

The official flagship Journal of ICMA

Volume : 31.6 | Nov-Dec 2022

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Exclusive Interview

“ We should design our education and training system in such a way that it encourages innovation. We should generate professionals who are competent in manufacturing, especially in plant and machinery manufacturing, for the local industry; this will reduce our dependency on the international market and also reduce our import bill ”

Mr. Shahid Anwar Tata

Chief Executive Officer
Tata Textile Mills Limited

 **TATA
PAKISTAN**

Building Bridges between Industry and Academia



Institute of Cost and Management
Accountants of Pakistan

From the Holy Quran

In the name of ALLAH, the Most Magnificent, the Most Merciful

To Him belongs all that dwells in the night and the day. He is All-Hearing, All-Knowing. (13) Say, "Would I take as guardian someone other than Allah Who is the Creator of the heavens and the earth, and Who feeds others, and is not fed by anyone?" Say, "I have been asked to be the first to submit (to Him) and never to be one of those who ascribe partners to Allah." (14) Say, "If I disobey my Lord, I fear the punishment of a momentous day." (15) Whoever is spared from it (the punishment of that day) is, indeed, blessed with His mercy. That is the manifest achievement. (16) If Allah causes you harm, there is no one to remove it except He Himself; and if He causes you good, then He is powerful over everything. (17) He is Dominant over His servants, and He is the All-Wise, the All-Aware. (18)

(Surah 6: Al-Anaam, verses 13-18)

Translation: Mufti Taqi Usmani
<http://www.quranexplorer.com>



Respecting the sanctity of the Qur'anic verses is the duty of all of us

قرآنی آیات کا احترام ہم سب پر فرض ہے۔



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Jan-Feb 2023
Climate Risk and Economic Growth
Deadline for submission of articles
February 10, 2023

Mar-Apr 2023
Startups in Pakistan: Potential and Challenges
Deadline for submission of articles
April 10, 2023



President's Message

President's Message

I am pleased to know that the current issue of the ICMA Journal is dedicated to the critical topic of "Building Bridges between Industry and Academia." Globally, industry-academia partnership has remained a successful means of enhancing knowledge and innovation and has played an important role in the economic progress of industrialized countries. This linkage has a strategic role in developing critical skills required by the industry and promoting entrepreneurship, such as startups. The industry can leverage applied research at the university level that focuses on current demands and market trends to promote commercialization.

The current situation of industry-academia collaboration in Pakistan is not promising. Despite several small-scale initiatives, there is still a large gap between what is produced and what the industry requires. Pakistani industry has to compete in the international market, however, our exports are nearly static due to low-quality products and high product pricing. Our exporters have been unable to enter new markets or diversify their products to new destinations. Here, academia can build strategic alliances with industries to propose creative methods based on scientific research in order to increase product quality and lower product costs. I would like to point out that management accountants, having expertise in cost management, can help the industry save money by reducing costs.

Regional Chambers of Commerce can act as catalysts in this regard, taking the lead in building a strong link between the two sides by forming a national-level committee comprising of leaders from industry, academia, and government. This proposed committee would identify and address the major impediments to the development of strong and sustained academia-industry links in Pakistan. ICMA would love to be an integral part of this committee or any other initiative that may help foster industry-academia linkage in our country.

As a professional management accounting organization, ICMA has taken measures to expand and strengthen its relationships with the corporate sector. ICMA keeps a constant liaison with companies in varied industry sectors for their human resource requirements as well as the capacity building of their employees. ICMA has signed a number of MoUs with Chambers of Commerce, as well as public and private sector organizations. Furthermore, ICMA organizes Corporate Pakistan Job Fairs to provide a matchmaking service between our qualified members and the HR departments of companies. We also welcome industry representatives to our major events to benefit from their hands-on expertise with current industry trends and to recommend ways our qualified members may assist them in navigating their enterprises through various odds and problems.

Shehzad Ahmed Malik, FCMA
President ICMA



From the Desk of **Chief Editor**

I am delighted to present the CMA Journal's final issue for the year 2022, which focuses on a topic of critical relevance for our economy and society in general and for academia and industry in particular. This issue covers write-ups by authors reflecting on the current state of academia-industry linkages in Pakistan and how the existing gap between these two sides might be bridged to produce a win-win situation for both. I do hope that the suggestions put forward by writers would merit the attention of relevant stakeholders, especially the Ministry of Education and the Higher Education Commission (HEC).

One of the best ways for academic institutions to formalize collaboration with the businesses is to secure suitable industrial placements for their students, which help them gain more insight from top industry players and strengthen their skills and knowledge before they enter the workplace. ICMA is already making this a prerequisite for qualified students and aiding them in acquiring industrial internships.

This issue covers an exclusive interview of Mr. Shahid Anwar Tata, CEO of Tata Textile Mills Limited. I am grateful to him for sparing his precious time for the interview.

In the "Focus Section," which contains theme-focused articles, twelve authors have contributed their write-ups, including nine members of ICMA. I would like to thank all of them for their time and efforts.

In the sector brief, the R&P Department has contributed a SWOT analysis of the Telecommunications industry in Pakistan.

A very happy and blissful new year to all the CMA fraternity. Please enjoy reading and send your feedback to rp@icmap.com.pk

Ather Saleem, FCMA
Chairman, Research and Publications Committee

From the Desk of
Chief Editor

Research & Publications Committee



Chairman



Ather Saleem, FCMA

Chief Editor

Ather Saleem, FCMA
Chairman, Research & Publications Committee

Editor

Shahid Anwar, Director
Research & Publications Department, ICMA

Correspondence Address

**Institute of Cost and Management
Accountants of Pakistan**
ST-18/C, ICMAP Avenue, Block-6,
Gulshan-e-Iqbal, Karachi-75300, Pakistan.
Ph: + 92 21 99243900 Ext. 117 / 107
Fax: + 92 21 99243342
Email: rp@icmap.com.pk
URL: www.icmainternational.com

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Exclusive Interview



“ We should design our education and training system in such a way that it encourages innovation. We should generate professionals who are competent in manufacturing, especially in plant and machinery manufacturing, for the local industry; this will reduce our dependency on the international market and also reduce our import bill ”



Mr. Shahid Anwar Tata
Chief Executive Officer
Tata Textile Mills Limited

ICMA: What are your views on the current economic situation in Pakistan, especially in the Global context?

Shahid A. Tata: I believe the world is going through unprecedented times. First it was the pandemic which resulted in commodity prices spiral and then the Ukraine-Russian war which caused serious increase in energy prices and this triggered high inflation in all the countries of the world. It is also to be noted that in the recent past, US and the European countries have created money / wealth out of debts, which led to increase in money supply and hence race of commodity prices and Crypto Currencies. This alone made number of people feel very rich and thus the buying power and consumption rose. Now some sort of correction is taking place, so these are uncertain times.

ICMA: What are the manufacturing sector's key challenges and how could these be surmounted?

Shahid A. Tata: Pakistan is a very difficult country for business and industries. When we look at the Global

Indices, in regard to the ease of doing business and cost of doing business, you will find Pakistan at a much lower level. The economic management has been very poor and our policies of import substitution has led to 70% or more Industries relying on some sort of subsidies' support or protection from the Government. There is a culture of inefficiency and the issues stem mostly from being inefficient, together with a sick power sector. The main reason being regulatory structure, number of Government departments, poor taxation management, poor taxation system, poor human resource, poor work ethics, shortage of quality human resources which is the outcome of poor quality education in general, resulting in poor performance and low levels of productivity.

Although, I have no experience of working abroad, however, through my interaction, I have come to know how the Industries everywhere are facilitated, valued and respected. In our country all the bureaucratic departments are out there to cause trouble and difficulties and are not there to facilitate and help you out.

ICMA: How do you see the future of the Textile Industry in Pakistan?

Shahid A. Tata: The textile industry is one of the few industries that is perhaps more efficient than others. Moreover, the value-added sector, besides being an efficient sector, is also supported by the government. Pakistan's textile sector, though small, contributes to the global supply chain, and textiles are the country's principal export. It is only the textile sector that has helped many countries to develop, China and Bangladesh being two of them and now Vietnam is another example.

However, as these countries progress and develop, the textile sector steadily moves out, like now in China there is a labor shortage and availability of blue color labor is also shrinking and for other reasons as well, the textile is gradually moving out of China. So there is a good opportunity for us that we get a fairly good share of export market, however it will depend how well prepared we are and how efficient we become as an Industry and as a country.

ICMA: Do you agree that Pakistani businesses need to innovate more to be able to compete at the international level? What should be done to become more competitive and add value to the international market?

Shahid A. Tata: Of course there is a great need for innovation by the Pakistani businesses due to advancement of highly developed technology so we cannot distance ourselves from it. However, as our Industries seek Government support, subsidies and protection so there is less focus on innovation and creativity.

The industry's survival is dependent on protection and assistance, for example, the car industry is one of the most inefficient Industry as it has not been able to export a single car. On the contrary, it should have been encouraged from the beginning that 50% of the cars produced should be exported. Any industry's goal should be to produce efficiently so that our exports are based on resourcefulness rather than protection.

This is also a fact that our cost of doing business is comparatively very high as compared to similar market in the region. Hence, to be more competitive, we should look into the global indices and work on correcting our weaknesses and accordingly create an environment that will enable us to be competitive in the international market.



ICMA: TATA Pakistan has greatly contributed towards corporate social responsibility, how does it help in making a difference in people's lives, and how important it is for business to continue contributing towards society?

Shahid A. Tata: TATA Pakistan is comparatively a small entity; however, we have kept our fundamentals right. We do not have even one worker on contract; all are our permanent employees, like packing and loading workers, etc. We have different initiatives for workers and employees, like the Adult Literacy Program (Jugno Sabag) and different training programs. All rights are covered, like shares in profits, loans, medical policies, donations, etc. In line with the policy, our HR Department has been working continuously for the betterment of the workforce, which is having and will have a positive impact on society.

ICMA: There is a growing need to bridge the industry-academia gap, what should be done in this regard?

Shahid A. Tata: Our industries are far behind due to lack of development in research and technology; rather, they are much more dependent on support, subsidies, and protection from the Government. This is the reason that there is no visible innovation or modernization in the industry. Unless we create an environment for indigenous innovation, our industry will never achieve that competitive advantage.

To bridge the gap between industry and academia, frequent interaction between industry and academic representatives, interaction with Management is necessary along with regular conferences and visits to Industries for first-hand knowledge. At TATA, we actively take part in various conferences, training programs, and seminars and play our part toward bridging this gap.

ICMA: Apart from formal degrees, Institute/Universities also offer courses on various technical and managerial topics. On which topics training should be provided by academic institutes and on which skills should the academia focus?

Shahid A. Tata: In Pakistan there is an explosion of population so there is a lot of labour which is unskilled and untrained. I feel the first step is to build hundreds of Vocational Training Institutions all over the country, e.g. training for plumbing, carpentry, mechanical, electrical, maintenance, etc. We should also have institutions where workers of Garment Industries can be trained, etc. In this way we can export skilled labour instead of unskilled labour and bring in the much needed increase in foreign revenue.

Moreover, to be more competitive in the market, our institutions should concentrate on the professional qualifications e.g., the IT industry. India has made tremendous growth in IT exports since last 25 years so we should also focus on exporting Information technology. Further, we should also work on developing strong work ethics and we should design our education and training system in such a way that it encourages innovation. We should generate professionals who are competent in manufacturing, especially in plant and machinery manufacturing, for the local industry; this will reduce our dependency on the international market and also reduce our import bill.

ICMA: Management Accountants have the expertise to help the textile industry in minimizing its production wastages and cost of doing business. What do you say in this regard?

Shahid A. Tata: Accounting is the most sacred and important function of any organization; if your accounts



A Group Photo of the ICMA delegation with the CEO of Tata Textile Mills Limited

are incorrect, then you have no right to be in business. There is no doubt that by maximizing the use of advanced technology, we can achieve the necessary improvements in all areas of accounting. We have a good and competent team of Accountants and always strive for latest technology; and we are the first textile industry to have acquired the Oracle Fusion Cloud which is being implemented.

ICMA: What is your message for young graduates entering the textile sector?

Shahid A. Tata: We are lagging far behind our neighbors. Pakistan is a vast country, and we cannot run it by just exporting unskilled labor. For our survival, we are importing goods worth billions of dollars, and the growth over the years has come from imports and consumption. We have never been able to bring about growth through production and productivity. So one should make efforts for efficient manufacturing and focus on productivity. In our limited capacity, we should focus on how we can become more efficient and productive and how we can compete in global markets with countries like Indonesia, Bangladesh, Vietnam, and India. The youngsters should seriously focus on these lines, as they have the analytical skills, communication skills, leadership skills, and capacity for innovation to become better leaders and citizens.

The Editorial Board thanks Mr. Shahid Anwar Tata, CEO, TATA Textile Mills Limited for sparing from his precious time to give exclusive interview for Chartered Management Accountant Journal.

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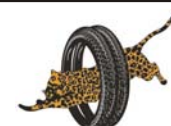
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CORPORATE LEADERS OF ICMA



Mr. Ghulam Abbas [F-1345]

Chief Financial Officer
Panther Tyres Limited



PANTHER

Mr. Ghulam Abbas is a seasoned finance professional who presently serves as the Chief Financial Officer at Panther Tyres Limited. He is a fellow member of ICMA International and CA Pakistan and an alumnus of Lahore University of Management Sciences (LUMS) and the University of the Punjab, Lahore. He is also a Certified Director. He is an elected member of the ICMA Lahore Branch Council and currently chairs the CPD Committee. He has been the Division A Director of Toastmasters International's D122P (Pakistan) chapter. He remained President of CA Toastmasters Club Lahore for the years 2020-21. He is also the Lahore chapter leader of MECA CFO Academy USA. Mr. Abbas

has over 16 years of experience in senior management positions in large, publicly listed companies with specialization in the areas of strategy, corporate finance, IPOs, financial modelling, BPRE, costing, budgeting, and taxation. He has good hands-on experience working with sophisticated ERP systems like SAP ECC6, Oracle, and Microsoft Dynamics GP. He has been a member of multiple senior teams and committees that devised strategies and future plans for organizations.

“ My advice to newly qualified CMAs is to stay focused on their goals. You have the world's best management accounting qualification, and as such, you must have a clear vision of your future career path in mind to move on with commitment. The early years are undoubtedly difficult but never turn down a good challenge because there is where you learn. You must realize that when you stop learning, you will stop growing. The world is changing fast, and there is always something new to learn to keep you motivated to be the best in your field. Having no fear of failing is an important part of growing, so do not be afraid of taking risks. You must constantly improve and develop your communication and critical thinking skills. I wish you the best of luck in your future professional endeavors. ”



Mr. Touseef Alam Khan [A - 7279]

Chief Financial Officer
National Logistics Cell (NLC)



Mr. Touseef Alam Khan's professional career spans over 22 years. He is an Associate member of ICMA and a Fellow member of ICAP. He is also an alumnus of the University of Oxford, Saïd Business School, and LUMS. He is currently serving as CFO in Pakistan's premier logistics and construction organization and directly supervises over 200 finance professionals. He previously served at top professional services firms such as PricewaterhouseCoopers and Ernst & Young and has almost six years of international experience. He also has vast teaching experience at various universities and professional institutes. He is also serving on the board of six public sector companies.

“ ICMA is my parent-professional institute, and I will be eternally grateful to it for transforming me into an internationally competitive professional and preparing me to take on any qualification or project with full confidence. I strongly believe that ICMA will offer you a solid foundation to develop and advance your professional career. A galaxy of respected members serving at senior levels all around the world is a testimony to this fact.

Our young members and students are the institute's assets, and I am sure they will achieve greater success and make us all proud. My advice to our younger colleagues would be to make a personal commitment to their long-term success. Life is a marathon, not a sprint. You may win some segments and suffer setbacks in a few others. Long-term success necessitates that your failures do not wear you down and that you continue to move forward in the direction in which you believe wholeheartedly. If you can accomplish that, the sky is the limit. May Allah help and guide us all. ”



Nurturing the Organic Bond between Industry & Academia

Sir Francis Bacon once said that knowledge itself is power. The contemporary world is the manifestation of this assertion; nations that are considered powerful politically or economically, are those who valued and prioritized education; their emphasis on education resulted in the production of scientific knowledge, and consequently the development of technology. In this whole process, the key was the pragmatic approach toward episteme. In simple words, these nations utilized the knowledge to solve their problems, to progress, to enhance living standards, and to compete with other nations. For a developing nation like ours, it is a very clear path to follow. Adoption of a pragmatic approach requires synchronization of the academic process with the different facets of society. Especially, the link between higher education providers and businesses is vitally important for sustainable economic progress and prosperity.

In developed countries, industry-academia linkage has always been a two-way process. Researchers, scientists, and academicians contribute with their knowledge, skills, and research work in the industrial process; whereas managers, entrepreneurs, and professionals share their experiences, exposures, and expertise with academicians to facilitate their

“ In Pakistan, the link between industry and academia is not only weak but also cosmetic in nature. Problems lay on both sides of this feeble bridge ”

endeavors. At the institutional level, the corporate sector offers technical support, seed fund, and requisite technology to transform basic research, conducted at universities or higher education institutions, into applied research, product development and innovation, etc. All such activities are guided through strategic initiatives by governments or

their representative agencies. To strategize the industry-academia linkage in our society, detailed overhauling of the academic process as well as the reorientation of long industrial goals are of utmost importance.

Pakistan's Scenario

In Pakistan, the link between industry and academia is not only weak but also cosmetic in nature. Problems lay on both sides of this feeble bridge. Universities and higher education institutions operate without close liaison with businesses and industry. They update their curriculum very rarely, and even the updated curriculum and teaching hardly emphasize on application of knowledge. The lack of focus on liaison with the industry starts right from the hiring process of faculty. There is no weightage for professional experience as such in the hiring criteria of faculty in universities. When lecturers without industry exposure start teaching, they have no idea of industry trends, practices, and issues.



