VOLUME 1 | ISSUE 4 | AUGUST 2024

THE WORLDONOMICS TIMES

INNOVATION IGNITION

FUELING ECONOMIC GROWTH

"Innovation is the key to unlocking economic potential."

PROSPERITY'S PROMISE

ECONOMIC GROWTH STARTS WITH HUMAN DEVELOPMENT

Shri Anuj Gupta
Head - Commodity and Currency Market
HDFC Securities

UNITY IN PROSPERITY

GLOBAL COLLABORATION FOR GROWTH

SPENDING POWER ON THE RISE

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THE

WORLDONOMICS

TIMES

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A NEW ERA OF ECONOMIC INTERDEPENDENCE : THE WORLDONOMICS TIMES

We stand at a precipice of unprecedented economic transformation. A world once defined by isolation and protectionism is rapidly evolving into a hyper-connected, interdependent global economy. The ramifications of this shift are profound, impacting everything from geopolitics to individual livelihoods.

The Worldonomics Times is committed to navigating this complex terrain, providing incisive analysis, expert commentary, and forward-looking insights. Our goal is to empower our readers with the knowledge and understanding necessary to thrive in this new economic order.

As we explore the intricacies of globalization, it becomes increasingly clear that economic growth is no longer solely a domestic affair. It is intricately linked to the fortunes of nations across the globe. Supply chain disruptions, trade wars, and currency fluctuations have demonstrated the fragility of our interconnected world.

However, within these challenges lie immense opportunities. Technological advancements, from artificial intelligence to renewable energy, are reshaping industries and creating new economic frontiers. Emerging markets are becoming global powerhouses, driving economic growth and innovation.

It is imperative that we approach this new era with a spirit of collaboration and cooperation. Protectionist policies, while tempting in times of uncertainty, ultimately hinder economic progress. By fostering open markets, promoting fair trade, and investing in education and infrastructure, we can create a more prosperous and equitable world for all.

The Worldonomics Times will continue to be a platform for dialogue and debate on these critical issues. We invite our readers to join us in shaping the future of the global economy.

Let us together navigate the complexities of our interconnected world, seize the opportunities, and build a more prosperous future.

Sandeep Kumar

EDITOR-IN-CHIEF

The Worldonomics Times

Courtesy Meeting With Shri Sripad Y Naik Ji, Union Minister of State forPower & New & Renewable Energy, Govt. of India

Courtesy Meeting With Smt. Annupurna Devi Ji, Union Minister of Women and Child Govt. of India

3rd Foundation Day (23.07.2024) of International Navodaya Chamber of Commerce

Courtesy Meeting With
Shri Harsh Malhotra Ji,
Ministry of Road, Transport & Highways
And
Ministry of Corporate Affairs Govt. of India

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Blessing Support

CMA Sanjay Jindal
Director Finance,
Engineers India Limited

Dear Mr. Sandeep Kumar,

With the launch of **The Worldonomics Times**, professionals worldwide are poised to embark on a journey of enlightenment and empowerment. In today's fast-paced economic landscape, the need for up-to-date insights and innovative strategies is more crucial than ever. As Director (Finance), I recognize the significance of continuous learning and informed decision-making. This magazine promises to be a comprehensive resource, offering valuable insights and actionable strategies to navigate the challenges and opportunities ahead.

The Worldonomics Times is not just a publication; it's a beacon of innovation in economic discourse. Through cutting-edge analysis, thought-provoking articles, and expert commentary, it will serve as a trusted companion for professionals across various sectors. Leveraging the latest technologies, the magazine ensures accessibility and engagement for all readers, regardless of background or expertise.

Beyond economics, **The Worldonomics Times** will explore intersections of finance with technology, sustainability, and social responsibility. By fostering dialogue and collaboration across diverse fields, it will inspire innovative solutions to global challenges.

I am proud to be associated with this initiative, and I extend my deepest gratitude to the editorial team, contributors, partners, and supporters who have worked tirelessly to bring this vision to life.

I offer my sincerest blessings to all those who will embark on this journey of enlightenment and empowerment, fueling innovation and success in the ever-evolving world of economics. Impressive Initiative!

