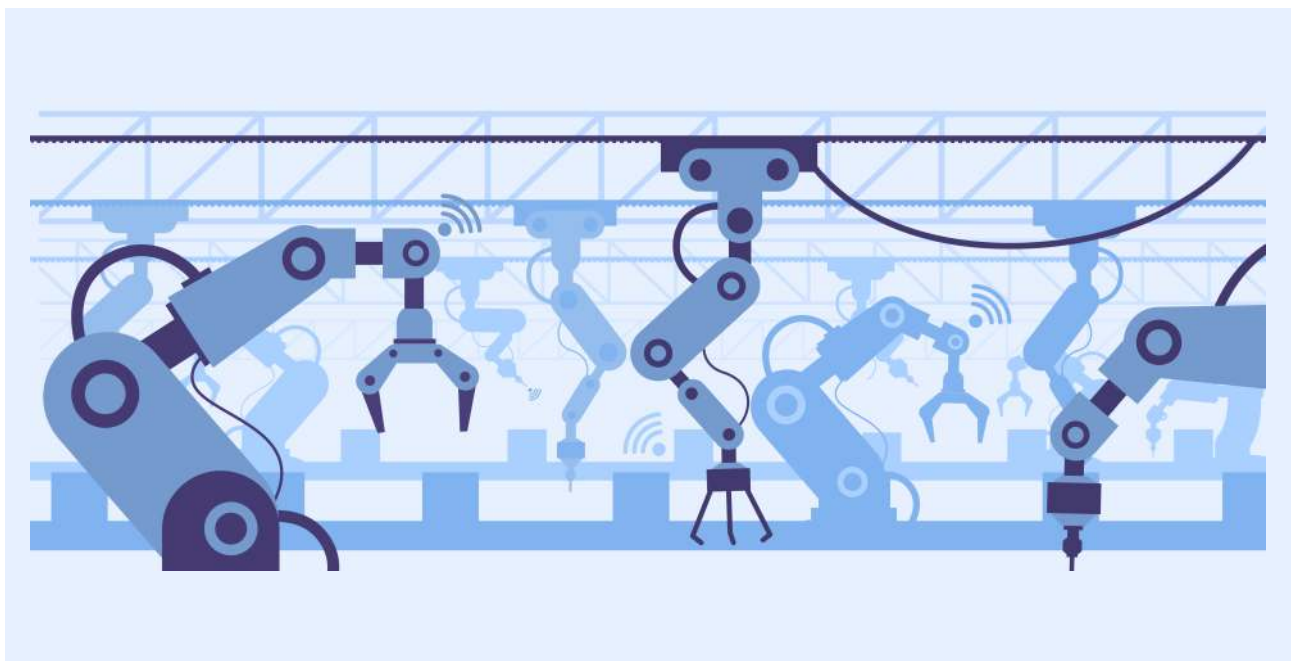
9. Value Chain Integration 4.0 (Horizontal Real-time integration of enterprise)

10. Automation – Discrete & Process- 4.0 man machine interactions

**CLOSING REMARKS:** Human

development for a Self-Reliant nation (AtmaNirbhar Bharat) requires an approach which takes into account all external stake holders including industry, research, environmental challenges and above all the job seeking

youth of this largest democracy of the globe.





## INTERVIEW



**Rajasekar Gowrineni**  
Chairman and CEO,  
Iconhomz

### **What has been the impact of the pandemic and lock downs on the real estate business?**

There has been a lot of impact; especially on the productivity. 2020 March we were at zero and we have been able to reach to a max productivity to 70% by this Feb. From sales perspective, there was a lot of resistance with the customer to make a decision to buy; Even if they did, they expected huge discounts; But see the irony, our labour cost, steel cost etc went high, and we had no choice but to keep the price intact in-order to sustain.; From Jul-Oct the market started gaining traction and picked up well to good sales in Nov – Feb good sales; Demand for residential segment evidently has increased; Though the commercial segment took a hit, “Ready to move in” residential units picked up; The concept of affordable, transformational smart homes is what resonated well with the customers.

There have been immense challenges on sustainability and profitability. The budget

meant for Business development had to be steered to sustainability; this impacts our future projects; We did not want to do lay off staff at any cost; if the second wave could have been avoided, we could have restored to 100% productivity; The second wave got the productivity stuck at not more than 40%; We have learnings from the first lock down and hence we did our best to reduce the impact from second lock down.