Salman Sarwat, FCMA
Associate Professor
Benazir Bhutto Shaheed
University (BBSU)

“ Pakistan's industry is stagnant as far as innovation, technology adoption, and value addition is concerned. Our companies are lacking far behind in research, development, and commercialization ”

Another reason for teachers' lack of industry information is the unavailability of indigenous case studies. We are a downloading nation, we do not produce knowledge but borrow it from foreign sources, which barely correspond to the local scenario. Research activities at the university are also disoriented from industrial demands and real problems in our business sector. There is hardly any meaningful involvement of companies at each phase of the research process from topic selection and data collection to the implication of findings and policy recommendations.

Hands-on training of students is also an important aspect of the academic process. Universities do send their students for internships in different companies but the protocols of such internships are not well defined. Professional education institutions have a more structured system of internships than universities, but desired outcomes are still not up to the mark.

On the other hand, the industrial and business sector of Pakistan is least bothered to explore the opportunities for mutual benefits from industry-academia linkage. Pakistan's industry is stagnant as far as innovation, technology adoption, and value addition is concerned. Our companies are lacking far behind in research, development, and commercialization. They hardly allocate budgets for R&D activities, and when there is no focus on R&D, coordination with universities and research centers becomes superficial. Besides R&D, there are so many other issues such as improvement in productivity, system development, change management, market studies or employee efficiency, etc., which should be addressed through a scientific approach. Researchers and professors with their student teams can provide better solutions in these areas provided that they are given excess to information, employees, and processes. But, it is generally observed that the corporate sector is reluctant to provide that much space to academia, and there is a common belief among corporate managers that such an initiative would be a futile activity. There are reasons behind this behavior; the first is the lack of confidence in the capabilities and strengths of academia, and the second reason is the narrowness of the vision of the business sector.

Our businessmen, managers, and entrepreneurs are not enthusiastic about innovation, creativity, continuous change, value addition, and out of box thinking. In the contemporary globally competitive environment, these are the elements so crucial not only for sustainable growth and financial stability but for the survival of businesses as well. Shortage of skilled resources is another issue faced by our industry, and the main reason is the lack of industry-academia linkage. Companies hardly encourage internships, and those who are offering internships, do not involve internees in meaningful engagements. They are least concerned to groom students for their human resource requirements.

Procedural & Policy Panaceas

Developing a meaningful and fruitful interaction between industry and academia requires lots of rethinking not only on the part of academia but in the business fraternity as well. A cohesive, enabling, and conducive environment is the core of industry-academia linkage. To develop such an environment, input and feedback from industry should be inculcated at every step of the academic process of higher education. To make industry an integral part of developing and updating curricula, there should be a representation from the business sector in the board of studies or board of faculty of the universities; thus, the courses can be designed for the enhancement of employability.

Incubation centers should be set up in all types of higher institutions, where industry experts are invited to mentor the students with their technical expertise and practical exposure. Professors and researchers should develop their connections in the industry by offering consultations, conducting workshops and seminars, and assigning students capstone projects on topics related to a specific industry or company.

“ Higher Education Commission (HEC) should encourage seasoned businessmen and experienced managers to join the academia by emending the hiring criteria for a professorship; there is a concept of Professor-in-Practice to attract successful professionals from the industry to universities ”

Senior managers and professionals should also be invited to evaluate the applicability and practicality of students' projects and research work.

Higher Education Commission (HEC) should encourage seasoned businessmen and experienced managers to join the academia by emending the hiring criteria for a professorship; there is a concept of Professor-in-Practice to attract successful professionals from the industry to universities. HEC should also design exchange programs, and encourage professors to join the industry for a specific time period.

The establishment of the Office of Research, Innovation, and Commercialization (ORIC) in universities was a good initiative of HEC. Unfortunately, the working and outcomes of ORIC at various universities are missing the spirit of its existence. There is a need to reform ORIC, as it should be the main link between universities and industry. On the same footing, the process of research grants to the universities from HEC should also be structured in such a way that reinforces the industry-academia linkage.

The first thing, which the industry needs, to jell with higher education and research, is to reshape the corporate culture. Companies demand good human resources but they don't seem to participate in the human resource development process. Constant liaison with academia can help them in getting better human resources with the requisite skills and knowledge. Industry can also avail services of researchers and professors for research and development function, which is the weakest aspect of the industrial sector. There has to be a feedback loop between industry and academia for transforming basic research into applied research and commercialization. In this regard, research parks can be established on a consortium basis. Industry can facilitate research activities through technological support and by granting seed money. Such endeavors can make our industrial sector more innovative, competitive, and sustainable.

There are several industrial sectors in Pakistan such as the textile, pharmaceutical, biotechnology, and telecommunication, as well as the agriculture sector, which have great potential for product development, value addition, and innovation. Besides hardcore research and development avenues, there are certain business functions, where the involvement of academia and higher education can reap fruits for industry, for instance engaging management accounting students in cost rationalization process, IT students in automation and digitization of business functions, marketing students for customer



surveys, engineering students in energy conservations or alternative energy usage, and communication media students in campaign designing, etc. Such engagements should be channelized through well-designed and targeted internship programs and project assignments.

In Pakistan, the SME sector is critically important as it contributes 40% of the GDP, and accounts for 25% of export business. But, it is facing all sorts of issues and problems from energy shortage, lack of infrastructure, and shortage of skilled labor to technological backwardness, a me-too stereotype approach, and the absence of long-term strategy and vision. Amalgamating the SME sector with academia will bring a far-reaching impact on the development and progress of Pakistan's economy. The nature of academia SME connection would rather be different from the corporate sector. Support and facilitation from government agencies (like SMEDA), chambers of commerce, trade associations, NGOs, and banks is a prerequisite of SME Academia liaison. These stakeholders will work as a bridge between universities and SMEs. Academicians can provide technology solutions and knowledge support to SMEs; they can fill the skill and knowledge gaps of the SME workforce through training and workshops. Academia, with the help of the aforementioned stakeholder, can also set up open knowledge platforms and research labs. Another important benefit of insightful coordination of academia with SMEs and the corporate sector is the generation of local case studies, which are of utmost importance for contextualizing the knowledge and creating indigenous content. A vibrant loop of knowledge and skills exchange between academia and industry is the key to socioeconomic development in the technologically driven highly competitive world.

About the Author: The writer is a Chartered Management Accountant and a Fellow member of ICMA. He holds a Ph.D. in Finance, in addition to an MS (Finance) and M.Com, M.A (Philosophy), and over 16 years of teaching experience at the University level. He is currently an 'Associate Professor' at Benazir Bhutto Shaheed University (BBSU), Karachi. In his professional career, he has served the banking, retail, and oil sectors. He has also published a book and several research articles in impact factor journals.



Industry-Academia Linkage in Pakistan: A Lost Dream

By: Dr. Mahmood Khalid (Senior Research Economist, Pakistan Institute of Development Economics) and Sana Zafar (Pakistan Institute of Development Economics)

Linkages between academia and industry are certainly not a surprising issue to consider since they have been accounted for hundreds of times for the extension of the fundamental idea they hold, namely the growth and development of society through the consequence of technology transfer. Industry and academia are two distinctive domains that stand on different pedestals. Both have different ideas and different goals. But the environment is changing so quickly that it is forcing these two very different realms to work together to address and resolve some of the problems that the real world is facing today.

Industry-academia collaboration is necessary for the growth and advancement of an economy. Although the industry is a sector that transforms information and technology into innovative products, academia is a repository of knowledge and invention. So it takes extensive and continuing work to transfer research and innovation from universities or other research organizations to the market for social benefit. Universities and research institutes are extensively recognized as influencers in all countries' economic development processes, and their interaction with industry has risen in recent years. The goals of these linkages can change depending on their scope and the level of agreement between the university and the industry. The engagements may have had different

intensities, i.e., they might have engaged in high-intensity to low-intensity linkages.

In **Pakistan**, the concept of industry-academia linkage has long been viewed as a dream that has yet to be fully realized. Despite efforts by the government and various educational institutions to foster collaborations between the two sectors, many challenges remain that have hindered the development of a strong and sustainable partnership.

One of the main barriers to industry-academia linkage in Pakistan is the lack of **a cohesive policy framework**. While there have been various initiatives aimed at promoting such collaborations, there is no comprehensive strategy in place to guide and support these efforts. As a result, partnerships between industry and academia are often ad hoc and lack the necessary structure and support to be successful.

One of the core reasons is that the research capabilities at universities in Pakistan vary. Some universities in Pakistan have well-developed research programs and a strong tradition of producing high-quality research. These universities often have well-equipped research laboratories and dedicated staff to support research activities. They may also have partnerships with industry and government organizations, which can provide funding and other resources for research.



“One of the main barriers to industry-academia linkage in Pakistan is the lack of a cohesive policy framework”



“ Several challenges are hindering the development of strong links between industry and academia in Pakistan: One challenge is a lack of funding for research projects”

Other universities in Pakistan may have more limited research capabilities. These universities may have fewer resources and less funding for research, which can make it more difficult for academics to carry out research projects. They may also have less experience in partnering with industry and other external organizations, which can limit their ability to access funding and other resources for research. Several challenges are hindering the development of strong links between industry and academia in Pakistan: One challenge is a **lack of funding** for research projects. Many companies in Pakistan may not have the resources or the inclination to fund research projects at universities, which can make it difficult for academics to carry out research that is relevant to the industry.

- Another challenge is a **lack of awareness** about the benefits of industry-academia collaboration. Some companies may not understand the value of partnering with academia, and some academics may not be aware of the opportunities that exist to work with industry.
- Many in the business sector view academia as being **disconnected** from the needs of industry and unable to provide practical solutions to real-world problems. Similarly, academia often views industry as being too focused on short-term gains and not interested in long-term research and development. This lack of understanding and appreciation of each other's perspectives and needs has made it difficult to establish meaningful partnerships.
- Fourth challenge is a **lack of communication** and understanding between industry and academia. Academics and industry professionals may have different priorities and ways of working, which can make it difficult to establish productive partnerships.

- Finally, there are **cultural barriers** that prevent effective collaboration between industry and academia in Pakistan. For example, there may be societal expectations about the roles of industry and academia, which can make it difficult for the two sectors to work together.

The lack of resources and funding is one of the significant obstacles to industry-academia linkage in Pakistan. Many academic institutions lack the necessary resources, such as equipment and facilities, to engage in research and development activities with industry partners. Additionally, the lack of funding for such projects has made it difficult for academia to engage with industry, as they are often unable to provide the necessary support.

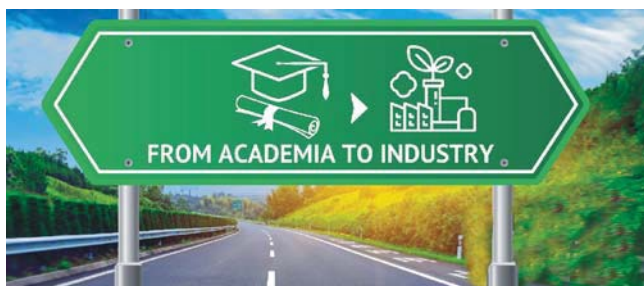
Coming back to the cultural differences between the two sectors, which are one of the barriers to industry-academia linkage in Pakistan, The traditional hierarchical structure and bureaucratic processes of academia can be at odds with the more agile and fast-paced nature of the business world. This can make it difficult for the two sectors to work together effectively.

Despite these challenges, there have been some successes in establishing industry-academia linkages in Pakistan too. Many universities have established partnerships with industry, and numerous research and development projects are being undertaken in collaboration with the business sector. However, these efforts are still relatively small in scale and do not yet represent a widespread and sustainable partnership between industry and academia.

“ One way to strengthen the industry-academia linkage in Pakistan is through research partnerships. Companies in Pakistan can provide funding for research projects at universities, and university researchers can help solve problems that the company is facing ”

If we consider the institutional setup looking after this aspect of higher education, then the Higher Education Commission (HEC) comes to mind as a government organization responsible for regulating and coordinating higher education in Pakistan. One of its main roles is to facilitate industry-academia linkages by promoting collaboration between universities and industry. This can take the form of internships, research projects, and joint degree programs, among other things.

The HEC aims to foster partnerships between academia and industry to improve the quality of education, encourage innovation, and support the development of a skilled workforce. It does this by providing funding for research projects, organizing conferences and workshops, and working with universities to develop degree programs that meet the needs of the industry. However, the impact evaluation for such initiatives is seldom done.



The HEC also plays a role in promoting entrepreneurship and encouraging students to start their businesses. It does this by providing funding and support for incubators and accelerators, as well as organizing events and training programs for aspiring entrepreneurs. Overall, the HEC is an important organization that helps to ensure that higher education in Pakistan is relevant, responsive, and aligned with the needs of industry and the wider economy.

To conclude, it is not uncommon for there to be a gap between industry and academia in many countries, including Pakistan. However, it is not necessarily a lost dream to bridge this gap in Pakistan. There are several ways in which industry and academia in Pakistan can work together and benefit from each other:

- One way to strengthen the industry-academia linkage in Pakistan is through **research partnerships**. Companies in Pakistan can provide funding for research projects at universities, and university researchers can help solve problems that the company is facing. This can lead to new technologies and innovations that can benefit both the company and society at large.
- Another way to strengthen the linkage is through **internships and co-op programs**. These programs allow

“ although industry-academia linkage in Pakistan has made some progress, and even though there are some challenges in establishing strong links between industry and academia in Pakistan, it is certainly not a lost dream ”

students to gain practical experience in their field while working at a company, and they also allow companies to train and recruit top talent.

- **Professional organizations and conferences** can also be a useful way to bring together industry and academia in Pakistan to share knowledge and build connections.
- **Entrepreneurship Labs and startup challenge funds** also work as a good way of innovation through industry and academia linkages.

In conclusion, although industry-academia linkage in Pakistan has made some progress, and even though there are some challenges in establishing strong links between industry and academia in Pakistan, it is certainly not a lost dream. By actively seeking out opportunities for collaboration and working to build strong partnerships, industry and academia in Pakistan can work together to advance knowledge and drive innovation. Generally, the research capabilities of universities in Pakistan are influenced by a range of factors, including funding, infrastructure, and partnerships with external organizations. While some universities in Pakistan have strong research capabilities, others may face challenges in developing and supporting research programs. A cohesive policy framework, increased awareness and understanding, better resources and funding, and cultural alignment are all necessary to fully realize the potential of such partnerships and to drive innovation and economic growth in the country.

About the Authors: *Dr. Mahmood Khalid is Senior Research Economist at PIDE and also looking after the Center for Excellence on CPEC at PIDE. He has rich research experience and specializes on the fiscal side. Ms. Sana is currently assisting in research for the CE-CPEC at Pakistan Institute of Development Economics.*



University-Industry Link: Vital for Transfer of Knowledge

Two decades back, while surfing the internet, I came across a page on activity-based costing of a foreign University, where the salary of teachers was classified into three segments viz. teaching, research and development, and University allied service. And it began to shape my thinking that the Western education system value research and development as a part of their academic curricula and operations.

It is an undeniable fact that the University-industry link lays the foundation for the transfer of knowledge. The Universities which can provide innovation, consultancy, and ideas to industries, pave the way for growth in the economy at large. The Universities are benefited from the financial investment, both by the Government and Corporate sector. The Universities have a pool of competent human resources with diversified educational backgrounds and are in a better position to advocate and bring information about new avenues of knowledge and learning. The West reaped enormous economic benefits by using this research for innovation, development, and modernization. The growth in the IT sector, especially huge investment by IT companies like Google, Facebook, and Microsoft in research and development indicate the strategic competitiveness they have achieved and maintained.

According to the report of “Statista” for the year 2022, the USA is at the top of the list with a spending of US\$ 679.4 billion in research and development, followed by China with US\$ 551.1 billion and Japan with US\$ 182.2 billion. Spending by India stands at US\$65.2 billion for the same year. Unfortunately for Pakistan, there is a scarcity of economic resources to allocate any funds for R&D. In Asia, Japan, South Korea, China, India, Malaysia and Thailand have institutionalized the research and development of academia with their industries and it is reflected in their economic indicators as well. The spending by the Government of China on higher education for the year 2021 was US\$ 179 billion.

India has laid the foundation of gain through the service industry with a boost in its IT exports. India's software and allied service export stand at US\$ 171.9 billion for 2021-22. While in Pakistan both the public and private sector universities have yet to develop a road map for the

adoption of research and its utilization by the Industry. It has been compounded by the fact that the number of research publications has become a core representation, and research activities have yet to achieve a certain earmark. Therefore, quantity has become center stage and less attention has been extended to quality. In due process, advancement in securing research skills has not gained much prominence.

The industries in Pakistan have a long road ahead. We depend largely on imported materials and are still considered a semi-industrial country. Industrialization has not accelerated at the desired level in compatibility with population growth. The concept of the brand is taking its roots gradually and most industries do realize its importance. From the manufacturing perspective, the majority of industries are involved in low-wage manufacturing. Technological and high-value-added production is very minimal. Industries need skilled manpower and they do realize the importance of academia in meeting this need. However, there is an underlying feeling that with innovation and technological advancement, the higher education sector in our country is finding it difficult to sustain the changing conditions.

Where the Problem lies?

The problem exists both at the University and Industry levels. Let's discuss them separately.

University context: The prevalent system of education in Pakistan is still in the process of incorporating the concept of inquisition as an essential ingredient for research activities. In the cultural context, the attitude of admissibility and permission of independent thinking is a norm that is yet to find a place in our lives.



Further, a very limited number of academic books have been written by local authors in line with the prevailing culture, issues, and stigma of society at large.

Today, there are over 10,000 Ph.D. scholars in Pakistan and much of their research work has been published. Unfortunately, there is not any yardstick to determine how this research has benefited Pakistani industries. There is a weak institutional cohesion between the Universities and the Ministry of Education, Ministry of Commerce & Industries and the Chambers of Commerce. Different centers such as National Vocational & Technical Education Commission (NAVTEC), Technical Education & Vocational Training Authority (TEVTA), Small and Medium Enterprise Development Authority (SMEDA), Technology Up-gradation and Skill development Company (TUSDEC) are operating in Pakistan without any formal understanding between these institutions and the academic institutions.