Best Wishes to you and your team for resounding success on this fantastic effort.

CMA Hrishikesh Kumar
Executive Director(Finance)
NBCC (India) Limited

Dear Shri Sandeep Kumar,

At the outset I would like to congratulate you for taking the initiative for publishing this magazine **"The Worldonomics Times".** In this era of rapid changing economic environment vis-à-vis the pressure on business to sustain, the importance of seamless transfer of information and knowledge cannot be underestimated which I hope would be fulfilled by your magazine in future.I must say this is a great initiative by you and your team in this regard.

All the best for your endeavor

CMA Yogendra Prasad Shukla

Director Finance
HOCL - Hindustan Organic Chemicals Limited

Dear CMA Sandeep Kumar Ji,

I extend my heartfelt congratulations on the launch of **"The Worldonomics Times."** Your dedication to providing a platform for insightful economic knowledge is truly commendable. In today's-paced economic, the significance of facilitating the smooth flow of information and wisdom cannot be overstated, and I am confident that your magazine will excel in meeting this crucial need. Your initiative, alongside your team, is truly praiseworthy, and I foresee great success for "The Worldonomics Times" in the days ahead. Your commitment to empowering minds through economic understanding is inspiring.

Best regards

CMA Gaurang Dixit

Former Chairman-cum-Managing Director
NSIC - National Small Industries Corporation

Dear Shri Sandeep Kumar,

At the onset, I applaud the initiative of the **'International Navodaya Chamber of Commerce'** to come out with a magazine **'The Worldonomics Times',** which will provide the relevant information and knowledge to the all in this diverse global market. In the present complex business / economic scenario, the whole world market is like a field open for all players to play thereon. This global market is having abundant opportunities and to become a successful entrepreneur in such complex economic environment, the need for having relevant information and knowledge is of paramount significance. Your endeavour to come out with the magazine **'The Worldonomics Times'** will certainly help to suffice this requirement.
I must congratulate to you and your team for this endeavour.
With best wishes.

CMA Vijay Kumar Agarwal

GM (Finance)
ONGC Videsh

Dear Shri Sandeep Ji,

It's my great pleasure to note **"The Worldonomics Times"** monthly magazine launching by **"International Navodaya Chamber of Commerce (INCOC).** The various Global Perspectives with relevant data have been covered which are relevant from our local perspective. The contents of magazine in coming days will be way forward in knowledge enhancement as well as for better understanding in correlating the global economics with local need.

Congratulations CMA Sandeep ji & Team for such an initiative which will surely provide the tailored world economic information.

Shri BK Sabharwal

Chairman, Capital and Commodity Market Committee, PHDCCI
Ex-President CPAI, Ex-chairman FISE, Ex-Director, Delhi Stock Exchange

Dear Sandeep Kumar,

Congratulations on the launch of **The Worldonomics Times!** Your dedication to global finance journalism is commendable. This milestone marks the beginning of an insightful journey. In our interconnected world, timely updates on regulatory changes are vital, and your magazine promises to fulfill this need. Dedicated to providing expert insights and periodic updates, it aims to become a key resource for policymakers, industry professionals, and academics. Your leadership in this initiative is inspiring. Here's to a successful launch and a prosperous future ahead.

Best regards

Shri Jyoti Prakash Gadia

Managing Director
Resurgent India Limited

Dear Sandeep Ji

Congratulations on the launch of The Worldonomics Times! This new publication promises to be a vital resource in financial journalism and stands to reshape our grasp of global financial landscapes. **The Worldonomics Times** will undoubtedly be an indispensable source for thorough analyses, covering the nuanced intersections of global economics and market dynamics. Your magazine is uniquely positioned to serve the needs of business leaders, policymakers, and those with a keen interest in the complexities of global finance. We eagerly await the fresh perspectives and insights that The Worldonomics Times will bring to the complex world of global finance.

Best wishes for your journey ahead!

CMA Yash Paul Bhola

Ex-Director (Finance), NFL.
President (Hon.) INCOC

Dear INCOC Team Members,

I congratulate and appreciate the efforts by one and all in bringing out Global Finance and Economics Magazine, **"The Worldonomics Times"**. This milestone marks the beginning of an exciting journey in the realm of global finance and economics journalism.