### **Has the pandemic/lock down caused people to move away from the city and impacted your business?**

No, I don't think so; The city life and a town/village (their native) life has huge cultural differences. Looks like the people in the cities are now largely used to the life style here, especially the children. The cultural differences and the comforts of a city has led to people not wanting to migrate or go back; Probably there is only temporary shifts to natives, definitely not migrations.

In fact, during the pandemic the hunger for residential properties is high for suburbs now due to affordability and the fact that it gives a blend of peaceful non chaotic life with availability of city luxury when one wishes to have them.

### **So, what is the trend in the housing sector today?**

At the moment Layouts, villas

and apartments and getting built everywhere as you see; The trend is that in the years to come we are seeing a preference for intelligent compact homes or what we typically call as fluid homes; The idea is to build “small spaces” and touch the young millennials. Working professionals/couples do not want big houses, no one has the time to go and buy furniture's – expectation is plug and play;

Our key thought process was “can every square foot can behave like two square feet”, for example why give a cot a 35square feet of idle space that will not be used unless while sleeping – so why not convertibles that can become workspace during day and bed at night?

Observe that micro millennial families are 2-3 only; We call them the “Me, We, us” (Bachelor, couple, or a family with one kid) such families look for compact, affordable, maintainable homes, they did rather spend their weekend relaxing than cleaning a big house and large furniture's.

Bangalore being the Silicon city, our customers and future customers are millennials and baby boomers. They look for fluid homes and plan to possess the property during the age of 27-35 and retain it up to 45 years of age, then they plan to move to bigger homes. So, the typical trends are





## INTERVIEW

1. Low maintenance effort
2. Space utilisation in the house to the optimum
3. Availability of inhouse amenities – Apart from swimming pool, club house and parks which is the norm, now residents look for inhouse FMCG Vending machines, inhouse medical facility, Cinema screens where 5-6 families can book and enjoy movies/shows together, Community kitchen etc

**Personally, I have seen the spirit with which your team worked to ensure the “show must go on” and progress kept happening at the sites in whatever possible extent, how did you achieve this?**

While it has been struggle for existence, we were stable during the pandemic; we paid salaries on time and also had given covid policy to all employees. We had to bear the expenses of Rs 5 Lakhs for an employee who was suffering from Covid and some medical complications around it. He has recovered and that’s all that matters to us. We had distributed 12000 masks to our staff, associated directly or indirectly and ensured giving precautionary medicines with the guidance of healthcare team. Our customer site visits were ensured to be covid compliant. We did not lay off anyone in our team due to the pandemic struggles. Sobasically, our staff gained confidence in us and stayed on and gave their best support to the company too in whatever possible way.

**What is your strategy to speed up all stalled work and how much of technology consumption is on your mind?**

There is a lot of budget, in spite of that the industry is still sticking to traditional methods of construction. 60-70% is conventional method in India, rest of countries follow factory model

There is resistance in the market to get into new practices of construction.

Pre cast is not yet a welcome move, which is sad. Indira canteens are best examples of how quickly precast can help in setting up structures. Developed countries use 80% of precast practices and we are at 25%;

Ideally a 21-floor apartment can be built in 7 months – it’s like children playing Lego!

3D printing that enables construction happen in 48 hours!

Technology usage in this sector is fast moving but India is slow in accepting, that’s the concern.

However, with RERA coming in, a lot of things are improving and we see a better future for sure.

**There are many youngsters aspiring to take the architect route, but less in civil engineering as all are going after computer science mostly, what is your advice to them on the real estate trend and job demands?**

The sad news, Civil engineering is taken as last option; As a country we lack dignity of labour and this leads to people not choosing this field; It is just a social stigma.







## INTERVIEW

Current civil engineers are merely reduced to supervisors; An engineer should be in site to simplify the work, the person should possess a solution mindset; but that's not the case, they think there are at site to monitor and control the work progress.

That's the problem in the education, we lack a system that enables solution mindset; BTech Civil is just paper work – there is clear lack of practical knowledge; A mason who has not been to school has more knowledge than the degree holders!

We need skill-based training; Then there would be traction

and interest in this area.

In future a machine will build a brick wall, 2 people will do 10 manual labour job of plastering a wall – that's the level to which technology can come in- this is all going to get exciting; if people want to be in a job where you build precious structures of accommodation and progression (After all that's what a Home and Office is), this is the field to be in...Build strong places where the citizens can thrive and grow. literally!