Industrial context: Industries do not officially allocate budgets for research and development, however, their spending in liaison with the Universities remains minimum. Industries have not developed a formal, strategic, or general partnership with Universities to undertake specified or identified research. They find it difficult to discuss issues of technical and management nature with the Universities. Understandably, in a developing economy like Pakistan, with a slow growth rate, innovation and creation is the difficult phase but the question is: have the Pakistani industries developed any strong linkage with the Universities and academia to seek their help? It raises another question whether the industry has the capacity to absorb research and convert it into marketable products.

Intellectual Property Right

Linked with this issue is the precarious understanding of Intellectual Property Law in Pakistan. For the year 2022, the global rank for Pakistan is 108th out of 129 in the International Property Rights index.

One of the fundamental problems in the application of Intellectual Property rights is the awareness of its application, both at the academic and Industrial levels. Ghulam Murtiza & Ghaus Muhammad in their book titled 'The Implementation of Intellectual Property Laws in Pakistan- Impediments and Suggestions for Solutions'" have emphasized the need for a nationwide awareness campaign on Intellectual Property rights; bringing reforms in the judicial laws and initiating steps to strengthen the monitoring capacity of law enforcement agencies.

Similar views were shared in the research article titled 'Intellectual Property Rights in Education of Pakistan: Review of Constitution, Current Status and Expectation'. The authors of this book have suggested that the protection

of Intellectual Property Laws is a necessity for the development of creative knowledge and for enhancing competitiveness and resources at the individual and national levels. They also called for the dissemination of knowledge on the subject of "registration of Patent".

Role of ORIC in Universities

The Higher Education Commission (HEC) took a good initiative two decades back for the development of research activities for sustainable economic growth through the establishment of the 'Offices of Research, Innovation, and Commercialization (ORIC)' in the Universities. The idea was to encourage research, bring the invention into a sellable product through liaison with the industry, and generate a level of income for the University. The ORIC Offices are supposed to act as catalysts between Universities and Industries. Recently, the Higher Education Commission took several measures to enhance the functionality of ORIC more effectively. A few of these measures are outlined below:

- Allocation of Separate budget
- Appointment of full-time Director
- Advance year-end planning of activities
- Including reporting according to Key Performance Indicators
- Board-based Reporting
- Training at national and International level

Despite its huge potential, ORIC has yet to achieve its full objective. It faces a host of issues, mainly the absence of formal understanding between a researcher and the industry. It has been further hampered by the fact that the present cadre of teachers is more inclined toward the classrooms and has limited concerns about issues facing industries. A professor at an Engineering University pointed out that the pressure of earning a Ph.D. qualification has so intensified that earning practical experience in the industry is preferred less nowadays. Apprehension on part of industries also exists. A major resulting factor of this gap is the failure to develop a joint platform for the assessment of job requirements in various industries and training of the students in accordance with their needs. ORIC should be a source of dissemination of information on the modality of financing through venture capital.

Technical Education

Technical education is a stream that provides impetus to industries. Technicians play a key role at the operational level of the organization. One of the key factors in the success of Japanese industries is the role of technical staff at the middle and lower level of production.

In Pakistan, more than 100 polytechnic colleges, Technical Boards and Vocational Institutes are operational. Recently, several Chinese companies, engaged in CPEC-related projects, have raised complaints about the quality of local technicians. Hence they are opting for employing vast numbers of staff of their origin. The low quality of our technicians could be due to low investment or a lack of trained teachers. Our Universities need to adopt a consultancy approach for the enhancement of the quality of these educational bodies by bringing formal recognition which is the biggest hurdle in the personnel growth of the technician. There is also a need for undertaking research to identify the knowledge gap between industry and technical institutions.

The Way Forward

The term research has its manifestation from culture and values within a society. Until and unless society is ready to review itself from within and allows critical thinking to flourish, research will remain restricted to papers only. Research has multiple dimensions- social, behavioral, cognitive, and scientific.

Universities should develop a defined method of valuation of research output and research activities which encompass quality of work to publication and usage/commercialization. This is the essential criterion for the enhancement of the volume of research funds.

Research in the field of thematic, social, and behavioral subjects should be accorded equal importance to that of scientific and technological ones.

Universities should finalize agreements with international institutions to learn more about the best global practices in research and to enhance research capacity.

The Government should play an instrumental role in strengthening the liaison between industries and Universities. A portion of the budget allocated for the research and development in the industry may be shared with the Universities with defined terms and objectives. Industries at their convenience should allow the usage of laboratories and equipment for undertaking research.

Higher Education Commission, Islamabad has drafted a policy document titled "Vision 2025". One of the fundamental objectives of that policy is to "Implement a three-tier integrated tertiary system". The Tier-1 Universities will be highly focused Universities, followed by Tier-2 and Tier-3. It will bring research-oriented Universities to the forefront.

In a highly competitive global environment, academia and industry require assistance from each other, greater or lesser does not matter as a slight edge can lead to a big difference in the statistical arena.

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About the Author: The writer is a Chartered Management Accountant and a Fellow member of ICMA. He is currently working as Director Finance at Dawood University of Engineering & Technology, Karachi.



Significance of Industry-Academia Linkages in Economic Development

Academia-Industry collaboration is becoming increasingly important and these linkages are vital not only for industry and universities but also for economic development. This collaboration requires a carefully determined thought process and an understanding of issues that need to be addressed. As globalization encourages trade beyond borders, it is the need of the hour for industries and academic institutions to develop strong relations to reduce gaps and increase the global employability of graduates. Both of them are essential pillars of economic prosperity and mutual support is a common practice in developed countries. However, it is equally important to identify critical areas of collaboration and coordination.

The objectives of industry and academia may differ from each other as universities seek to collaborate with the industry for teaching improvements, access to funding; reputation building, and access to empirical data from the industry. While the rationale behind the industry to connect with academia is to gain access to complementary knowledge; get into a pool of skilled graduates; provide training to existing or future employees; and gain access to the university's facilities, equipment, public funding, and other incentives. Companies may also seek to mitigate risks by sharing the costs of research and development and influencing the overall teaching and research mechanism of universities.

A key concern is related to the extent to which these linkages affect the core objectives of the academic system as they relate to research & knowledge creation. There are some valid arguments for this as if universities are too influenced by market demand, weaknesses may be developed in academics. The lack of market demand for certain field research individuals' results in a substantial decrease in supply. The non-availability of individuals who carry out basic research work causes weakness in the academic system. A balance must be maintained to allow the universities to retain their core mission and function as society's knowledge base, meanwhile integrating flexibility in the core objectives to respond to changing conditions. Well-structured and organized linkages can greatly assist universities to maintain their position. The industry can also take advantage after bringing forward its unsettled issues to academia, which will turn the issues into projects to be done by students and attract funds from the industry.

Normally, the focus of academia is to fulfill industry-driven demand for skilled graduates equipped with qualifications and technical knowledge, but in a rapidly changing environment and developments, differences started to establish between the academic and industrial world. After the development of advanced computer programs and devices, the industry's operational work radically changed and the fast-paced technological developments in recent decades are the main cause behind the difference between industrial skills and academic knowledge which create employability issues for young graduates. Resultantly, the companies may not find the exact skill match with ease, and this adversely impacts the confidence level of high academic achievers and causes demotivation for qualified people when they realize the gap between their knowledge and practical work.

Currently, almost all operational tasks in companies are performed by advanced devices and computer programs but universities' curricula focus more on theoretical aspects rather than practical approaches. Usually, the primary source of income is fees collected from students or government grants in the case of public universities. With these limited income sources, it is always a challenge for academia in developing countries to provide world-class education with the latest facilities and lab equipment. Though this situation can be overcome by various means as universities have the option to monetize their courses and professors' lectures on the websites. Further, the universities can provide online education in remote areas of the country which enable them to create extra cash inflows.

However, Universities need industry support to quickly update their curriculum and upgrade the knowledge of graduates through seminars and other programs. As it has been observed that young graduates are lacking skills in implementing academic knowledge in real practical scenarios.



This triggers the need that students must be familiar with the working environment and in handling real challenges. In developed countries, most of the universities have signed memorandums with corporations which proved to be beneficial for both as universities have great recognition when they have industry support and businesses have access to a wider base of human resources. Also, it provides opportunities for Internships to students during study breaks, industry visits, and meeting with field professionals.

In Pakistan, companies are now actively participating in job fairs in different universities to fulfill the needs of skilled resources ICMA International is the most recent example where several job fairs were conducted in the year 2022 throughout country campuses in which more than 300 companies participated.

In previous decades, the growing economy demanded highly qualified individuals and required research and development work that is meaningful for technological upgrading and innovation. Unfortunately, research activities have not been carried out to a significant degree, and also the lack of funding for public universities created a gap between the demand and supply of skilled graduates, especially in science and technology. Thus, the growth of technological development is slow as compared to other nations. Also, Weak science and technology base in research and teaching affects innovation and is considered to be a major setback in the country's long-term economic development and prosperity.

Big corporations in Pakistan, with government support, may also invest in institutions to lessen the technical skills gap for future recruitment. This could be in the form of internships, training, access of graduates to production facilities, and incubation centers, and deploying resources to assist institutes in designing curricula as per industry needs. This in turn will save the recruitment costs for the company as they will already have a significant database of skilled graduates.

As global competition increased with the developments and process improvements over time and companies achieve high sales revenue and growth by getting insight into business operations and strong analysis of their position. An important factor of competitive advantage over competitors is the extensive skillset of employees with innovative ideas. Engagement of corporate representative at the university level create pathways for fresh graduates to land their first job in minimum lead time and also an advantage for companies to hire fresh skilled people which ensure a great source of new ideas, maintain a level of innovation, and enhance business competitiveness. It is very beneficial for companies to visit university researchers and interact with the academic community for better results and the impact of relationships. Regular meetings could be held in the shape of face-to-face meetings, developing communication lines, and encouraging information exchange from industry to academia and vice versa.

Though there are some challenges and the scope of these relations can be limited because of insufficient funding,

grants, equipment & human resource. Generally, corporate policies do not allow employing full-time staff that works specifically in developing linkages with academia; the same is the case with universities that it is difficult to employ staff without fulfilling teaching and research obligations.

Research, innovation, and exports are important factors in economic development. Essentially, Innovation is an important factor as it benefits consumers, businesses, and the economy as a whole. In the last few decades, human being witnessed significant improvements in technological developments and now competitiveness depends on the extent of these advancements implemented in industries. These advancements need strong Research and development with state-of-the-art equipment, although it may be a challenge in developing countries. The advanced nations are well equipped with these facilities which enhance the global competitiveness of their industries and products.

An additional challenge for industries in developing nations is the non-availability of skilled human resources having advanced level knowledge and skills, required in various operational activities. This compels the industries to import various parts of their products or completely build units to meet the market demand. Consequently, it creates outflows of the foreign exchange resulting in value depreciation of the local currency, which is one of the reasons that the government levied huge duties on imports.

The support of the government is significantly important in economic development through research and innovation. The government provides grants and incentives to private sectors and foreign investors to bring investment and encourage research and development activities. Also, there are other non-financial factors as well which boost the confidence level of foreign investors and institutions such as law and order situation, political stability, ease of doing business, and infrastructure. In addition to these, the government should also encourage local production and facilitate the universities to provide specialized skilled courses at graduate level studies. These steps require substantial investment from the government with careful consideration given to future economic benefits. As a consequence, an increase in local production and exports will grow up the country's GDP and create inflows of foreign exchange.

Universities have always played a vital role in contributing to the development of the nation through knowledge-based research, innovation, devising management techniques, and suggesting economic policies. It is evident that whenever industry and academia jointly work on a platform, they turn out to be a great force for the innovation and economic development of a nation. However, it requires efforts from both sides and engagements beyond the traditional approaches of collaboration.

About the Author: The writer is a Chartered Management Accountant and an Associate member of ICMA. He possesses diversified experience in working with reputable organizations. Currently, he is serving as Senior Accounts Officer at Mirpurkhas Sugar Mills Limited, a publicly listed company of Ghulam Faruque Group.



Key Roles of Professional Accountants in Strengthening the Bond between Industries and Academic Institutions

The existing gap and linkage between Industry and Academia in our country are widening due mainly to inherent weaknesses in our education systems and a lack of intent on the part of the industry. To bridge this widening gap, professional accountants can play a significant role. I have tried to summarize in this article some of the key roles that professional accountants can contribute towards establishing and strengthening linkages between the industry and academic institutions.

1) Constructing a well-adjusted market-compatible syllabus

Academic syllabi in the field of Professional Accountancy, be it Financial Audit or Management Accountancy, is one of the highly discussed topics these days. The key focus is that the syllabus should be updated or modified in line with the global standards and industry requirements, especially more content about Fintech and digital strategies in the constantly changing world. A balanced approach can be suggested, for instance, the subjects can be classified into fundamental subjects (i.e. Core Accounting and Management Subjects) and Innovative subjects (i.e. Role of Fintech, Artificial Intelligence, and Data Science like Big Data Analytics in day-to-day industrial operations) with more focus on Soft Skills such as Presentation Skills and selling skills. To acquire the latest technologies, alternative modes of learning (i.e. E-learning and/or Online classes) can be explored with online well-thought-out courses available in the market at very reasonable prices on online e-training platforms like Coursera, and Google Certifications.

2) Enhancing the motivation of Students/ Future Professional Accountants

You can name any skill, motivating students to perform better during studies plays a pivotal role in their professional upbringing. As per our social paradigms, it is not uncommon that all Professional Accountants must instill analytical and problem-solving skills that makes them

great Professional in Industrial job markets, as every person is unique in his under-lying strengths in a particular area.

Professional Accountants should be given opportunities during their study to discover their inner underlying strengths. This can be achieved by making students collaborate to work on some out-

of-the-box solutions for complex problems facing the Industrial World through systematic real-life world case studies and providing them with strong encouragement to work out various possible solutions to these problems. The out-of-the-box activities can consist of Industrial Study tours to understand the SOPs of working in industries and exploring the Real Life complex industrial problems faced by these industries, providing opportunities to discover their creative side with activities like brainstorming sessions in classrooms, etc. Students should never be demotivated as nobody knows what each student will turn out to be in the real world after passing out. Demotivating them will have a negative impact on the confidence level and creativity of students. Allowing the students to participate in various sets of activities can surely enhance their motivation and morale.

3) Capacity Building of Students/Faculty members

Capacity Building is also an important factor in bridging the gap between industry and academia. It should be viewed as a long-term and constant improvement methodology (also commonly known as Kaizen principles) and can be achieved by adopting the capacity across the whole industrial ecosystem. Some actions that can be taken are summarized below:



Shakil Khawaja, ACMA
Manager Finance
Sui Southern Gas
Company Ltd. (SSGCL)

- a) Capacity Building at the Individual level: Everyone has a role to play in improving their competencies including students, faculty members, or even any industrial worker or employee. The attitude of learning should be cultivated by different methodologies to enhance the skill set and bridge the gap between academia and industry. This culture of lifelong learning will surely benefit the passing out students in adapting to day-to-day changes in the industrial work environment. With the emergence of new technologies, disrupting traditional ways of working, such as Big Data Analytics, Artificial Intelligence, and Machine Learning, students need to have a continuous learning mindset to remain alive to the emerging changes.
- b) Capacity Building at the Organizational level: At the educational and organizational level, capacity building can be done by adopting better practices of teaching, and evaluation methodologies as well as by ensuring standardized and better mechanisms in place for collaboration between Academia and Industry.
- c) Capacity building at the Social level: Capacity building also needs to do be built at a social level i.e. interactive public administration like a civil society as a whole working on it. Society should take the feedback positively and immediately start working on it. Capacity development at the Social level is for society to develop as a whole.

4) Providing exposure to Students/Future Professional Accountants at the workplace/Industries

Internship opportunities should be provided to professional accountants in the industries with committed action points for a specified time period and focus on Real Life Case Problems for complex problems faced by these industries.

Students studying in academia are most of the time not aware of the expectations of the job workplace. Awareness of the workplace needs to be arranged by arranging to divulge them with the workplace of the real world. Internships play a pivotal role in bridging the gap between academia and industry. Through internships, Professional Accountants can not only learn about job expectations from employers but also about behavioral aspects of the work environment i.e. oral and written communication with office colleagues and seniors/mentors, taking complete work ownership of the work given to employees, providing quality output as desired and learning obtained through real-time tasks i.e. the essence of on the job training. By attending corporate-level activities like team meetings,

training workshops, and face-to-face in-house meetings, interns can figure out the big picture about the functioning of an organization.

In addition to the Internship, students can also be provided an opportunity to be aware of the corporate world by having engagement programs with the prevailing industrial sector i.e. arranging guest speaker sessions by experts of specific fields, One-on-One mentoring sessions, and arranging industry experts in a particular field as part of visiting faculty.

5) Nurturing a Non-stop knowledge transfer environment in the Ecosystem

There should be an outright need to be knitted into a consistent ecosystem for knowledge sharing/transfer. This ecosystem is recommended to connect the development of new curricula, faculty capacity development programs, constructing enhanced teaching practices, collaborating with industry partners for internship programs, and having an industry expert ecosystem with the backing from the management of Regional Professional Accounting Bodies. If this ecosystem is in place and adopted consistently. It would surely provide new food for thought and help in improving the gap between academia and industry.