As our world becomes increasingly interconnected, and regulatory framework is fast getting changed and updated, the need for a comprehensive magazine in finance field cannot be over emphasised. This magazine is dedicated to providing a platform for periodical up-dation of the developments across the globe and experts to share their insights. It is intended to establish itself as a key resource for policymakers, industry professionals, academics, and anyone with a keen interest in understanding global finance and economics. Once again, I congratulate and wish you all the best for a successful launch of the magazine and a prosperous future ahead.

CMA Ramesh Kumar
Chief General Manager
POWERGRID Corporation of India Ltd.

Dear Shri Sandeep Kumar,

With great pleasure we extend our good wishes on the launch of **The Worldonomics Times**. This publication is poised to become a cornerstone in the landscape of global finance and economics, offering deep insights and valuable perspectives. Your commitment to excellence in disseminating knowledge is not only commendable but vital in these complex economic times. We eagerly anticipate the success and influence your magazine will undoubtedly achieve.

Warm regards

CMA R C Gupta
EX Executive Director (Finance & Accounts)
GAIL (India) Ltd.

Dear Shri Sandeep Ji,

I have gone through the May 2024 issue of The Worldonomics Times and found it very informative. My heartfelt congratulations on the launch of a world class magazine in the area of Cost Management, Financial Management, Financial Planning, Taxation and World Economic Affairs. The coverage in the magazine is very wide & excellent and is based on the theme of Global Perspective with Local Relevance, in-depth data driven journalism and accessibility of the magazine in print as well as digital formats. It will empower the readers with well researched articles for ready reference, decision making & knowledge enhancement.

I wish all the best to you and your team of International Navodaya Chamber of Commerce (INCOC) for bringing the magazine on regular basis with full of information of world economic affairs for use by all professionals.

With Best regards,

हाउसिंग एंड अर्बन डेवलपमेंट कॉर्पोरेशन लिमिटेड
(भारत सरकार का उपक्रम)
Housing & Urban Development Corporation Limited
(A Government of India Enterprise)

आज़ादी का अमृत महोत्सव

एम नागराज
निदेशक (कॉरपोरेट प्लानिंग)
M. NAGARAJ
Director (Corporate Planning)

MESSAGE

Dear Shri Sandeep Kumar,

I extend my warmest congratulations to you on the impending launch of Global Finance and Economics Magazine: The Worldonomics Times on May 5th! This milestone marks the beginning of what promises to be an exciting journey in the realm of global finance and economics journalism.

As our world becomes increasingly interconnected, the need for a comprehensive and insightful resource in the field of finance and economics has never been greater. Your magazine's dedication to providing a platform for experts to share their insights is commendable and much needed in today's complex economic landscape.

I have no doubt that The Worldonomics Times will quickly establish itself as a key resource for policymakers, industry professionals, academics, and anyone with a keen interest in understanding the intricacies of global finance and economics. Your commitment to delivering high-quality, well-researched content will undoubtedly set a new standard in the industry.

I eagerly anticipate the inaugural issue and look forward to the valuable contributions and perspectives that The Worldonomics Times will bring to the forefront of economic discourse.

Once again, congratulations on this significant achievement, and I wish you all the best for a successful launch and a prosperous future ahead.

(CMA - M. NAGARAJ)

एच.ई.सी.

ISO 9001:2008 Company

Rajesh Kumar Dwivedi
Director (Finance)

स्वच्छ भारत
एक कदम स्वच्छता की ओर

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MESSAGE

Dear Shri Sandeep Kumar,

I take this opportunity to heartily congratulate you on publishing "The Worldonomics Times", which I really feel is a hands-on treasure of useful information.

Today's world is rapidly changing and inter-woven with diverse complexities. In such a global environment, authentic and timely information is a powerful tool which I am sure will be always provided by "The worldonomics Times". I am sure, the adage that *"The Pen is mightier than the Sword"* will be once again be proven right with your magazine.