### What are the key learning's for your industry sector from this pandemic?

- We realised that we can do virtual sales

- We have scope to reduce man power per project and utilise for more projects
- We could plan to rely a lot on factory made structures to avoid site work – this could ensure productivity at all times irrespective of site work restrictions.
- If you enable and entrust your people at work, they will trust and enable you back in times of need



## INTERVIEW



**Atanu Niyogi**

Practice Head, Cyber security,  
L&T Technology  
Services Limited

### **What are the key learnings in the cyber security area from the pandemic?**

Pandemic has prompted corporates to adopt to remote working in a rapid pace with primary focus on continuity of business. This obviously created multiple loopholes in cyber security areas, data leak at all-time peak. I see every corporate gearing up very fast to be cyber resilient.

IT security is a very matured area and industry is equipped with required tools, technologies and processes to tackle the attacks in this segment.

However, cyber security in ER&D (Engineering Research & Development), manufacturing continues to be a weak area and demands lot more focus. Cyber-attacks have been multi-folded in last 1 year and few of the sectors like O&G (Oil & Gas), utility and manufacturing sectors has become lucrative target of cyber attackers. Look at the attacks on Molson Coors or Colonial, industry needs major focus on cybersecurity for OT (operational technology), IoT

## **Cyber Security: The much sought after pre, during and post pandemic**

and IIoT which is very different from IT security. There is a lot of catch up to be done in this segment.

### **As a service provider, what hassles did you face in this sector?**

I will answer this from my perspective, based on our customer's experiences. Many ER&D organizations still think they are not vulnerable to cyberattacks, or cybersecurity can be ensured just through penetration testing before product launch. Definitely not sufficient; Security begins at the architecture level and checks are to be done as early as that in the development lifecycle. Certain businesses tend to think their products which are not connected to network are not prone to cyberattacks; The fact is they can be attacked physically. Unfortunately, businesses are of the opinion that cyber security activities are just a cost overhead for the product, whereas in reality they need to be budgeted as unavoidable and essential cost

We spend a lot of time consulting our customer on educating them as to why they should plan cybersecurity right at design stage and build a secure software by design strategy, why they need to set a robust vulnerability management strategy and more.

### **What are the best practices that businesses should adopt**

### **immediately to face such unforeseen occurrences in future?**

Businesses should not depend on traditional security designs rather build a defence in depth strategy. Correct IAM (Identity Access Management) strategy, DLP (Data Loss Prevention), SIEM (Security Information and Event Management), managed deception, robust incident management and forensic strategy is must.

ER&D organizations should also invest in setting up processes and technologies that will help adopting DevSecOps strategy to integrate security at every step of product development lifecycle until decommissioning of the product.

### **Can you give us a view of the most impacted and least impacted businesses sectors and why do you think it was so?**

Today, every business segment is affected by cyber attacks. Banking/ finance sector, IT industries were traditional target of cyber attackers but today right from government institutions, power & utility sector, O&G, healthcare, transportation, manufacturing, education sector – you name it and there are examples of cyber-attacks in all these areas. In last few years, sectors like utility, manufacturing has gained much interest of cyber attackers and these industries



## INTERVIEW

are affected by ransomware/ targeted attacks.

### **Do you see good diversity in the cyber security space? Do women opt for this space as a career option?**

While statistics say that women make 20-24% of the cybersecurity workforce and are making it to leadership positions, I personally see more women joining cyber security workforce improving diversity in this space. I also see industry encouragement towards women professionals joining cyber space. This is definitely a good and welcome trend.

### **What is your advice for the youth who want to pursue cyber security/STEM as their career option? Anything specific to encourage women in this stream?**

Do not be under assumption that cyber security means only IT security. With every aspect of our life being connected through smart home, connected car etc., cyber security horizon has expanded beyond imagination. There is a huge skill gap in market in this

area and lucrative jobs are up for grab. Try to look for specialization in automotive security, security for ICS (Industrial Control System) / SCADA (Supervision Control and Data Acquisition), IoT endpoint security, cloud security etc. Being a certified professional is always a welcome add on.

I have seen and worked with many women who are expert and leaders in cyber security areas. Some of the best talents in my team are women and I am also privileged to work with some of the brilliant women students who chose to do internship with us. I do believe that women are very detailed oriented and does their job with perfection, industry needs more such talents.

### **Do you think the current curriculum in schools/Universities has sufficient coverage for this topic?**

Apart from few of the top most schools/ universities, rest of them focuses only on typical IT/ network security areas in their academia. While IT

security is quite established field which continues to demand talents from market, scarcity of skilled and knowledgeable cyber security engineers in IoT, IIoT, OT, connected product areas demands for academia to relook at their curriculum for cyber security.