Conclusion

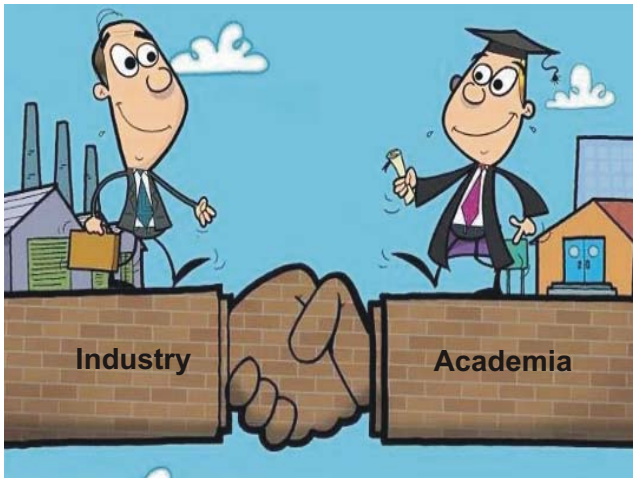
For industrial growth to flourish and nurture success, it is imperative that the gap between Industry and academia should be bridged or minimized. In this article, the writer has pinpointed ways and possible suggestions on how to minimize this gap with respect to Professional Accountants. The quality of the resource is of utmost importance. A motivated and energetic workforce, especially the youth, is a precious asset that, fortunately, is available in abundance in Pakistan. This huge population chunk needs to be directed towards a positive workforce by making it employable. Bridging the gap between industry and academia plays a vital role in this scenario where students, Professional Accounting Institutes, Industrial organizations, and government should work together and collaborate to make it a reality.

About the Author: The writer is a Chartered Management Accountant and an Associate Member of ICMA. He is currently working as Manager Finance at the Sui Southern Gas Company Ltd. (SSGCL). He has an overall 19 years of experience in Accounting and Finance in the Industrial/Engineering and Utility sectors. Previously, he held the position of DM Finance and Business Administration at Siemens Pakistan Engineering Company Limited with a diversified experience in SAP ERP Implementation business in various industries and public sector organizations.



Academic Institutions and Developed SMEs are the Foundations of Economy

Good academia and developed SMEs are the foundations of the economy. In Pakistan, academics is moaning about a slow job market, while the industry is complaining about a dearth of quality and competent people resources. What is missing in these two industries? The answer is that this chain lacks strong and effective industry-academia linkages. It is essential that these two sectors collaborate for the economy's growth and success.

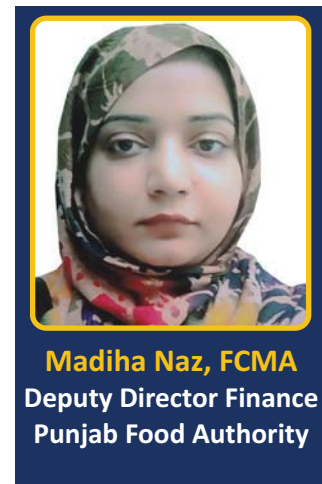


SMEs as an Accelerator for Economic Growth

We must not overlook small and medium-sized businesses, since their efforts and contributions will decide the growth and performance of large-scale production. Pakistan has over 3.2 million SMEs which account for 90% of private sector firms and their contribution to the GDP is almost 40 percent. SMEs provide revenue for the government through exports and tax collection. SMEs' contributions are critical to the exports of light engineering and high-tech sectors. They also create and sustain jobs which helps the economy. The SME sector is the economic backbone, and the relevance of micro-business is crucial. In the current scenario, MSMEs are generating 80 percent of new jobs.

Industry-Academia linkage for SME growth

Developing strong industry and academic partnerships can be extremely beneficial to the growth of SMEs. Collaboration between industry and academia is critical to improving the performance of the SME sector. The goal of national economic growth through the development of SMEs cannot be realized without effective industry-academia collaboration. All of Pakistan's provinces, including KPK, continue to sustain a primitive corporate model devoid of academic research.



Madiha Naz, FCMA
Deputy Director Finance
Punjab Food Authority

The success of manufacturing units is determined by the efficiency of their operations. The effectiveness of operations is dependent on the rough and semi-finished products supplied by SMEs to large-scale manufacturing whereas the success of SMEs is dependent on good and efficient human resources, which our academia supplies. Resultantly, the entire economy is based on good human resources, and we can only have good human resources if we polish our stones with practical experience in industries, turning them into sparkling diamonds.

Industry-Academia Linkage Globally

We have excellent examples of China, India, and Bangladesh. They used their academia as a weapon and promote their cottage and medium-sized industries. Their educational institutes provide the raw material for the empire-building of industry and economy.

Their educational institutes do not compromise on quality and quantity and helped their exporters to better allocate available resources and provide an effective solution for management and administrative problems. Their educational institution also helps policymakers in designing industry-friendly policies. Their all efforts have resulted in increased GDP growth, help to alleviate poverty, and uplift the living standards of citizens.

All over the world, Universities and academic institutions are intensely adopting industry-based research. Their efforts for better and more effective industrial research and development have resulted in lightening up the way forward for dynamic trade organizations.

The most important output of effective academia and industry collaboration is the development of the most potential sector of the economy which is startups. These are the future of economies. They come up with unique ideas. The strong industry and academia collaboration helps youngsters and students to think creatively and innovatively while considering the industry's needs.

In developed countries, special attention has been paid to startups. Because they are long-going businesses and are equipped with the latest technologies like AI, biotech, cyber security, and hyperlink connectivity. These startups provide firm support to boost the knowledge economy

Industry-Academia Linkage in Pakistan

Unfortunately, Pakistani products do not fulfill international standards due to which the acceptance, trustworthiness, and image of our export firms are constantly eroding. Our SMEs operate in an environment that underestimates the value of academic research.

Collaboration between industry and academics is the need of the hour and the demand of the modern world. TEVTAs and other institutes provide education and training that falls short of global standards and is incapable of meeting the future needs of SMEs.

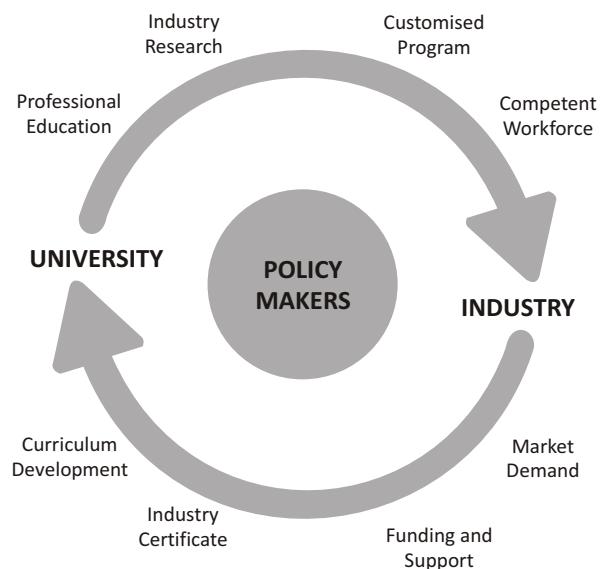
Our educational institutions are not focusing on industry-based research which is so essential for SMEs to compete with developed economies. Industry-based research could help SMEs to produce effectively while utilizing technologies efficiently. Academic institutions in Pakistan should be supportive of industrial research as this would provide students with the knowledge and skills required to work in industries. Because of their potential for growth and job creation, SMEs should constantly be prioritized.

Some efforts in industry research have been made by the Office of Research, Innovation, and Commercialization (ORIC). They are working in similar capacities, are vigorous in

creating links for their research with the relevant industries, and are focused on resolving problems faced by industries. The ORIC is also encouraging startups and small enterprises.

Our academic institutions' curricula are extremely rigorous. They are not tailored to the requirements of various career paths for SMEs and other major disciplines. They lay less emphasis on applied research, in contrast to developed economies. This results in a lack of innovation and originality among students, and our SMEs and economy have to suffer the consequences. Similarly, a student leaving our educational system is altogether oblivious to the industry's various prospects and facilities.

Federal Minister for Planning Development and Special Initiatives, Ahsan Iqbal, has recently directed the Higher Education Commission (HEC) to develop a compulsory course on entrepreneurship and export marketing for university students. This is a welcome announcement. The question is: will the industry be consulted on curriculum development?



Steps for Building Strong and Effective Industry-Academia Linkages

1) Designing of Curriculum according to SMEs/ Industry Requirements:

It's time to revise and align the curriculum with SME's requirements. This can be achieved by seeking advice and the involvement of SMEs in curriculum design. This should be a continuous process as in fast-paced global village nothing is constant.

2) Exposure to Industry / SMEs

SME exposure must be compulsory for students. Nearly all educational institutes are making industry exposure in form of internships mandatory for students but in actuality, this model is miserably failed. Both sides are not serious about achieving the true spirit of the internship. Mostly in internships students are given the tasks like setting the racks or filing official documents. Students are also not serious and take internship casual and spent most of their time in gossiping while SMEs fail to recognize the character of creativity and innovation in students. It shows careless behavior from all stakeholders in the internship. There is a need for academia to have firm control over monitoring the students. At the same time, SMEs take internships formally and set key objectives to be delivered by interns during their tenure.

3) Teachers and Professors having Industry Experience

Practical experience should be required not only for students but also for teachers and professors. The teaching faculty with industry knowledge and practical experience should be hired by academia. In this way, they will be able to share their own industry experiences which would motivate pupils and improve their practical knowledge. All teaching faculty should be required to learn about the practical elements of their disciplines and prepare their students accordingly. Furthermore, industry technocrats should be invited to give talks in educational institutions. This will encourage students to learn about practical aspects of their studies.

4) Incubation Centres

Every University should establish incubation centers to help students grow their businesses and solve difficulties associated with them, particularly in the early stages, by offering a variety of commercial and technical services, initial seed capital, lab facilities, consultation, network, and linkages.

Students bring their creative and unique ideas and work on them under the guidance of lecturers and industry professionals. This will assist young people in growing their businesses, increase the ratings of the university and directly increase economic growth.

5) Entrepreneurship and Commercial Sustainability

Technical skills should be linked to business understanding. No project can be successful until its technical viability is assessed. Similarly, a technical project can only succeed with sound business acumen. Curricula and courses should be developed by educational institutions to provide students with both technical expertise and an understanding of running successful enterprises.

6) Research by Academia

Academic research serves as the foundation for the partnership between industry and academia. Students should be encouraged to explore industry concerns and present solid proposals and solutions. This will help to bridge the gap between knowledge seekers and knowledge users. Research should be conducted while keeping practical values in mind. This will result in fresh ideas for industry and increased efficiency in their operations, adding to the country's development.

7) Consistency in the Transfer of Knowledge

All of the preceding points are interconnected. However, this should be an ongoing process, with these steps implemented consistently. The industry contributes resources to academia in the form of experienced professionals, financial assistance, training, and so on, while academia provides resources to the industry in the form of human resources, research, and so on. This cycle should be continued for the benefit of the country.



Conclusion:

In Pakistan, 64% of the population is under the age of 30; we must capitalize on their potential. On the other hand, our country's industry is in a state of flux. We should take immediate steps to bridge the gap between industry and academia in order to turn the country's young population into a national dividend, boost exports, and build a better and enhanced image of our country. This will undoubtedly lead to our country's advancement.

About the Author: Ms. Madiha Naz is a Chartered Management Accountant and a Fellow Member of ICMA. She is working as Deputy Director Finance at the Punjab Food Authority. She has vast experience in different managerial positions in the public sector. Her articles have appeared in the official journals of ICMA, ICAP, and AB Magazine of ACCA Global.



Some Prospective Avenues for Academic-Industry Collaboration

Japan can be cited as an example of post-World War II development. During the war, Japan was completely destroyed. It had to adjust to the post-war reality of a new world and develop its skill base accordingly. Japan's first effort was to develop the textile industry and train its labour force as industrial workers. It was initially regarded as a low-quality imitation of English textiles, but it quickly rose to prominence as a world-renowned industry. The second effort of Japan was to develop the shipbuilding industry, where they introduced new processes that cut short vessel production and delivery times to customers. Japan became the leading shipbuilder, and the UK lost its customers to Japan. By now, the labour force was well-trained for industrial production. Japan then began to build cars and other vehicles with an emphasis on fuel economy. It is now the world's leading car manufacturer and has specialized in electronic equipment. Textiles and shipbuilding have been outsourced to Korean firms as Japan focuses on higher-value-added industries. Because Japan lacks natural resources, it is primarily reliant on imports. However, it adds so much value to them that the country's exports significantly outnumber its imports. Japan has a GDP of USD 50.6 trillion, ranking third in the world after the United States and China, according to World Bank 2020 statistics.

A deeper analysis indicates that Japan's advancement is the outcome of its scientific minds and government policymakers. Academia and researchers can contribute to the development of the Pakistani economy in a variety of fields, including industry, information technology, agriculture, and associated areas like meat, chicken, milk, and other ancillary areas.

Bashir Jan Mohammed is a major Malaysian importer of edible oil and the owner of the Dalda Brand, which was previously owned by Unilever Pakistan. He has his own manufacturing facility and has assisted others in establishing edible oil plants. There is immense potential for local edible oil production. If the government makes it a policy to plant edible oil-producing trees along Sindh's shore, particularly in Badin, Mr. Jan Mohammed, and other businessmen may be interested in this project. The academic team can create a business plan as well as a timeframe for implementation.

Japan is the world's top producer and consumer of shrimp, which can be grown in Thar's brackish water. Some shrimp and fish farming trials have already been conducted in the Indus Delta and other areas of Sindh. A collaboration between Lever/Nestle, National Food, or our existing fish and shrimp exporters and established Japanese shrimp farming enterprises is needed. In this regard, I believe that Agha Khan University, IBA, or LUMS are best suited for the task. To fund the Thar coal development project, however, policy backing from both the national and provincial governments is required.



Jalal Ahmad Khan, FCMA
Former Executive Director ICMA

Similarly, the northern hills of Pakistan are a prospective location for the development of Pakistan's own tea farms. Universities in Peshawar, Islamabad, and GIK should work together to produce business plans for Tapal and other top firms to consider. Again, government policy assistance is desired to make such a project economically possible.

Pakistan has the capability and capacity to manufacture its own defence equipment, such as tanks and aeroplanes, however, we do not produce our own automobiles or cars. Around 90% to 95% of the deletion that was expected to take place has not been done. Academia, particularly engineering schools, should study this phenomenon and develop designs for parts that can be manufactured locally. However, where a larger investment in foundries is required, government policy should either support it with long-term soft loans or an outright grant to preserve precious foreign cash that would otherwise be spent on imports.

Meat One has been exporting meat for a decade now and is also selling locally. However, the cost per kilo of Pakistan's animal stock is much higher than that of New Zealand and Australia. In-depth costing exercises by relevant academic researchers are required, as are cross-breeding with heavier animals and milking with local stock under a timetabled research program.

Preservation of Fruits in KPK and Baluchistan for export in cans or bottles can be done for exports. Universities should encourage, in their master's programs, students to visit these areas and prepare business plans and feasibility reports for prospective investors to consider these ventures with interest.

The growth of flowers for the perfume industry and export is another interesting area of practical research. Agriculture University also needs to study the reasons for lower yields per hectare in wheat and rice in the United States than in regional countries.

To bring this culture of practical contribution to society through research by universities, academia believes that one of the leading universities should initiate the culture.

About the Author: The writer is a Chartered Management Accountant and a Fellow member and the former Executive Director of ICMA. He is presently a faculty member at PAK-KIET University.



Building Successful Partnership between Universities and Industry Sector in Pakistan

Pakistan is a country living beyond its means. Our production has always fallen short of demand. Pakistan is a net importer of food, edible oil, tea, lentils, cotton, and much more. We are net importers of energy and now face a harsh winter without gas. We have academia that stays away from reality by not coming up with research on their sprawling university campuses. Indeed, the capabilities of academia have not been sought after by industry. The industry faces its own constraints in terms of production financial services costs and inefficient energy at a higher cost than neighboring countries.

Research Centres such as the Pakistan Council of Scientific and Industrial Research (PCSIR), Pakistan Agricultural Research Council (PARC), National Institute of Oceanography (NIO), and Pakistan Standards and Quality Control Authority (PSQCA) have employed PhDs whose papers are published in research magazines abroad. Pakistan has the 7th largest pool of scientists in the world. They have the highest individual capabilities but nothing to show for it collectively.

The industry needs financial management expertise. When the industry looks around, it is provided with graduate applicants who lack the desired skills. Academia-industry linkages are the hope for taking the process to the next level of economic growth. The Vice Chancellors of Universities and Business Schools need to frequently visit chambers of commerce for interaction to exercise and explore market conditions and provide solutions to pending issues with huge growth potential.

An important raw material for industry is water. Of all the available water, 95% goes to agriculture, 3% to drinking, and 2% to industry. Agriculture contributes 19% of the GDP, the industry contributes 23%, and the rest comes from the services sector. With a 2% water supply to industry, it is still expected to contribute more taxes, employment, industrial development, etc. Pakistan is a water-stressed country with freshwater resources at the surface and underground but there is an absence of any regulatory system for their maintenance and management.

Depleting Water resources are in critical condition, especially in the industrial city of Karachi. This city can hardly provide drinking water to even 30% of its citizens. The only new source expected for the K4 project currently appears to be a long way away. In smaller countries like the Netherlands, Switzerland, New Zealand, Hungary, etc., water management is a highly valued subject in universities at the doctoral level. Unfortunately, our universities and researchers have hardly provided any programs.

Academia needs to focus its attention on environmental issues. Low-cost renewable energy research should be conducted

instead of importing solar panels and wind turbines. Pakistan is at a crossroads where climate change has occurred and devastating flooding has caused misery for 30 million people. Academia-industry collaboration is urgently required to

prevent future massive losses. Using the clean and green process, it is possible to reduce the temperature by 1 degree Celsius. Each new car buyer should be required to show photographs of plants certified by local councilors, mosque imams, MNAs, and MPAs.

Academia-industry collaboration is of paramount importance at this crucial juncture in the world economy's recessionary mode. To bridge the gap between academia and industry, various chambers of commerce need to urgently realize their responsibilities. There is a realization at the industry level about the need to mobilize the immense talent possessed by academia and government research organizations. The work done by academia is either not publicized or lacks the will to develop communication.

