

Our Chairman insights about How to win a Funded Research Project

Aa No Bhadrah Kratavo Yantu Vishvatah.

Let Noble Thoughts Come to Us from All Sides.

My friends, I wish to wish all of you a good morning.

Not contented with mere publication of papers, today researchers are looking more at real life projects that would lead to meaningful research. I have seen that these research projects help the society for a meaningful life and business. Let me briefly share my experience in ushering innovations, research and development.



Er. N Ramanuja Chairman MPBIM

In industries like HMT, a multi product conglomerate, which I had the privilege to head, we had our own in-house research and development arm, where our goal was to incentivize the generation of ideas and to allocate funding such that it is most likely to deliver machinery that would augment manufacturing progress and eventually economic and social returns by ushering new ideas. Our pioneering of CNC machines, Special Purpose Machines and Manufacturing lines, were such ideas, where we had to prepare our industries and expose them to newer technologies. Besides conserving precious foreign exchange, our research activity also helped us explore creativity of our young team of engineers.

In light of these requirements, it was important to understand whether allocations indeed facilitate additional, relevant research outputs and whether these are accessible to the user industries and also make provision for these. We were required to anticipate and foresee industry's requirements. We had in-house research and development division with a budget for converting ideas generated into machinery and processes useful for the industry. I think we were reasonably successful in our endeavours. I will not dwell more on this.



My friends, not all research can be in-house. Industries and businesses will need to outsource research activity to external researchers who could closely work with the industry. In a way our research was indeed fuelled by the industry requirement though not directly funded by the industry. As a business conglomerate, at HMT besides, manufacturing processes, we had also involved external agencies, both domestic and international, for helping us in our growth plans and trimming our businesses, who worked with us discussed with us on our requirements and helped in restructuring businesses we were in.

I wish to mention here that initiatives of our R&D wing resulted in our bringing out a comprehensive book on Mechatronics which is useful for Professionals from the machine tool user industry in their research activities. Besides this book now published by Tata McGraw-Hill makes pedagogy in the field of machine tools lucid, blending the elements of mechanics, electronics and information systems in a well-defined way.

In the arena of funded projects, I have to mention that our experience in the industry and expertise in undertaking studies for industrial development paved way for institutions like Government of India, Government of Nigeria, Arab Development Bank, Asian Development bank and also World Bank using our experience to conduct market surveys for industrial growth in Arab world, South East Asia, Central Asia and North Africa. As a result, HMT also set up various projects for manufacture and training in engineering disciplines in various countries in Asia and Africa. HMT also did a study of agriculture in Nigeria and Senegal in West Africa for increasing the productivity in farm sector. There are many such opportunities.

All along I have seen that it is possible to publish papers without any external funding; observational research and experimental research with small sample size can be conducted without external funding and can result in meaningful papers like case reports, case series, observational study, or small experimental study. However, when studies are multi-centric studies, experimental study or observational study with large sample size are envisaged, it may not be possible to conduct the study within the resources of an institution and a source of external funding is required.

The successful execution of the research project depends not only on the effort of the researcher but also on available infrastructure to conduct the research. The conduct of a research project entails expenses on man and material and funding is essential to meet these requirements. It is possible to conduct many research projects without any external funding if the infrastructure to conduct the research is available with the researcher or institution. Research funding is required to meet these expenses and smooth execution of research projects. Many good ideas do not materialize into a good research project because of lack of funding. This is an art which can be learnt only by practising and we intend to throw light on major hurdles faced to secure research funding.

In my discussions with the professors of American Universities I was given to understand that Professors continuously undertake research on behalf of user industries and in the processes many of the researchers complete their PhD programmes too. The grants are pretty large and ensure returns are substantial.

Hence researchers work closely with users in their research activity helped by grants by the user agencies. Research funding is a grant given to you researchers for conducting research. Getting these grants is not an easy process. I have known that this is a very competitive process. In particular individual-level analyses are highly interesting since most grants are awarded to individual researchers or to small teams of researchers. The estimation of the effect that a grant has on research outputs is, however, challenging.

To apply for grants and securing research funding is an essential part of conducting research. I am sure in today's webinar we get to know how one writes a project that would get him/her research grants? what are the avenues for getting research grants? and how to go about it in a step-wise manner?

With an experienced professor researcher Dr. Lalith Achoth guiding you, I am sure that in today's webinar, there will be meaningful takeaway on how to write research grants and what to be done after funding is received.

I wish all of you all the very best and a good take-away in this series of innovative webinar's planned.

Thank you. Have a Great Day.