### **What is the risk you see because of this gap in the academia versus industry practice?**

Availability of skilled professionals is a concern in cyber security space, especially in ER&D sector. Gap between demand vs. availability of professionals is very prominent in this segment. Today, corporates need to run special training programs to train engineers for cyber security. This takes lot of time and investment from corporates to make the fresh graduates ready for deploying in projects. Academia focus on realignment to market demand will help reducing this gap.





## MSME



### Krishna Kumar N G

BE(Mech), PGDMS, PGDPSc(I/O), Ph.D  
Business Coach, Mentor & Trainer  
Business Growth Consultancy Services,  
Bangalore.

The COVID 19 pandemic has pushed all the economies whether they are the developed, developing and the emerging economies no distinction into a tail spin. Many eminent economists, businessmen, and the financial analysts predict near-term and medium-term difficult times for the large, small and the medium business enterprises. This may perhaps lead to the development of a different behavioural change in the way we live and conduct our businesses.

Few of the businesses will succeed, while few others will struggle for some time and slowly rise up. Notwithstanding, many of the businesses may close down or may go under the Insolvency and bankruptcy resolution. MSME Business owners should develop a doable and realistic clear strategic plan to overcome this unforeseen, unexpected havoc unleashed by the pandemic COVID 19.

## The Corona Crisis and the Way Forward for the MSME Businesses

The immediate challenges that the companies would face are

- Getting the outstanding payments from the customers.
- Calls from the banks to repay the loans / interest servicing.
- Calls from the vendors to pay their dues.
- Notices from the statutory authorities to pay their dues.
- Release of the due salaries to the staff and the workmen.
- Release of admin and other overhead payments.
- Getting the business up and running again.

I am sharing here some of my thoughts to face these challenges.

- Customers will show difficult behaviour if your products / services are not directly useful for their products / services and are not helpful in converting their work-in-progress inventory into business cash. They will find excuses to reject the supplies, or will find reasons to delay the payments for longer periods or will force part payments and make the business owners to accept the part payment as the full & final payment.
- Have you adequately covered business insurance for material rejections,

damages in the warehouse, or business loss?

- Have you built up sufficient back up paperwork to contest the negative claims of the customers?
  - Have you built up sufficient positive customer relationship so that they perform & respond favourably?
  - Actually, the major pressure will be in releasing the staff and employees' salaries. They will require money as much badly as the business owner, but they don't have any other alternative finance source other than the salary. Whatever the extra working capital loan that would be obtained will have to be used mainly for the disbursement of the salaries and the overheads.
  - How many employees /staff can you layoff without triggering any unrest. Layoff the contract labour? Convert few of the current labour into contract staff and layoff later? Cut the salary to retain the people and also build their confidence /trust till you tide over the situation.
- I hope the MSME business owners have already considered more than these points and are gearing up to meet the challenges in the coming months. Certainly, it will not be business as usual.



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Whilst, this financial burden is one major pain point, the business owners still have to get their business re-started and running. The business scenario is not the same now and in the coming months it may be so much totally different, which you would not have imagined, dreamed are seen previously. All businesses may have medium to high degree of difficulty in re-starting their business.

Here is an opportunity for the business owner to have a hard look into the business she / he is running. You will have to look at the complete customer business horizon to understand how much time, what amount of efforts, and what level of preparedness will be required to get back your business to at-least 70% of the pre – March 2020 position in the coming six months.

What this means, is that, for you to know not only your customer but also your customer's customer. If your customer's customer is operating currently in a very difficult economic business environment, your customer will be highly impacted and in turn your business will also be equally impacted if not more impacted.

For example, if your customer's customer is in Automobile manufacturing, presently this business is in a very challenging position. Obviously, if your customer is an OEM supplier to this automobile manufacturer then he will be impacted severely and your' business in the

process will be badly impacted and will take a long time to get back to even 50% of pre- March 2020 levels.

Few of the options I suggest that you may like to consider are given here.

1. What little modification if you do to your product / services can lead to a new growth business sector
2. What if you can collaborate with another business owner and together you can provide a new / total products / services solution to the existing customer segment or to a new potential customer segment
3. Can you think of another new business line that you can add with least /low investment within the same clients' segment? So that you don't have to spend any extra money to search new clients.