Congratulations, once again and my Best wishes for this wonderful knowledge endeavour!

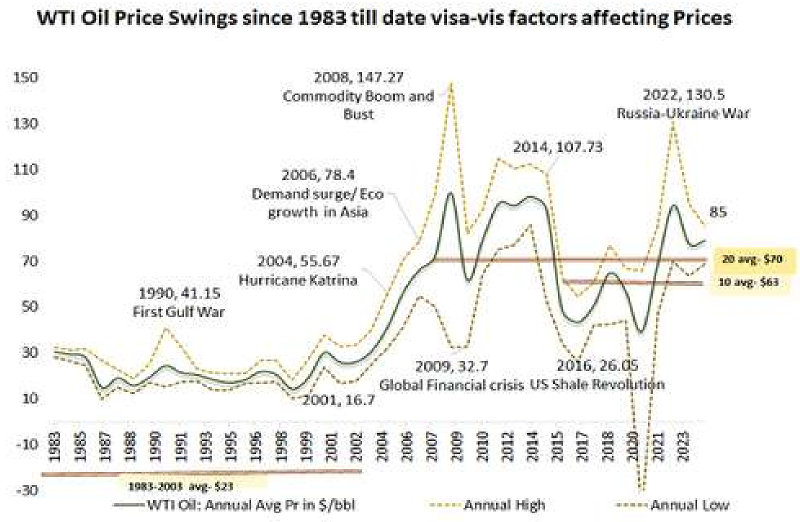
(CMA Rajesh Kumar Dwivedi)

Crude Oil: Riding on the waves of Supply, OPEC+ cuts, China, and Geopolitics

Crude Oil in the current context is influenced by a complex interplay of factors including fluctuating supply from non-OPEC producers, strategic production cuts by OPEC+, economic headwinds from China, and ongoing geopolitical tensions. The balance between these forces is what making the Crude Oil market highly dynamic and closely watched by governments, industries, and investors.

• Crude Oil's historical price footprints: A journey through time

Oil has historically been a trigger for geopolitical events that affect supply and demand fundamentals, leading to price volatility. Besides geopolitics, weather and other uncertain events also have a significant impact on Crude Oil and petroleum products. While supply shocks from such events are usually temporary and markets stabilize over time, the oil market also undergoes structural changes driven by economic booms or technological advancements. These broader developments can cause a more significant and permanent shift in average oil prices.



However, post-2003 saw a remarkable surge in oil prices, with WTI climbing from $28 to $134 per barrel due to structural demand shifts associated with an unexpected expansion of the global economy and strong additional demand for oil from emerging Asia. Because oil producers were unable to satisfy this additional demand, the price of oil increased.

A more significant movement in crude oil price history occurred in 2008, against the backdrop of the global financial crisis following the collapse of the US home loans market. Volatility led to oil spiking to $145 a barrel, and months later it collapsed to under $40 a barrel as demand for the commodity dropped off.

There have been a number of smaller demand and supply shocks in the oil market between 2010 and early 2019. However, the notable development of that decade was the unexpected growth of US shale oil production, not only in the US but also increased oil production in other countries including Canada and Russia. The next big oil price movement came during the COVID-19 pandemic starting in March 2020 when global lockdowns stopped travel and slowed demand for fuel. As a result, oil prices plummeted to abnormally low levels.

In 2022, as the world rebounded from the pandemic and demand for fuel returned with travel and industrial output, crude oil prices skyrocketed, leading to the oil market hitting near-record levels. Demand in the oil market was further exacerbated by Russia's invasion of Ukraine in February. Russia is a key global supplier of oil, and when sanctions were imposed against the country for its actions, other nations, including those in the European Union, had to scramble to find replacements from other parts of the world.

Now, let's look at the current context.