Following the global pandemic, Pakistan faces rising inflation as a result of the global market crisis and economic downturn. At the same time, the country's worrisome population expansion is limiting economic and developmental growth in the illiterate labour force. Academia and industry have a duty to save the country's economic slow growth and unemployment. Academia has a lot to do to use its large resources of fresh researchers with futuristic ideas to adapt indigenous resources for rapid growth in order to fight population growth. Furthermore, with the world's fifth-largest population, Pakistan's education system is failing to provide skilled labour for industrial surplus items for export, which is so critical for foreign exchange earnings. Academia and industry must pool their resources to reduce the foreign exchange gap to manageable levels. The Pakistani universities must become centres of excellence, catering to the highest levels of work ethics, time-saving culture, and efficiency in all areas.

About the Author: The writer is the former Vice President of the Federation Pakistan Chamber of commerce and Industry (FPCCI) and Convener of FPCCI Central Standing Committee on Industry-Academia Collaboration on Water Resources.



Muhammad Waseem Vohra

Former Vice President, FPCCI
& Convener of FPCCI Central
Standing Committee on
Industry-Academia Collaboration
on Water Resources



Developing a Sustainable Win-Win Situation



Munir Iqbal
Business Entrepreneur

Developing a sustainable win-win situation between industry and academia is the need of the hour. In this article, we will be looking at the causes of gaps between industry and academia and possible ways to enhance employability. Unemployment is a serious concern for both industry and academia. The industry is concerned with attracting the right candidates for their companies. On the other hand, academia is facing the challenge of producing quality graduates to match industry requirements. The common causes of gaps between industry and academia are briefly outlined below:

- 1) **Lack of Effective Interaction:** Lack of effective interaction between industry and academia is one of the main causes of unemployability. Both have different cultures and purposes. The industry is focused on maximizing profits while minimizing risks and completing tasks within a given time frame. In contrast, academia is engaged in high-interest, focused research. Although the cultures and goals of both are different, their problems are interrelated. As a result of this ineffective interaction, academia is not producing quality graduates to match industry needs.
- 2) **Lack of adequate digital skills:** The graduates do not possess sufficient digital literacy skills in areas such as communication, use of devices, computer literacy, social media, and so forth.
- 3) **Lack of Confidence in using Technology at Work:** The curriculum is not designed with the practical aspects of related technology used in the industry. This situation negatively impacts the graduates' confidence level to perform well.
- 4) **Lack of technology adaptability skills:** Graduate students face employment issues as academia does not realize the importance of imparting adaptability skills needed to deal with technological upgradation in related fields.
- 5) **Lack of Human Skills:** Companies these days are looking for human skills in candidates in addition to work-related knowledge. Our academics focus only on job-related curriculum that helps students perform their

job responsibilities. Another crucial aspect related to human skills is neglected, due to which job opportunities are decreasing.

- 6) **Limited Opportunities for Industry Exposure:** A large number of graduates are deprived of industry exposure due to poor coordination between industry and academia. Unfamiliarity with the real work environment may make it difficult for employed graduates to carry out their responsibilities well enough to be acceptable to employers.
- 7) **Curriculum not updated regularly:** The course contents of most educational institutions have remained unchanged for many years. The curriculum is not designed to provide students with emerging and changing needs, as well as the necessary enabling skills in related fields.
- 8) **Faculty-Centered Approach:** Most of the education system is based on a teacher-centered approach. Here, the teacher transfers the knowledge to the students, who focus their full attention on the teacher and listen exclusively in a passive manner. There is less interaction between teachers and students. In the classroom, students work individually, and group work is discouraged. As a result, students do not learn to collaborate and communicate with each other.
- 9) **Substandard Educational Institutions:** These institutions, which provide higher education to the students, fail to equip them with the skills related to their profession. A large number of incapable graduates produced by these institutions are further adding to their unemployability.
- 10) **Lack of Seriousness among Students:** Most of our students are only interested in getting a degree. Their reluctance to acquire the required skills creates a barrier to finding good jobs, which further widens the gap between industry and academia.

Suggestions for developing a sustainable win-win situation for industry and academia

The widening gap between industry and academia is a serious concern. Overcoming this challenge requires an in-depth analysis of the problem and finding a permanent solution. The industry and academia should sit down and collaborate to find a long-term solution to bridge the gap and create harmony in education and career. Successful industry-academia collaboration is the result of academia's efforts and abilities to add value through collaboration with industry. This effort is crucial to building institutional strength. The academy will be strengthened to improve the employability of its graduates.

In comparison to an industry that lacks such capacity, academia has more time to focus on in-depth study. Companies can play a key role in overcoming this capacity limitation by collaborating with students to design curricula and research projects that familiarize students with the technology used in their related fields and prepare them to address real-life industrial difficulties. In addition, new features should be added to the curriculum to assist students with their other research projects.

Some possible ways to develop sustainable win-win situations between industry and academia are provided below. Setting realistic goals is a prerequisite for achieving a mutually beneficial outcome.

- 1) **Additional Funding for Research:** Universities generally face a shortage of funds to carry out their research projects. As a result of industry-academia collaboration, universities receive sufficient funds to remove obstacles to carrying out research activities. This additional funding helps them scale up their research work to meet the needs of the industry.
- 2) **Building Students' Motivation:** Collaboration between industry and academia not only equips the students with a higher level of skills but also encourages them by providing opportunities to discover their strengths. This approach boosts students' confidence and self-esteem. Group projects further enhance the learning experience and improve the social and interpersonal skills of students. All such motivational aspects are crucial for employability.
- 3) **Paves the way for innovation:** Scientific researchers from industry and academia pave the way for innovation. Both stakeholders can overcome challenges through their combined efforts and the use of resources, knowledge, and technical skills. This collaborative effort is mutually beneficial for both. University students gain real-world experience and use their research findings for technological improvements in other companies. These students get good jobs with collaborative companies. University researchers use their academic capabilities to help industry researchers identify the research scenarios for the development of

innovative processes and products. Industry gains insight due to interaction with university researchers. Employers benefit from having the right candidates with valuable knowledge and experience to meet future needs.

- 4) **Development of Human Skills:** One of the most important aspects of industry-academia partnership is the development of human skills. A lack of human skills is detrimental to one's job development. The need of improving students' human skills in order to make them employable has been recognized by industry and academia. Both collaborating partners' efforts in building human skills in students are critical for good employment and career growth.

Student-Centered Approach

Collaboration between industry and academics results in the development of a student-centered strategy. Students and teachers share equal focus in the classroom, and group work is encouraged. Students learn to collaborate and communicate with one another as a result of healthy student-teacher engagement. The major aspect of this approach is self-directed learning, in which students choose topics of interest and preferences, as well as the methods and tools for learning.

Work-Related Industry Exposure

The productive outcome of work-related industry exposure is reflected in student confidence levels due to practical learning and familiarity with technology in their related fields. This practical exposure is more likely to develop hard and soft skills in university students that make them employable.

Positive Impact of Collaborative Curriculum

The combined effort of industry and academia to develop a curriculum that meets the purpose of combating unemployment is a healthy sign for industrial growth and economic development. The collaborative curriculum allows for the sharing of knowledge and expertise between university research scientists and industry experts. The contributions of these scientists have a tremendous impact on innovation and technological advancement to meet current and future challenges.

Academia is developing its potential to produce quality graduates with real-world workplace exposure in their related fields. On the other hand, the industry is provided with the right candidates to match its needs. The collaboration's most significant impact and the productive outcome is in creating a platform to bridge the gap between industry and academia.

About the Author: The writer is a business entrepreneur, having more than thirty years of experience in the supply and demand markets. He graduated from Karachi University with an M.Sc. in Statistics and from IBA Karachi with an MBA (Marketing).



Academia + Industry = Prosperity

The objectives of any industry revolve around profitability, growth, stability, efficiency, and productivity. These goals are achieved through the deployment of various inputs like factors of production, physical, and human. No amount of highly sophisticated physical assets could perform with the desired efficiency to meet the objectives without a skilled and capable human workforce, for which every industry is on the hunt and equipped with a careful selection program. A high level of established industry is a guarantee of a mature economy and a label for a developed country.

Several factors determine whether a country is developed or not, such as political stability, GDP, infrastructure, level of industry, etc., yet human development prevails. Similarly, there could be other areas necessary for industrial development, including technical innovations, governance, free capital flows, trade openness, and macroeconomic policies aiming to boost industrial production and, in turn, economic growth. And who would bring about improvement in these responsible factors obviously a mature human force?

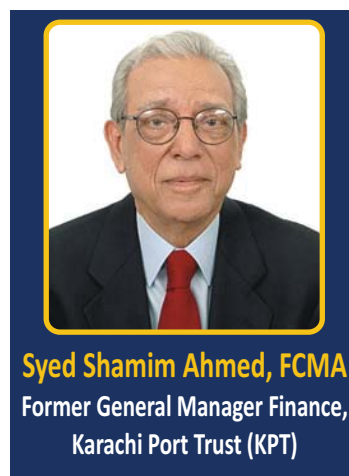
The industry has always remained focused on quickly adapting to new technologies to compete by minimizing cost and maximizing quality along with quantity. Humans skilled in research and innovation are constantly improving the technologies themselves. Everything revolves around humans, albeit smart humans. Some argue that artificial intelligence will mostly replace humans, but it must be appreciated that the capabilities of AI are limited to those of its inventor.

Through the ranking of all industrialized, developed countries, it is realized that the same countries are ahead in the ranking of human development. They strongly believe in "garbage in, garbage out." We are a great victim of this famous quote, where most of the state enterprises are running into losses and eating up around Rs. 800 billion of the taxpayers' money every year. In a nutshell, industrial evolution remained possible because of human development.

Academia is the main source of supply for educated and skilled people in the industry in different fields, such as humanities, science, engineering, medicine, information technology, etc. Knowledge in any discipline may be elementary, intermediate, or advanced. Professional institutions provide instructions in teaching and training in

higher education, vocational education, and professional education with provisions for research, advancement, and dissemination of knowledge, creating high-level intellectuals with innovative abilities. All said and done, but what is the standard of our skill development? This expertise of our graduates is evident from the standard of our industrial development ranking at the international level, which stood at 117 in 2021.

The high quality of academia in other developed countries is primarily responsible for their success. Just, for example, Harvard, which continues to hold its place as one of the most reputed schools in the world, has produced 161 Nobel Prize winners, which shows the importance they attach to research and publications with excellent teaching, highly functional installations, and the promise of successful careers attained through merit with no compromise and hard work. Their graduates always remained in demanding positions. We produced 480,000 graduates in 2021, of whom approximately 175,000 were able to obtain jobs, and these graduates may not have jobs that meet their expectations. Our unemployment rate remained at 4.35%, the highest ever. We have a demographic advantage, with 64% of the population under 30 and 29% of youth between the ages of 15 and 29.



Syed Shamim Ahmed, FCMA
Former General Manager Finance,
Karachi Port Trust (KPT)

This huge mass needs to be converted into a positive force by making the spirited youth employable, which can only be possible if our universities are preparing them to be useful to the industry.

Every organization looks forward to those individuals who have the necessary skills and capabilities to be useful in achieving their goals. Therefore, academia has to develop its curriculum in line with the requirements of organizations. On the contrary, the industry should also keep academia abreast of its concerns. Thus, the bridge has to be built from both ends for fruitful results for putting theory into practice. Otherwise, academia would continue working in isolation, imparting traditional forms of learning and leaving passing graduates searching for jobs. This is a time of change. The status quo is brought about by repetition. People who have been educated can bring about change by focusing their research on innovations. Any prosperous organization counts most importantly on unlocking the capacity and capability of such research-oriented people who have core values, knowledge, skills, and abilities. Such a dream does not become reality through magic; it takes sweat, determination, and hard work. Successful nations are not gifted; they just work hard.

There is only one goal of coordination between academia and industry: prosperity. While wealth is the goal, hard work is the means to that goal. Nations oblivious to the word "hard work" are also unaware of the word "prosperity."

Economic growth is the key to the prosperity of any nation and is directly related to human development. According to UNDP reports for 2021-22, Pakistan ranked 161 out of 192 countries in the Human Development Index, hovering at a per capita income of \$1,500, whereas Switzerland enjoyed a per capita income of \$87,000 without any noticeable natural resources but a top rank in human development with hard work and innovations.

Some wise men said:

- Academic success depends on research and publications.
- Success in academia is not final and failure in industry is not fatal. So, integrate both.
- Academia is striving for perfection and tells $2+2=4$ and industry to settle for excellence in pursuit of $2+2=5$ where extra one is synergy when both coordinate.
- Doing the best at this moment puts you in the best place for the next moment.
- Hard work beats talent if it does not work hard.
- If you want to shine like the sun, then first burn like the sun.

We need to collaborate. Academia and industry have similar goals; one is to provide a good, efficient workforce and the other is to provide good-quality products. Some people believe that academia and industry have different ways of thinking. Industry sees academia as primarily concerned with publications, self-centered, and devoid of innovation. While academia considers industry to be profit-driven and driven by bottom lines and product sales. This ideological gap is to be bridged.

How to bridge the Academia-Industry Gap

The gap between theory and practice will continue if academia keeps working in isolation imparting traditional form of learning and industry continue hunting for the desired people, therefore:

Collaborate to Create:

- a) **Awareness:** To become part of a working entity with a shared purpose.
- b) **Motivation:** To drive to gain consensus in problem solving and development.
- c) **Self-Synchronization:** To decide when things need to happen.
- d) **Mediation:** To negotiate and work together and find points of common interest.
- e) **Reciprocity:** To share and expect sharing in return.
- f) **Reflection:** To think and consider alternatives.
- g) **Engagement:** To proactively engage rather than wait and see.

Balanced Syllabus: Most of the topics studied by students are redundant and of no use in view of technological advancements. Such courses need regular review and updating, keeping in mind the practical aspect of the same. No doubt, subjects are categorized as foundational and advanced, yet their practical usage is to be given importance. Students should be given hands-on exercises, assignments, and projects where they end up building something. This will further increase their motivation and make them ready to learn any new technology as they step into their career.

Workplace Exposure: While in college, students are not aware of workplace expectations. As a result, awareness will be raised by exposing them to real-world workplace scenarios. Most colleges are not bothered about this important aspect of training.

A few institutions arrange internship programs that work very well to bridge the gap between academia and industry, and some institutions have made it mandatory as a part of the educational curriculum.

By working on internships, students not only learn about their job expectations but also about behavioral aspects, which include oral and written communication with colleagues and seniors, taking ownership of the tasks, delivering quality output, and learning on real-time jobs. By attending company-level common activities like meetings, teamwork, and off-site workshops, the interns can build a big picture of how an organization functions.

Capacity Development: It is the process whereby people, organizations, and society as a whole unleash, strengthen, and create capacity over time to achieve development results. It is an important way in which the industry-academia gap can be reduced because it is a long-term and continuous improvement mechanism. The system works with:

- a) **Individuals** – Where everyone including students, faculty, and organizations must take steps to improve their capabilities. The learning attitude is cultivated where an individual can continue to enhance his knowledge and skills. This helps him become a lifelong learner and adapt to changes being faced in the future as new technologies always disrupt traditional ways.
- b) **Organizations** – Especially the public sector need to be organized for better performance. Organizational capacity building can be done in form of bringing up better practices of teaching, standardizing evaluation mechanisms, and better ways of collaboration. However, our limited consideration of the implications of the socio-political, bureaucratic culture and institutional environments, lack of ownership by senior officials, heavy regulatory system, insufficient investment in capacity development programs, and substandard training courses have all caused impediments towards capacity building and industrial growth.

- c) **Social level** – All this capacity building needs to be done at the social level to develop the society as a whole benefiting every aspect of the society.

Consistent Knowledge Transfer: Creating an Ecosystem to Connect New Curriculum Development, Faculty Development Programs, Better Teaching Practices, Industry Partners for Internships, and Industry Experts with Strong Academic Support

Conclusion

Every notable university in the world places great emphasis on academic and intellectual growth in pursuit of truth, knowledge, and a better world through collaboration between academia and industry, allowing research to be expanded and bringing new ideas at a faster pace. Out of the two, academia and industry, it is academia that will travel the majority of the bridge because they are the producers of the products being engaged by the industry, which is free to look for their desired people in the open market. Aside from imparting core and technical knowledge, academia should also emphasize soft and behavioral aspects such as interpersonal skills, leadership abilities, attitude, communication artistry, team spirit, and, most importantly, research and innovation talent.

About the Author: The writer is a senior Chartered Management Accountant having Fellow membership of ICMA. He retired as General Manager Finance from the Karachi Port Trust (KPT) where he served for around 22 years in different positions. He was also a member of the Karachi Dock Labour Board for 7 years. After doing his MBA from IBA Karachi, he started his initial career with Citibank and then served in Awami Autos (now Pak Suzuki).





The Role of Qualitative Characteristics of Information for Industry and Academia

Why are industries in developed economies growing and developing day by day as compared to those in developing or third-world economies? One of the major and significant factors is the positive, precise, and confident impact of their universities' research in introducing and developing inventions and innovations for their industrial growth (Fukuda, 2020).

Academia and industry both work together (Mansfield, 1995). The academy is intended and designed to contribute to the existing body of knowledge (Star & Hammer, 2008) by developing novelty through new knowledge through research experiments or by finding solutions to existing or upcoming industry problems (Cao, Li, Lu, Liu, & Amine, 2019). The industry cannot grow without the influence of the stakeholders; therefore, the stakeholders of industries require authentic information for their future decision-making (Mahon & Wartick, 2003). Academia has provided the solution for that by doing detailed research on the qualitative characteristics of financial and non-financial information provided by the industries to their users.

This research article emphasizes the importance of academic support for industrial growth (Sanderson, 2018) and, as a result, the importance of qualitative accounting information provided by industries to stakeholders. It also signifies the relevant efforts of academia for the growth and development of industries. This study declares the positive intentions of academia for industrial growth: if the industries include these qualitative characteristics in their information, then stakeholders will get maximum information for their informational needs.

Industries cannot grow without inventions and innovations (Shahroom & Hussin, 2018). The industries also do not have the excess resources, time, quantity, and quality for doing detailed research about upcoming problems and finding their relevant solutions. Universities, on the other hand, are laboratories where highly skilled and research-oriented professionals collaborate with their qualified students to create novelties and add inventions and innovations to the body of knowledge that is critically important for industrial

growth and development. Both academia and industry cannot live alone. Industries are the practical aspects of encountering new problems, and academia is there to provide solutions.