We all would have read in the newspapers, business articles, blogs and also would have listened to many presentations about the ambiguity in the business environment and the tough days we may have to face.

Every business person would have already faced such situations while growing his/her business albeit in different business environment. In the earlier instant the uncertainty and vagueness were particular to the business sector she /he would have been operating in. Whereas now the VUCA effect is on all the businesses irrespective of size, strength or

the geography.

When we get back to restarting our businesses apart from the financial problems, we would have to look at the execution of the customers' orders which, we would have received before the lockdown, we would have to consider how many of the workmen would return to work, and many more issues.

At the present times the business owners, inter alia should consider trust building as one of the key activities.

Trust building with the employees and staff. So that they get back to work with all positivity, commitment and enthusiasm. They may be willing to take a pay cut also. Lots of efforts will initially be to get the office / factory clean in a good state & shape to restart the work. They will have some anxiety about their work conditions. Their behaviours may be different based on some un-related apprehensions. Trust building is important to resolve these and such other issues so that the near normalcy is back at the work place.

Trust building with the customers. Plenty of what if type of situations. During this lockdown period has customer's priorities changed? certainly it would have. What impact will this have. Cancellation of un-delivered orders, vanishing of the promised requirements which were discussed before the pandemic outbreak. If your products / services were





# MoU

## MOU Signing between BCIC and Department of Technical Education, Govt of Karnataka



Proud moment on July 16th forging a significant collaboration between BCIC and Department of Technical Education (DTE), Government of Karnataka in a number of streams of work towards upliftment of Diploma Engineering education in Karnataka. The MOU is signed in presence of the Hon'ble Deputy Chief Minister, Dr. Ashwath Narayan under whose vision, this endeavour is undertaken.



### This partnership includes-

- Establishing of the DTE-BCIC Case Center to help DTE students learn from real world case studies
- Internships, Industry visits, Projects & Placements for DTE students across Karnataka
- Support the up gradation of laboratory infrastructure across polytechnics in Karnataka
- Train faculty in the latest subjects, topics and tools to ensure the teaching is on par with industry requirement.

This MOU is the culmination of a lot of work that has happened in the Background by the Young BCIC Expert Committee. As DTE proceeds to overhaul its curriculum for the 325 odd Polytechnics across Karnataka, BCIC provides the important required industry inputs, consultations and ingredients for that. The key goal of this curriculum revamp is to make Diploma Engineers Industry ready on day 1 on job. Young BCIC has brought in several industry leaders for an initial consultation on curriculum approach, followed by a number of consultation for input and improvement on the new curriculum of 2nd Year of Diploma stream such as Mechanical, Electrical, Electronic, Automobile, Computer Science and so on. This new 2nd year curriculum is now set to be rolled to the 325 Polytechnics in the state.

Young BCIC are now developing 4 Specializations for the new 3rd year curriculum of Computer Science. These specializations will be rolled out from 2022. Apart from that, consultations on Hospitality streams, Automobile and Mechanical stream curriculum are also provided.

At this moment, BCIC and DTE are jointly setting up a Guest (Industry) Speaker Series for students and Faculty members. This will be followed by setting up the BCIC-DTE Case Centre that would host case studies on contemporary technologies in all streams contributed by the industry. This will be used by the students as part of studies for consolidation of their knowledge.

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DST - Amrita Technology Enabling Center  
Dept of Computer Science & Engg (CSE)

#### Faculty Coordinators

Mr. M. Ritwik	96 55 47 2355
Dr. Prashant R. Nair	99 4398 44 83
Mrs. K.R. Bindu	948 992 19 89

#### Student Coordinators

Darshan M	97898 09191
Pragya Ananth	95151 31204
Adithi Narayan	63790 01140



The Young BCIC Expert committee is calling for Student Volunteers from Colleges to join us as Campus Ambassadors. As a Campus Ambassadors, you will have the opportunity to work with senior industry leaders in shaping the strategy and direction of Young BCIC. You will carry the BCIC brand with you and will have the privilege to have free and discounted passes for premium sessions and events from BCIC.

Mail your interest now to [info@bcic.in](mailto:info@bcic.in)



## Bangalore Chamber of Industry and Commerce

101, Midford House, 1, Midford Garden, MG Road, Bengaluru – 560 001  
Tel: +91 80 25583325 / 26 /27 / +91 80 25582232 Fax: +91 80 25580062  
Email: [bcicevents@bcic.in](mailto:bcicevents@bcic.in)

[www.bcic.in](http://www.bcic.in)

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