Academia explains their research findings that financial and non-financial information are key indicators of success and sources of communication between industries and academia (Ahmed, 2022).

The information provided in the financial and non-financial reports must have all the qualities well prescribed by the International Accounting Standard Board (IASB) framework (Gjoni-Karameta, Fejzaj, Mlouk, & Sila, 2021).

The IASB has divided qualitative characteristics into two major categories: fundamental and enhancing. The fundamental characteristics include relevance and faithful representation, whereas the enhancing characteristics are divided into four major concepts: comparability, timeliness, understandability, and verifiability (Ahmed, 2022).

The research question of this study is to find out the significance of the relationship between the qualitative characteristics of information and its perceptions by industries and academia. The interview questions were designed to understand the perceptions of the users by assigning scores to the answers to each question. The closed-ended questions were based on a 5-point scale (from 0 as "strongly disagree" to 5 as "strongly agree"). Out of a total of 18 interviewees, six were accounting professors, associate professors, and assistant professors at the top universities in Lahore, Pakistan, and twelve were investors, managers, and financial analysts from different sectors.



Ali Raza Sattar, ACMA
Programme Leader
- Project Manager
Regent Middle East, U.A.E

All qualitative characteristics are interconnected and interdependent. If any of these characteristics is missing, the users of accounting information will be misguided, and it will raise substantial questions about the credibility of the presenters of the accounting information. The bodies involved in accounting convergence must understand the significance of the qualitative characteristics of accounting information, and they must continuously develop it to be more realistic and influential by adding further characteristics so that organizations become more credible and their information becomes highly significant for the users of accounting information in industry and academia.

Relevance

The results indicate that users of industrial reports significantly depend on the qualitative characteristics of accounting information. Users describe the perception and importance of relevance. The disclosure of material information not only assists academia in predicting future problems but also helps create a confirmatory value for the relevant research. The relevant information is extremely helpful in drawing the confirmatory pattern for the users (*Gjoni-Karameta, Fejzaj, Mlouk, & Sila, 2021*).

The interviewees also mentioned that if they see any irrelevant information, then their confidence and satisfaction levels are significantly influenced, and they are unable to form a reliable and purposeful opinion about the relevant new inventions and innovations for industries. Organizations that are providing historical records over the past five or ten years of material information are more likely to enhance the confidence of universities for basic and applied research by providing material information (*Shaikh, Mustafa, Bishop, Zeb, & Nam-Gu, 2022*).

Faithful representation

Faithful representation is the key fundamental character of information. It must include neutrality, prudence, completeness, and being free from error and bias (*Ahmed, 2022; Gjoni-Karameta, Fejzaj, Mlouk, & Sila, 2021; Shaikh, Mustafa, Bishop, Zeb, & Nam-Gu, 2022*). Audited financial statements are always more reliable and valid than unaudited financial statements. However, in history, the questions on dependencies of the accountants and the independent auditors had also been the point of concern.

The IASB framework has always been focused on increasing the significance of faithful representation. No doubt, the higher-level managers, directors, accountants, and independent auditors are more responsible for providing quality information (*Gjoni-Karameta, Fejzaj, Mlouk, and Sila, 2021; Shaikh, Mustafa, Bishop, Zeb, and Nam-Gu, 2022*). However, their independence, loyalty, sincerity, and responsibilities must always remain under strong governance. The assurance about prudence and

completeness must also be governed, acknowledged, appreciated, rewarded, and penalized in case of misrepresentations. However, the margin of error must be supported with proper kindness.

The professional ethics of directors and managers are extremely important for faithful representation. The significance of professional competence, professional behavior, and integrity has always been responsible for increasing credibility, and it also minimizes the possibility of error and biased information. Similarly, the confidence of universities will be increased by observing and reading the faithful representation provided by industries to academia.

The neutral information will increase the credibility, honesty, and fairness of the organization. At the same time, the influence of prudent information increases the application of safety measures and professional care for the users of accounting information. Accounting information is the only form of faithful reporting that also represents the purpose for which it purports to be presented. Accounting reports must be complete, neutral, error-free, and represent the organizational position and performance prudently.

Comparability

The inclusion of comparability is always helpful for the academic community to compare the information. The interviewees emphasized that when university laboratories are given compared data, they are more likely to recognize the significance of consistency and can easily form their opinions. The comparability enhances their confidence, coherence, and clarity about their decision-making processes. Without comparability, a true and fair view can never be developed. The internal and external consistencies will be missing, and appropriate questions regarding the application of rigor, precision, and generalizability will be highlighted. The interviewees also expressed the absence of objectivity as significantly less than the absence of comparability. If the comparability is significantly misrepresented then the integrity and professional competence of the accountant will remain under significant questionable phenomenon. The interviewees also mentioned that comparability is useful for neutrality and equality.

Verifiability

The verifiable information must be presented as it is considered a true and fair representation. If the experts reach different conclusions, the accounting data must have been influenced by the lack of effective and appropriate significant qualitative characteristics. The experts must observe the qualitative characteristics: fundamental and enhancing, relevance and faithful representation, and the enhancing characteristics of comparability, timeliness, understandability, and verifiability (*Ahmed, 2022*).

The significant appearance of detailed qualitative characteristics along with the hallmarks of scientific investigations and information must have purpose, rigor, precision, and confidence to increase the verifiability of the accounting information. The interviewees also expressed that for verifiability, they must look for more clarity, conciseness, concreteness (hard disclosures), coherence, and consistency.

Understandability

Accounting information should be understandable by those users who have an appropriate understanding of accounting and finance. As a result, the interviewees emphasized two aspects of understandability: the second aspect of creating information that is easily understandable by those users who have appropriate accounting knowledge. If a user does not have a basic understanding of accounting basics, he cannot understand the qualities hidden in the accounting information. He does not compare, verify, predict, or even develop an independent and verifiable opinion out of high-profile information.

Timeliness

The information should be timely presented for timely decisions. The users require a significant amount of time to take decisions, and hence they must be provided with significant information in time. The interviewees expressed that if they are not timely informed, they will not be confident and clear about decision-making. The enhancing characteristic of timeliness is the key to critically analyzing the integrity and honesty of accountants and independent auditors. If the accounting information has not been timely presented, then they are going to miss clarity, purpose, consideration, objectivity, and parsimony.

Conclusions and Recommendations

Industries and academia both work for each other, and they have been learning with the help of research and experiences with each other. As far as accounting information is concerned, extensive and continuous research is required to increase the credibility of accounting information because this information is always used as a communication bridge between stakeholders and business organizations. Future research must be done on hard and soft disclosures in financial statements.

The researchers must look into the detailed significance and difference between the fundamental and enhancing characteristics. The upcoming studies must identify with substantial evidence that enhancing characteristics are ineffective in the absence of fundamental characteristics. Future studies must go for survey analysis and try to cover

more respondents to significantly study the importance of the qualitative characteristics of accounting information. In my opinion, the IASB needs to study more and include more detailed qualitative characteristics of financial information. They should add the hallmarks of scientific investigations and information: purposefulness, rigor, precision, and confidence. The IASB must look for more clarity, conciseness, concreteness (hard disclosures), coherence, and consistency. The data size must be increased, and respondents from different nations should be considered for more detailed convergence.

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About the Author: The writer is a Chartered Management Accountant and an Associate Member of ICMA, in addition to Fellow membership of PIPFA and ACCA and Associate membership of CIPFA and Auditors and Accounts Association of UAE. He completed his MSc in Applied Accounting from Oxford Brookes University, U.K., and MS in Banking & Finance from COMSATS, Pakistan.



Disintegration between Industry and Academia - Reasons and Outcomes

Thousands of times, we have heard that there is a significant gap between industry and academia and that the curriculum needs to be revised to meet the needs of industry. It gets worse when a recent graduate or CMA with stellar academic credentials fails in a realistic scenario. When a student (with experience) with a GPA of three (3) or below is preferred over a student with a GPA of three (3) or above but new to the industry, the situation becomes more serious. In this scenario, millions of debates are available. The following are some of the statements:



- a) Academic is just an intellectual game if there is no on-the-job training.
- b) Economic engines (industrial units) suffer where workers are skilled without schooling. The one-eyed person is the "King" in a land where blind people lead blind people.
- c) The larger the "gap" between institutions and industry, the more unemployment there is.
- d) Where academics fail due to social genius, industrial capacity suffers, and so on.

Reasons for Academia-Industrial Stretch

- a) Academia is unaware of the real needs of industry and the country.

- b) The government is too sluggish in dealing with academia-industry collaboration as it is often troubled by bureaucracy.

- c) Academicians are reluctant to leave their comfort zone (pure teaching) because of their widespread indifference toward applied research.

- d) Delays in research funding are a barrier to industrial development.

- e) Little or no incentive to research faculty.

- f) Only "pure academicians" are worshiped, with no recognition for "practicing faculty."

- g) Teaching and learning methods are largely theoretical and devoid of practicality.

- h) On the other hand, the industry is not involved in curriculum review or development. Consequently, students lack employability skills, among other factors.

Sadly, much can be said about said learning-practicing turmoil. Both (academia and industry) are operating independently with little or no coordination, and as a result, the industry is not accommodating the passed stuff and workforce. On the contrary, the industry cannot expand its operations because of a lack of skilled workers. As a result, GDP is set to "Ventilator."



Abrar Hussain, ACMA

Dy. Manager Banking and Finance
Pepsi Cola Bottlers, Multan

Outcomes of Disintegration between Academia and Industry

- 1) The birth of untraceable costs to industry in the form of a "Human Resource Department"
- 2) Defective production, over-processing, and movement of goods.
- 3) Underprivileged logistic management
- 4) general curriculum as opposed to an industrial curriculum based on research
- 5) Unemployment is leading to street crimes and drug obsessions.
- 6) Brain drain due to the industry's inability to engage experienced, professionally qualified staff
- 7) Inability of the economic system to attract "foreign direct investment (FDI)."
- 8) Educating students on employment techniques rather than "Entrepreneurship Spirit," etc.

Some Recommendations for Productive Industry-Academia Linkages

- 1) Formation of a National Academic industrial collaboration Committee with government participation
- 2) There should be a designation of "Corporate Professor" in academia, with due recognition and a stipend. He should visit the industries regularly and engage students and academics in industrial research.
- 3) Internship programs for students must be mandatory. It should also be specific, measurable, realistic, and time-oriented (SMART) as per industrial needs. There ought to be legislation in this regard in the National Assembly.
- 4) Internship will be more meaningful if the feedback mechanism is signed and stamped by the academic-industrial collaboration committee.
- 5) A duly configured and funded research center attached to each economic sector. With FBR's consent, there should be tax exemptions or relaxations for these research laboratories.
- 6) Industrial policy regarding new hiring over the next five years must be visible to all institutions so that academia can schedule their admissions accordingly.



- 7) Population welfare and health departments should also be in close liaison with universities, schools, and industries to make Pakistan prosperous.
- 8) An individual who can see the opportunity, take a Risk, explore it and own its result is known as an "**entrepreneur.**" The vice-versa is "**employee.**" The key element or value of the academic curriculum must be instilling an entrepreneurial spirit in students. Ministry of Commerce and Industry, Export Promotion Bureau, Customs, and Chamber of Commerce should also work in close association with schools, institutions, and universities to foster a flourishing entrepreneurial culture in Pakistan. Their annual dashboard summary is to be submitted to the National Assembly Secretariat for the perusal of public representatives, technocrats, and the general public.
- 9) The best business award for the year must be the social norm, even at the "proprietorship" level.
- 10) There should be ease in doing business, and businessmen must be oriented toward their social and environmental responsibilities. Consequently, an economically strong Pakistan will be "healthy and clean" on the global map.

A person whose today is not better than yesterday and whose tomorrow is not better than today is doomed — **Muhammad (P.B.U.H.)**. An insightful horizontally-vertically integrated academic-industrial policy (**considering** the aforementioned few suggestions) across all departments of government is needed to fly in the right and controllable direction. Otherwise, the time is very cruel! **Beware!**

About the Author: The writer is a Chartered Management Accountant and an Associate Member of ICMA and a member of the Pakistan Institute of Public Finance Accountants (PIPFA). He is currently working as Deputy Manager of banking and Finance at Pepsi-Cola Bottlers, Multan. He has over eleven years of diversified industrial experience at the professional level in the spinning and weaving industries. He is also stewarding and promoting his agriculture farm.



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The Trending ESG Factor in Business



Rizwan Ahmed Malik, FCMA
Director General
Punjab Public Private
Partnership (PPP) Authority

Managing risks and capitalizing on opportunities are two prerequisites for sustaining business growth. At the corporate level, the ability of a business to understand and communicate non-financial matters and related risks is necessary. It is crucial as new areas of risk governance emerge, such as water scarcity, extreme climate change events, reputational issues arising from social media engagement, the need for good practices in supply chains, and the increasing thrust to be inclusive in their approach. This approach has become increasingly important as global conversations center on "environment, society, and governance," a generic term used in the capital markets by investors to evaluate the behavior of companies as well as determine their future financial performance.

ESG considerations are gaining traction as investors and companies seek long-term value and alignment with sustainability and climate-related objectives. It refers to the three key factors when measuring the sustainability and ethical impact of an investment in a business or company, and usually socially responsible investors screen companies using ESG criteria to make investments. Environmental,

social, and governance factors are non-financial performance indicators that include ethical, sustainable, and corporate governance with the goal of implementing proper systems to ensure effective management of issues related to social inclusion, accountability, governance, and carbon footprint impacts.

In recent times, a massive movement is underway to address ESG across the corporate world. This ESG movement refers to the growing trend of companies making ESG-related commitments and investors getting more into ESG investing. The few enumerated benefits of the ESG movement are managing environmental impacts, encouraging environment-friendly investments, building a loyal customer base (who are keen to buy products from companies that are reducing their carbon impact), cultivating corporate culture, and improving governance. Integrating ESG factors into businesses, projects, or investments helps improve the financials. For example, ESG links to cash flow in multiple ways, including but not limited to facilitating top-line growth, reducing costs, minimizing regulatory and legal interventions, increasing employee productivity, and optimizing investment and capital expenditures.

As ESG increasingly becomes a priority for top management, it's essential to consider the factors behind forcing entities to report on ESG. Companies that adhere to ESG standards agree to conduct themselves ethically in these three areas and can draw on a range of ESG strategies, tactics, and opportunities.





Corporations face a wide range of possible approaches and solutions to address the three factors under the ESG umbrella. Entities, particularly those that have recently begun incorporating ESG into their compliance plans, are struggling to bring more clarity.

A good first step is to identify the issues that fit into the umbrella categories of environmental, social, and governance. Environmental factors include areas related to the preservation of our natural ecosystems, considering climate change on account of carbon and other greenhouse gas emissions, water pollution, air pollution, issues of water scarcity, and deforestation. Social factors take into account human aspects and our interdependencies, including but not limited to customer success, data quality and security, gender and diversity inclusion, and mental health. Governance factors include logistics and defined business processes, organizational issues like the board of directors and its makeup, executive compensation guidelines, political contributions and lobbying, and best practices in hiring.

Organizations must define ESG metrics and indicators to communicate performance in their mainstream annual report. These indicators need to be relevant, consistent, and capable of being verified. A few examples of metrics and indicators are studies conducted on diverse or inclusive environments, the proportion of employment from the local community (minorities, females, different age groups), the carbon impact created by businesses, the reduction of activities that reduce carbon footprints, the number of board meetings with an ESG agenda, recycling, plantation drives, afforestation activities, water conservation initiatives, and community education.

Mounting stakeholders' pressure for transparency on ESG disclosure issues and "greenwashing" (the organization may claim to be environmentally friendly in its communication with stakeholders, but its real actions are ineffective as compared to its claims) required action-oriented strategies and regulations from corporations and regulatory bodies,

respectively. In Pakistan, various efforts have been undertaken to nudge the private sector towards sustainability disclosure. In 2009, the Securities and Exchange Commission of Pakistan (SECP) issued a Corporate Social Responsibility (CSR) Order applicable to all listed companies. This was followed by the "Corporate Social Responsibility Voluntary Guidelines" in 2013. The guidelines leave it to the company's discretion to define how and at what level it wishes to integrate sustainability into the organization.

The 2017 Code of Corporate Governance Guidelines puts the onus on the board of directors for the "implementation of environmental, social, and governance and health and safety business practices," including a report on corporate social responsibility activities and the status of adoption. SECP has also published a position paper on a regulatory roadmap to encourage ESG practices and introduce a framework to facilitate sustainable investment. SECP considers sustainability a priority in its regulatory agenda. Although the proposed ESG roadmap is a first step in gaining understanding, setting momentum toward achieving key milestones, and showing the way forward through an inclusive approach to embrace ESG best practices for sustainable capital markets, However, in Pakistan, the media, political activists, relevant ministries, regulators (NEPRA, OGRA, SECP, etc.), and accounting bodies (like ICMAP and ICAP) need to assume the responsibility of highlighting the importance of ESG for entities working in a wide range of industries to trigger responsible business and investments focused on the wider benefits accruing from adopting ESG best practices.

About the Author: *The writer is a Chartered Management Accountant and a Fellow member of ICMA. He has done his MBA from LUMS and LLB from Punjab University, in addition to holding a CFE degree from the Association of Certified Fraud Examiners (ACFE), USA. He is currently working as Director General (Funds Management & Admin) at the Punjab Public Private Partnership (PPP) Authority.*



A Discussion on Free Trade Policy

Nowadays, free trade policy is a hot topic. According to many economists, it is becoming inevitable for developing countries. It is being argued that developing countries should adopt a free trade policy and remove all hurdles.

A discussion has begun about whether Pakistan should adopt a free trade policy or not and, if yes, what types of hurdles Pakistan may face due to this policy and how those hurdles could be removed.

Developing countries like Pakistan have a huge gap in their balance of payments, and a policy like this will surely increase imports, which will eventually further increase this gap and result in a shortage of foreign reserves. Pakistan may face an economic crisis as a result of this policy.

What is a Free Trade Policy?

A free trade policy seeks to eliminate barriers to imports and exports. Buyers and sellers from different economies may voluntarily trade without a government applying tariffs, quotas, subsidies, or prohibitions on goods and services. In free trade policy, the developing countries have two major concerns: (1) how to address the balance of payments issue; and (2) how to protect local industries. Before going into this discussion, we should first know what the potential risks and benefits of a free trade policy are for a country and what measures countries normally take to face these threats.

Potential Risks and Threats

- a) **Balance of payment issue:** A free trade policy may result in the balance of payment issue due to rise in imports and an increase in the foreign currency outflow as compared to a decrease in exports and an inflow of foreign currency.
- b) **High unemployment:** One of the reasons for the increase in imports may also be the fact that these goods cost less than locally produced goods. In that case, it may become difficult for local companies to compete; consequently, local companies may reduce their work force, which will result in an increase in unemployment.
- c) **Crowding out of domestic industry:** This policy may result in the total closure of some companies or

industries due to a lack of technical knowledge of modern techniques used for imported goods, limited resources, and a high cost of production.

- d) **Depletion of natural resources:** Free trade policies may lead to the depletion of natural resources like timber, minerals, and other natural resources. This may happen because of low local production, which results in low consumption of local resources. This may also happen due to environmental issues caused by multinational companies by not following local rules for environmental protection.
- e) **Reduced tax revenue:** This policy may lead to reduction in tax revenue due to closure of local industry.
- f) **Increase in crimes:** Increase in unemployment may result in high crime ratio due to increase in poverty level.



Zahid Farooq, FCMA
CEO, Zahid Farooq & Co.

Potential Benefits

- a) **Increased Economic Growth:** An increase in competition may result in an increase in economic growth. Local industry is also forced to enhance its capacity and quality and use updated technical knowledge and equipment. In Pakistan, examples of this can be found in the mobile industry, the internet industry, and the media.
- b) **More Dynamic Business Climate:** Again, free trade policy may result in healthy competition, which may result in good-quality products at a low price.
- c) **Lower Government Spending:** Many governments subsidize local industry segments. This policy may also result in the removal of government subsidies to local industry.
- d) **Foreign Direct Investment:** This policy may also result in an increase in foreign direct investment. This will increase the foreign reserves of the country, lowering the pressure of foreign payments on the government.

- e) **Expertise:** Global companies have more expertise than domestic companies in developing local resources. That gives local firms access to these new methods.
- f) **Technology Transfer:** Local companies also receive access to the latest technologies from their multinational partners.
- g) **Increase in Jobs:** As local economies grow, so do job opportunities.

Measure countries normally take to protect the local industry

Trade Protectionism

Trade protectionism is defined as a nation, or sometimes a group of nations working in conjunction as a trade bloc, creating trade barriers with the specific goal of protecting its economy from the possible perils of international trading. This is the opposite of free trade, in which a government allows its citizens to purchase goods and services from other countries or to sell their goods and services to other markets without any governmental restrictions, interference, etc. Trade protectionism takes numerous forms with the goal of defending a country's economic well-being. These are some examples:

- a) **Exchange rate control:** This is the biggest tool that countries normally use to stop imports and increase exports. The government normally decreases the rate of the local currency as compared to foreign currency. This policy results in increased revenue for the exporter in local currency while selling goods and services at the same foreign currency price. Similarly, it results in an increase in the cost of production for the importer because importers have to pay higher amounts in local currency while importing goods at the same foreign currency price.
- b) **Tariffs:** One major tool is to impose different tariffs to restrict imports of foreign goods and services. Tariffs can be specific, with a fixed tax rate or fee applied to each unit of a product or commodity imported into a country. There are also ad valorem tariffs, which are set as a proportion of the value of the imported product.
- c) **Quotas:** Quotas are direct restrictions on the number of certain goods, products, and commodities that may be permitted to be imported into a country. However, while imposing this policy of quotas, a country should keep in mind that other countries that are affected by this policy may also impose the same policy against the exports of the importing country.
- d) **Subsidies:** This policy is normally considered a better tool to protect local industry. Subsidies can be in the

form of cash payments, low- or no-interest loans, tax breaks, or government ownership of common stock in domestic companies.

- e) **Local content requirements:** The government may also impose a local content requirement policy to decrease imports by setting a manufacturing requirement in which a stated part or parts of a product must be made domestically. This may be possible by having a certain percent of a product manufactured locally, or in value terms, such as 70% of its value, it must be made locally.
- f) **Administrative trade policies:** This policy may be imposed by implementing rules, laws, and regulations designed to create serious difficulties for an importer of goods or commodities in a particular country. These policies may include setting high-level health and safety standards and requiring difficult-to-obtain import licenses for foreign producers.
- g) **Antidumping policies:** Antidumping policies may be used to prevent the sale of goods in a foreign market at a price far below their production costs in order to gain a substantial share of that country's market. Antidumping rules can also include regulations prohibiting the sale of goods, products, or commodities below their fair market value.

Trade protectionism may be a good policy for a country in certain circumstances, but it may cause more economic damage, which may be more severe. For example, it may result in a global recession if it is used globally.

Discussion on Resolving major issues in case of Free Trade

The government, with the help of the private sector, may conduct a study on how to address the balance of payment issue in the case of free trade policy and how to protect the local industry.

- (1) **Tackling the Balance of Payment Issue:** Consider the case of the economy of Country XYZ. The government of Country XYZ should first focus on a few top major countries from which traders in Country XYZ import goods. After the selection of these countries, a study should be conducted about the goods imported, and a list of these goods should be prepared. Country XYZ should then study as to what major types of goods are being imported by these countries, and can Country XYZ supply such goods to these countries under the current situation, or can Country XYZ manage to supply these goods in any way? If yes, then Country XYZ should enter into a free trade agreement with these countries and devise a payment mechanism.

Articles Section

This payment mechanism should be like the following:

- An importer from Country XYZ can enter into an agreement for the import of any good from any vendor in these countries.
- The importer will pay the government of country XYZ in local currency for these goods.
- Country XYZ will also collect all applicable taxes at the same time.
- Country XYZ will issue a certificate to the importer regarding payment.
- The importer of Country A will send this certificate to the concerned foreign vendor.
- The foreign vendor will give this certificate to his government.
- The vendor's government will issue payment in local currency.
- A similar procedure will be followed for exports to these countries.

The above agreement between Country XYZ and these countries should include all of the details of the payment mechanism between these countries, including the currency exchange rate mechanism, which may be in effect at the time of certificate issuance, and the mechanism for making balance payments and after what period, in what currency or form.

The following are the results of these steps:

- Foreign currency will be freely available in Country XYZ.
- Taxes may be charged and collected in a better way.
- There will be no negative activity in respect of foreign currency, like under-invoicing.
- Exports from Country XYZ will be increased.
- The employment level will be increased, and so on.
- And so the GDP will increase.

(2) Protecting the Local Industry: Free trade policy has always remained a big threat for the local industries of mostly developing countries. To overcome this problem, countries normally take measures of trade protectionism like the imposition of restrictions on imports through an increase in taxes at the import stage, devaluation of their local currencies, etc., as discussed above. On the other hand, advocates of free trade policy give examples from the communication industry, like what happened in the telephone and mobile industries.

When the government allowed the licensing of mobile communication in Pakistan, we saw a great revolution. Even the local communication industry in Pakistan (PTCL) improved its efficiency, and prices also went down dramatically. Similarly, an example of the internet industry with 3G and 4G licensing in Pakistan is being quoted.

The government should implement free trade policy in following steps:

- 1) A list of goods should be prepared showing for example three categories of goods from much necessary or unavoidable to medium and low level goods.
- 2) Free trade policy should be allowed for first types of goods at start

The government should then begin the process of industrialization through import substitution. "Import Substitution Industrialization (ISI) is a trade and economic policy that advocates replacing foreign imports with domestic production." "ISI is based on the premise that a country should attempt to reduce its foreign dependency through the local production of industrialized products."

This can be done by taking the following steps for local industry:

- by reducing taxes on these locally produced goods.
- by providing low-cost transportation.
- by offering low-cost technical and financial assistance.
- By providing producers with low-cost modern machinery.
- by locating raw materials and other ingredients close to the producer to reduce transportation costs and time spent bringing these items to the place of production.
- by giving any other incentives to producers.

When dependence on these first types of goods is almost finished, this process should be adopted on the next level of goods and, at last, on the lowest level of goods being imported.

The following are the results of these steps:

- The quality of products will improve due to increased competition.
- Production will go up with the help of the government in view of the import substitution policy.
- New employment opportunities will be created.
- More tax revenues will be generated.
- The inflation level will go down.
- GDP will be increased.

About the Author: The writer is a Fellow Member of Chartered Accountants of Pakistan (FCA), a Fellow Member of Cost and Management Accountants of Pakistan (FCMA), a Fellow Member of Public and Finance Accountants of Pakistan (FPA), and a Chartered Business Administrator from Canada (CBA). He also earned an LLB from the University of Punjab. He is currently the CEO of Zahid Farooq & Co. (ZFC), Chartered Accountants, Cost Accountants, and Management Accountants.



Consistency vs. Diversification – Industrial Response



Syed Shariq Waqar, FCMA

Consistency is a fantastic word in the professional arena, which means that a person consistently sticks to a particular field, such as someone in the pharmaceutical industry, for their entire career and achieves the greatest growth. To some extent, this is true, but many professionals who do not upgrade themselves or change industries remain stuck in their careers. Now that the term "diversification" has taken on a broader meaning, very few people can adopt different time zones; typically, this occurs with frequent fliers, different foods, different locations, people who speak different languages, different countries, and different types of industries.

As a management accountant, I believe we can be useful for any industry; we just need some time to adjust. But fortunately, market response to such types of professionals is not very healthy. Although many of them have a broader vision, greater flexibility, and a broader sense of adaptability, some enterprises think they lack focus, situations are not the same for all, and there are many other issues.

Now I'll give you an example. A financial accountant, before commencing his professional career, undergoes various diversified audit jobs, which help broaden his vision. They are well-respected professionals, so why someone who does multiple jobs would be considered inadequate?

To lead a country, we need a person with diverse experience because he has to oversee the entire economy as well as many other internal and external affairs, and we usually choose only people with a big public name for such an important position. Politicians do not need qualifications; they only need a vote bank.

Now back to diversified exposure they would be more effective for running national affairs, due to their flexible

thought process, but entrepreneurs must think in that fashion as well. Because new technology opens up new vistas, maturity, a flexible disposition, and adaptation to new

developments are more crucial than age and experience. Human resources institutions must focus on such points as how to capitalize on the vast and diversified experience and a healthy number of human resources available for the betterment of the country.

Institutions, in particular Professional institutions, should organize such awareness programs in collaboration with industries to raise awareness about these unsung heroes and the country of Pakistan. I believe that the expertise of these diverse experience holders, as well as their potential, can help Pakistan recover from its disastrous economic situation.

Saturated minds are incapable of thinking beyond limitations, whereas an open mind can think and then reassess.

Diversification is essential.

Consider another example: an entrepreneur who is not earning a good profit in one industry may shift his or her focus to a new industry. Unlearning and relearning is a never-ending process.

About the Author: The writer is a Fellow member of ICMA and has over 25 years of diversified experience in different trades' e.g. manufacturing, retail, aviation, and education industry. He is also associated as freelance faculty at several MBA Universities. He also contributes to TV talk shows on economic front programs.



Your Thumb
is Your Bank



No Cheque Book or ATM Card **No** Worries



Accountants & Technology

Data and analytics (D&A) are especially important to modern businesses as they can improve decision outcomes for all types of decisions (macro, micro, real-time, cyclical, strategic, tactical, and operational). At the same time, D&A can unearth new questions and innovative solutions to questions - and opportunities - that business leaders had not even considered. Progressive organizations use data in many ways and must often rely on data from outside their boundary of control for making smarter business decisions.

Data and analytics is also a catalyst for digital strategy and transformation as it enables faster, more accurate, and more relevant decisions in complex and fast-changing business contexts. Digital strategy is, therefore, as much about asking smarter questions via data to improve the outcome and impact of those decisions.

Progressive organizations are infusing data and analytics into business strategy and digital transformation by creating a vision of a data-driven enterprise, quantifying and communicating business outcomes, and fostering data-fueled business changes.

Advanced analytics uses sophisticated quantitative methods to produce insights unlikely to be discovered through traditional approaches to business intelligence (BI). It spans predictive, prescriptive, and artificial intelligence techniques, such as ML. In short:

- Analytics and BI represent the foundational or traditional way to develop insights, reports, and dashboards
- Advanced analytics represents the use of data science and machine learning technologies to support predictive and prescriptive models.

Augmented analytics refers to the use of ML/AI techniques to transform how insights from analytics are developed,

consumed, and shared. Augmented analytics includes natural language processing and conversational interfaces, which allow users without advanced skills to interact with data and insights.

Advanced analytics enables executive leaders to ask and answer more complex and challenging questions in a timely and innovative way. This creates a foundation for better decisions by leveraging sophisticated and clever mechanisms to solve problems (interpret events, support and automate decisions, and take actions).

Advanced analytics provides a growing opportunity for data and analytics leaders to accelerate the maturation and use of data and analytics to drive smarter business decisions and improved outcomes in their organizations. Gauging the current and desired future state of the D&A strategy and operating models is critical to capturing the opportunity.

The term “**big data**” has been used for decades to describe data characterized by high volume, high velocity and high variety, and other extreme conditions. However, the big data era is epitomized for businesses by the risks and opportunities specifically that the explosion in data traffic (especially with the evolution of Internet use and computing power) offers a rich source of insights to improve decisions but creates challenges for organizations in how they store, manage and analyze big data.

Most organizations have found ways to derive business intelligence from big data, but many struggles to manage and analyze a diverse and broad set of content (including audio, video, and image assets) at scale - particularly as the universe of data sources grows and changes and the need for insights is increasingly driven by advanced analytics.



Syed Hassan Al-Ahdal, FCMA
Sr. Management Accountant &
Corporate Trainer for
Advanced Excel & Power BI

Progressive organizations no longer distinguish between efforts to manage, govern and derive insight from non-big and big data; today, it's all just data. Instead, they are aggressively looking to leverage new kinds of data and analysis and to find relationships in combinations of diverse data to improve their business decisions, processes, and outcomes.

The global pandemic and other business disruptions have also accelerated the need to use more types of data across a broad range of use cases (especially as historical big data has proved less relevant as a basis for future decisions). Concerns over data sourcing, **data quality**, bias, and privacy protection have also affected big data gathering and, as a result, new approaches known as “**small data**” and “**wide data**” are emerging.

The wide data approach enables the data analytics and synergy of a variety of small and large data sources - both highly organized largely quantitative (structured) data and qualitative (unstructured) data. The small-data approach uses a range of analytical techniques to generate useful insights, but it does so with fewer data.

Business is facing chronic skills shortages in many aspects of data, and professional accountants can fill these roles. It is a natural evolution of the accountant's skillset which has traditionally been applied to financial data to measure and analyze financial performance for decision-makers. Their professional foundation provides accountants with an exceptionally strong footing on which to fulfill data roles.

However, professional accountants need to continually adapt to supplement their existing professional

competencies with the additional skills and knowledge required to fulfill key roles in the data management value chain. The traditional role of accountants has predominantly involved structured data that is manipulated in tables and Excel, and when it comes to financial reporting, is subject to standards. The valuation of an organization's data assets will typically show unstructured and non-financial data holds enormous value to a business. Ensuring that this information flows through the finance function is critical if the function is to reveal what is driving revenues, costs, and profitability. Accountants will need to enhance their capabilities in various areas, including statistics and modeling, and blend this with their in-depth understanding of an organization to identify the relevant opportunities and risks. They will also need to understand how decisions are made and are prepared to address bias and other human factors in decision-making.

Data management value chains are about creating data-driven outcomes with confidence whether it be exploring new products or strategies. As elements of traditional accounting roles become less relevant, the data management value chain provides helpful insights into how professional accountants deliver value in new areas and roles.

About the Author: Syed Hassan, FCMA, FPFA, MCOM, MBA is a recognized corporate trainer and technology instructor of Advanced Excel & Power BI along with Python for data analytics and visualization. He has a solid knack for Advanced Analytics & Reporting. Syed conducted several workshops, training, and seminars on the topics. Syed has 20+ years of experience in Accounting, Finance & Reporting. He can be contacted via email: ExcelBIpro@gmail.com



SECTOR BRIEF

Telecom Sector in Pakistan

By ICMA Research and Publications Department

Historical Background

Only 12,436 telephone landlines existed when the country gained independence in 1947, and they were heavily concentrated in a few urban areas, primarily to serve the country's administrative setup. There were two manual exchanges in Karachi and Lahore. The total density of telephones was less than 0.355 per thousand, or roughly one telephone for every 3000 people. The chronology of key initiatives taken by the Government in the telecom sector since independence is summarized below.

- 1949:** Pakistan Posts & Telegraph Department was established
- 1962:** An independent Telephone & Telegraph (T&T) Department was established
- 1990:** T&T Department was converted into Pakistan Telecommunication Corporation (PTC)
- 1990:** Pak Com (Instaphone) and Paktel became pioneers by starting mobile services in Pakistan
- 1992:** Mobilink [owned by Motorola] was the third company that was granted a license to operate in Pakistan
- 1994:** Pakistan Telecommunication Ordinance, 1994 was promulgated
- 1996:** Telecommunication (Re-Organization) Act no XVII was promulgated
- 1996:** Pakistan Telecommunication Authority (PTA) was established
- 1996:** National Telecommunication Corporation (NTC) was established
- 1996:** Pakistan Telecommunication Company Limited (PTCL) was formed and listed on Stock Exchange
- 2001:** PTCL launched Ufone as a private mobile network company
- 2003:** Deregulation policy for Telecom sector was announced and telecom market opened to private operators
- 2004:** Mobile Cellular Policy was announced
- 2004:** Mobile licenses to two new companies i.e. Warid and Telenor were awarded through open bidding






2006: PTCL management was transferred to Etisalat International Pakistan a subsidiary of Emirates Telecom Corp.

Key Players in Telecom Sector

- 1) Pakistan Mobile Telecommunication Limited (Jazz)
- 2) Telenor Pakistan (Telenor)
- 3) China Mobile Pakistan Limited (Zong) and
- 4) Pakistan Telecom Communication Limited (Ufone)

In addition, the Special Communications Organization (SCO) operated by the Ministry of IT&T is providing telecom services specifically in Azad Kashmir and Gilgit Baltistan.

As on October 2022, the market shares of the above cellular companies stand as follows:

Jazz	Telenor	Zong	Ufone	SCO
				
38.55%	25.20%	23.26%	12.13%	0.87%

Jazz is the market leader with a 39% share [75 million subscribers], followed by Telenor@25% share with 49 million subscribers; Zong@23% share with 44.8 million subscribers and Ufone@12% share with 23 million subscribers.

Key Facts & Indicators

Market size:	Rs. 695 billion (estimated for FY2022)
Sector employment:	1.36 million people
Mobile phone users:	194 million
3G/4G customers:	121 million
Broadband subscribers:	124 million
Teledensity:	88% as of Feb 2022
Broadband Penetration:	51% as of Feb 2022
Revenue Generated:	Rs. 644 billion in FY21 [Rs. 592 billion in FY20]
Tax contribution:	Rs. 170 billion in FY20 [\$1.1 billion]
FDI in Telecom:	US\$2.2 million
Total Data Usage:	6,855 Petabytes in FY21 [4,498 Petabytes in FY20]

SWOT Analysis of Telecom Sector



STRENGTHS

- Fastest-growing industry in Pakistan
- Contributes almost 71% to IT Sector
- Large customer base
- Skilled & Low-cost human resources
- Rising FDI in telecom
- Presence of strong international brand names
- Rising 4G subscriptions
- Strong increase in mobile broadband penetration
- Good accessibility and mobility
- Excellent infrastructure [optical network and satellite links]

WEAKNESSES



- Lack of accessibility in remote areas
- Less spending on R&D
- High usage cost of mobile data
- Issues of network accessibility and signal strength
- Quality of service
- Low revenue per user (ARPU)
- Customer retention
- Low fixed broadband penetration



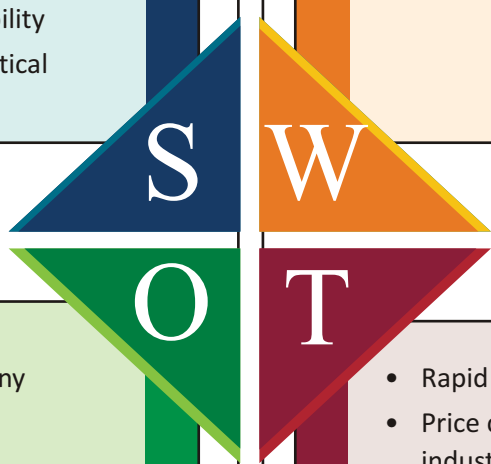
OPPORTUNITIES

- 25 million people without any telecom coverage
- Launch of 5G in Pakistan
- Local handset manufacturing
- Making technology accessible to all (e.g. broadband).
- Adopting the latest technologies like MVNO
- Removal of international trade barriers

THREATS



- Rapid technological advancements
- Price competition amongst industry players
- Conflicts related to license renewal fee charge
- Unprecedented rise in operating costs
- Power crisis in Pakistan
- Changing customer base
- High taxes and regulatory compliances
- New distribution channels





OUR WINNING STREAK CONTINUES!



UBL shone bright in 2022. For the third consecutive year, Asiamoney lauded UBL's digital excellence by declaring it the '**Best Bank for Digital Solutions**' in Pakistan. Alongside, Euromoney declared UBL as the '**Market Leader of Digital Banking**' in Pakistan, especially based on our track record as the Best in Digital.

As we begin 2023, we look forward to new opportunities to further serve our 10 million valued customers and support our hard working teams.





ECONOMY WATCH

By ICMA Research and Publications Department

Dollar Outflow from Pakistan

In the midst of economic uncertainty, political turmoil, and catastrophic floods, the country is facing another significant problem in the form of acute currency shortages, which are forcing many businesses to suspend operations.

The country, which mainly relies on oil imports, is grappling with a destructive combination of soaring inflation, elevated commodity prices, dwindling remittances, and a persistent current account deficit (CAD). Depleting foreign exchange reserves has substantially reduced access to the dollar. To manage the gravity of the situation, the central bank has imposed restrictions on the opening of letters of credit (LCs) and electronic import forms (EIFs) while slashing the foreign currency threshold to \$5,000 per visit for travelers.

It is worth mentioning that the SBP's foreign exchange reserves stand at \$5.88 billion by the end of December 23, 2022, barely enough to cover 1.277 months of import bills, less than the three-month benchmark.

The cash-strapped country has to pay \$1.3 billion foreign debt by January 10, 2023, which will further put a dent in our reserves.

On the other hand, these restrictions by SBP disrupted the supply chain in almost every sector, especially in automobiles, medicine, steel, etc., which heavily rely on imported raw materials. Consequently, many more local and international cross-border businesses are temporarily shutting down their operations or producing at reduced capacity.

Moreover, hundreds of essential food commodity containers have piled up at the port during the past two months on grounds of limited LCs since commercial banks are not releasing documents on account of the dollar payment crisis. This unreasonable delay in timely clearance will incur demurrage continuously. Adding to this, it might lead to a massive shortage of vegetables and drive food inflation.

The other problem is a shortage of dollars that has fueled the black market for dollars due to the widespread open market and interbank exchange rates. Against this backdrop, market experts are of the view that the grey economy booms. From the desk of official channels, you can buy a dollar by paying some extra cash. Unsurprisingly, this

growing gap between official and informal (Hawala/Hundi) channels resulted in a consecutive month-on-month decline in inflows of workers' remittances during November 2022, clocking in at \$2.1 billion, as the general public found the latter one more profitable and attractive as it saved thousands of rupees.

In the same vein, the growing disparity between open market and interbank exchange rates is also the reason why exporters delay the inflows due to expectations of further depreciation of the rupee and the high premiums offered by informal channels.

Not to forget the smuggling of dollars to neighboring countries remains a challenge for the government.

The aforementioned factors are pushing the central bank to tighten its grip on import bills to sustain a lower CAD.

At the time of writing, the central bank, on December 28, 2022, withdrew import restrictions for Authorized Dealers (AD) from January 02, 2023. However, the SBP added that ADs may prioritize or facilitate imports under essential imports, energy imports, imports by export-oriented industry, imports for agriculture inputs, deferred payment / self-funded imports and imports for export-oriented projects near completion.

ICMA is of the view that the sinking economy could come out of the woods if the government and the SBP take much-needed steps such as the implementation of a market-driven exchange rate in consideration of International Monetary Fund (IMF) requirements, strong surveillance on official desks to counter grey market activities, and curbing the smuggling of dollars across borders.

The government may consider allowing trade with the neighboring countries in local currency or by barter. Further, to cease dollar smuggling, the government needs to ensure strict control and administration at its border crossings and ports.

But most importantly, the institute thinks the crisis would subside if the government arrange immediate finances to bridge the gap in external accounts through assistance from our friendly countries, in addition to the revival of the IMF bailout program, which is the need of the hour.

Economy News

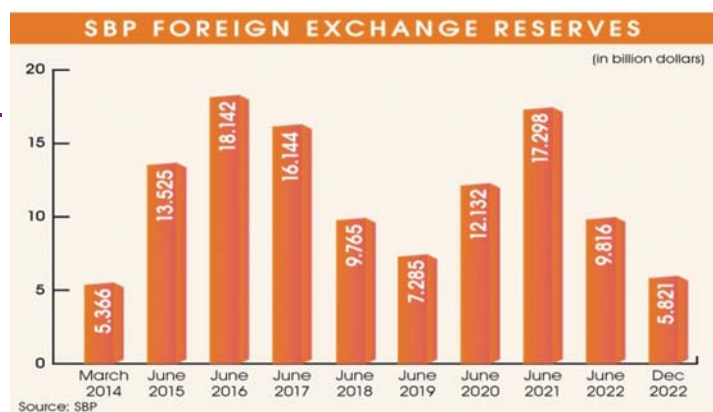
Trade Deficit shrink by 32.65% in first half of FY 2022-23

According to the Pakistan Bureau of Statistics (PBS), the trade deficit decreased by 32.65% in the first half of the current fiscal year compared to the same period last year. The trade deficit was \$17.133 billion from July to December (2022-23), a 32.65% decrease from the deficit of \$25.438 billion from

July to December (2021-22). Exports for the year totaled \$14.249 billion, a 5.79 percent decrease from the previous year's total of \$15.125 billion. Imports, on the other hand, decreased by 22.63 percent, going from \$40.563 billion last year to \$31.382 billion this fiscal year.

SBP's Forex Reserves fell to eight-year low

Foreign exchange reserves at the State Bank of Pakistan (SBP) fell by \$294 million to \$5.82 billion on December 23, 2022, and fell further to \$5.57 billion by December 30, 2022. Total liquid foreign reserves stood at US\$ 11.42 billion as of December 30, 2022. With such a low level of forex reserves, the country is finding it more difficult to service its massive foreign debt.



SMEs incur \$5.3 billion in flood losses

The recent floods have affected around 25% or 197,658 economic establishments (Small and Medium Enterprises (SMEs)) across the country, with the total loss incurred being estimated at around \$5.3 billion. There has also been a sizable increase in the unemployment rate in flood-hit areas, as 54 percent of employees working in SMEs have lost their jobs,

according to a preliminary assessment report issued by the Small and Medium Enterprises Development Authority (SMEDA). The survey stated that the maximum loss has been incurred in Sindh, amounting to \$3.85 billion, followed by Khyber Pakhtunkhwa (KP) at \$0.66 billion. Losses in Punjab were estimated at \$0.42 billion, followed by Balochistan at \$0.35 billion.

LSM output dropped by 7.75 percent in October 2022

Pakistan's large-sector manufacturing (LSM), including food, textiles, petroleum oil, pharmaceuticals, and automobiles, reported a cumulative drop of 7.75% in October 2022 compared to the same month of the previous year. On a month-on-month basis, the LSM sector posted a decline of 3.62% in the

month under review compared to the previous month of September 2022, the Pakistan Bureau of Statistics (PBS) reported. PBS reported that the LSM sector's output fell 2.89% cumulatively in the first four months (JulyOctober) of the current fiscal year, as compared to the same period last year.

Remittances hit 27-month low at \$2.1 billion

The remittances sent home by overseas Pakistanis hit a 27-month low of \$2.10 billion in November 2022, as many expatriates were believed to have dispatched money back home through informal channels. According to the State Bank of Pakistan (SBP), the remittances dropped by 14% to \$2.10 billion in November 2022, compared to \$2.45 billion in the same month last year. The inflows decreased by 5% compared

to the previous month, October 2022. November is the third consecutive month when remittances have declined, according to the central bank data. In the first five months (JulyNovember) of the current fiscal year, remittances have dropped by 10% year-on-year to \$12 billion. Remittances have mainly decreased from Saudi Arabia and the United Arab Emirates (UAE).

Other Features

REGULATORY WATCH

By ICMA Research and Publications Department

Ministry of Finance established a 'Debt Management Office (DMO)

The Ministry of Finance, Government of Pakistan has established a 'Debt Management Office (DMO). In this context, the Finance Division has issued a notification dated 15th December 2022, which states that in pursuance of

Section 6 of the Fiscal Responsibility and Debt Limitation (Amendment) Act, 2022 and with the approval of the Federal Government, Debt Management Office (DMO) is established with immediate effect and until further orders.

FBR achieved unprecedented 66% growth in Direct Taxes in December 2022

The Federal Board of Revenue (FBR) has collected Rs. 3,428 billion for the first six months of the current financial year 2022-23 against Rs. 2,929 billion collected in the corresponding period of last year, depicting an increase of 17 percent. FBR collected Rs. 740 billion in the month of

December 2022 against Rs. 599 billion in the same month last year showing an impressive growth of almost 24% as compared to the same month last year. This performance is despite huge import compression and zero rating on petroleum.

SBP released Annual Report on 'The State of Pakistan's Economy'

The State Bank of Pakistan (SBP) has released its Annual Report on the State of Pakistan's Economy for the fiscal year 2021-22 on Dec 21, 2022. According to the report, Pakistan's economy achieved a real GDP growth of around 6 percent, for a second consecutive year in FY22. The growth was broad-based as both agriculture and industry saw a notable increase that also spilled over to the services sector. The external account pressures, coupled with the

appreciation in USD index led to a substantial depreciation in the PKR. On the fiscal side, while the sharp pickup in imports boosted tax collection, a broad-based increase in fuel subsidies widened the fiscal and primary deficit during FY22. The complete Report is available at: <https://www.sbp.org.pk/reports/annual/aarFY22/Anul-index-eng-22.htm>

SBP released Annual Payment Systems Report for FY 2021-22

The State Bank of Pakistan (SBP) has released its Annual Payment Systems Review Report for the fiscal year 2021-22 on Dec 23, 2022, which states that overall e-banking transactions witnessed a healthy growth of 36.2% by volume and 59.4% by value. E-banking channel was mainly utilized for online funds transfer. During FY22, the number of funds transfer transactions through digital channels reached to 489.1 million which is 80% higher than

FY21. By value, it grew by 75% on YoY basis reaching to Rs. 98.9 trillion by the end of FY22. As of end Jun-22, number of registered mobile phone and internet banking users reached to 12.3 million and 8.4 million with YoY growth of 13.5% and 59.8% respectively. The Report can be downloaded from the link: <https://www.sbp.org.pk/PS/PDF/FiscalYear-2021-22.pdf>

SECP issued Digital Lending Standards

The Securities and Exchange Commission of Pakistan (SECP), taking notice of rising concerns involving mis-selling, breach of data privacy, and coercive recovery practices of licensed digital lending companies, has issued directive to safeguard public interest and ensure fair treatment of borrowers in digital lending ecosystem.

The circular can be accessed from SECP website at <https://www.secp.gov.pk/document/circular-no-15-of-2022-requirements-for-nbfc-engaged-in-digital-lending/?wpdmdl=46436&refresh=63abedc5978a21672211909>

Presentation of Souvenirs / Mementos to Writers

The Research and Publications (R&P) Committee

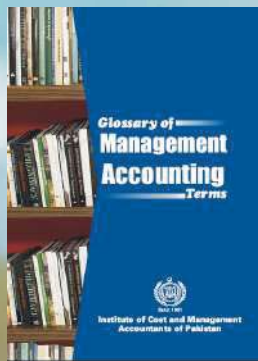
is pleased to announce that Souvenirs / Mementos shall be presented to Members contributing 'Articles' in the CMA Journal in order to acknowledge their efforts

- ◆ To all writers whose articles are published in CMA Journal for the first time
- ◆ To Authors who contribute at-least three (3) articles in one calendar year
- ◆ To Writers of 'Best Presented Articles' in the Focus Section of each issue of Journal

The above recognition is in addition to allocation of 8 CPD hours and publication of profiles of writers in the 'Authors' Directory'

Special ceremony to be arranged at the end of the calendar year to present Souvenirs

Ather Saleem, FCMA
Chairman, Research & Publications Committee



Management Accounting Terms

Aesthetics

A quality attribute that is concerned with the appearance of tangible products (for example, style and beauty) as well as the appearance of the facilities, equipment, personnel, and communication materials associated with services.

Break-even point

The point where total sales revenue equals total costs; the point of zero profits.

Continuous improvement

The process of searching for ways of increasing the overall efficiency and productivity of activities by reducing waste, increasing quality, and reducing costs.

Discounting models

Capital investment models that explicitly consider the time value of money in identifying criteria for accepting or rejecting proposed projects.

Ending finished goods inventory budget

A budget that describes planned ending inventory of finished goods in units and dollars.

Functional-based management (FBM) accounting system

An accounting information system that emphasizes the use of functional organizational units to assign and manage costs.

Internal constraints

Limiting factors found within the firm (such as machine time availability).

Joint production process

A production process that results in two or more joint products.

Least square regression method

A cost – estimation method in which the cost line is fit to the data by statistical analysis. The method minimizes the sum of the squared deviations between the cost line and data points

Modified accelerated cost recovery system (MACRS)

An allowable method for computing depreciation for tax purposes.

Non-value-added costs

Costs that are caused either by non-value-added activities or by the inefficient performance of value-added activities.

Organizational culture

The mindset of employees, including their shared beliefs, values, and goals.

National Council

Office-bearers

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Shehzad Ahmed Malik, FCMA
Chief Executive Officer
Shehzad Malik Management
Consultants (Pvt) Ltd.

Vice President



Ather Saleem, FCMA
Member Tribunal, Anti-Dumping
Government of Pakistan

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Pakistan Expo Centres
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Director Advisory Services,
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Additional Finance Secretary,
Finance Division, Govt. of Pakistan



Sumaira K. Aslam
Chief Financial Analyst/
Deputy Chief Cost Accounts Officer,
Finance Division, Govt. of Pakistan



**Muhammad Kamran
Shahzad, ACMA**
Deputy Chief Cost Accounts Officer,
Finance Division, Govt. of Pakistan



Saleemullah
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State Bank of Pakistan

Executive Director



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Corporate Leaders of ICMA



Ghulam Abbas, FCMA
Chief Financial Officer
Panther Tyres Limited

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“ My advice to newly qualified CMAs is to stay focused on their goals. You have the world's best management accounting qualification, and as such, you must have a clear vision of your future career path in mind to move on with commitment ”

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“ Our young members and students are the institute's assets, and I am sure they will achieve greater success and make us all proud. My advice to our younger colleagues would be to make a personal commitment to their long-term success ”



Touseef Alam Khan, ACMA
Chief Financial Officer
National Logistics Cell (NLC)

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Submission Deadline
February 10, 2023

Mar-Apr 2023

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Submission Deadline
April 10, 2023

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