- Year 2024 so far in Crude Oil:

A comparatively stable year

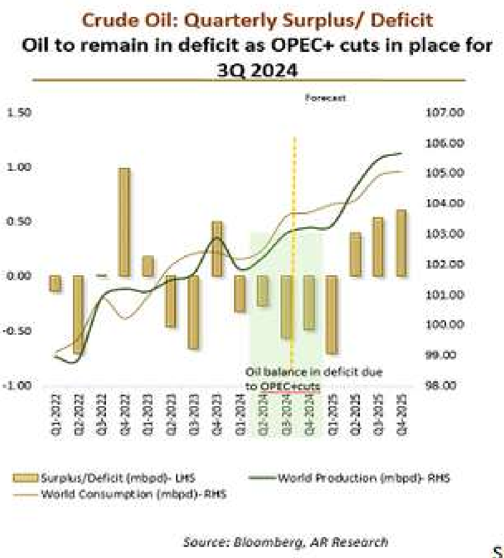
Year 2024 featured a comparatively stable year for Crude Oil with prices largely hovering between $70 and $85 per bbl level. After ending 2023 below $70, prices rebounded and surged toward $85 by the end of the 2Q 2024. The ongoing geopolitical tensions, accompanied by OPEC+ cuts and resilient US economy outweighed China demand concerns and higher Non-OPEC supplies.

Despite elevated interest rates, US economy is resilient. But at the same time, being the election year the nation won't be happy if oil prices rise sharply as it will stoke inflation. Non OPEC countries including US, Brazil, Canada continues to pump oil and Non-OPEC output is seen growing. Considering higher Non- OPEC production and faltering Chinese economy, OPEC remains in forefront and the key members maintains the voluntary output cuts.

Going forward, let's see how these factors might pan out over the remaining part of 2024.

- How long will OPEC continue with its output cuts?

A well supplied market and slowdown fears may force OPEC+ to extend cuts till year -end



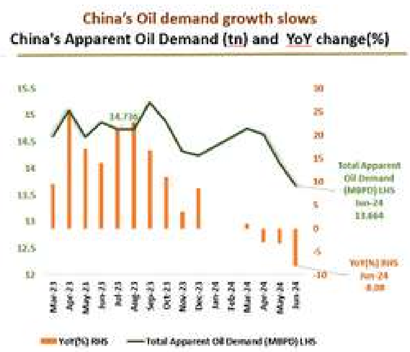
Since late 2022, OPEC and its allies have made production cuts to balance increasing output from the US and other non-OPEC nations and to address demand concerns in major economies. Currently, OPEC+ is cutting production by 5.8 million barrels per day (mbpd), or 5.7% of global demand which includes 3.6 mbpd from OPEC+ members until December 2024 and an additional 2.2 mbpd voluntary cuts. In its June 01 meeting it extended the entire cuts for 3Q 2024 but said the 2.2 mbpd output cuts will be restored gradually from October2024 onwards, depending on the then situation.

However, a well-supplied oil market and tepid demand outlook may force OPEC+ to extend all output cuts to year-end despite several members' eagerness to increase production. The group's strategy of supporting prices has effectively subsidized external supply growth (especially in the US), leaving little room for OPEC+ to taper its curbs. Thus oil balance sheet would remain in slight deficit with OPEC+ cuts remaining in place, keeping the broader picture a bit positive for oil.

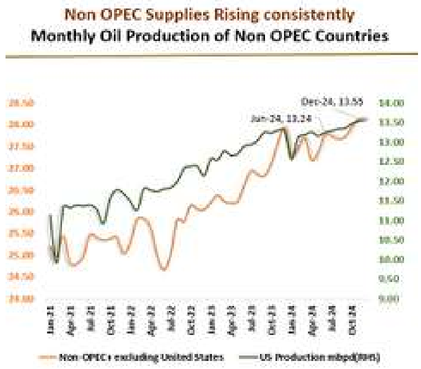
- US WTI Oil faces potential plunge below $70

Higher Non-OPEC supplies, China demand woes and unwinding of cuts

As long as the entire OPEC+ cuts remain in place, we don't see possibility of oil prices sliding below $70 per bbl level. However, the same cannot be completely ruled out. If the cartel starts unwinding the cuts starting October, prices faces a potential plunge below $70 as well. Oil markets could face a 100,000 bpd surplus in 4Q if Saudi Arabia and other major producers scale back voluntary cuts after 3Q. If US shale oil producers keep ramping up output, or if China's economic weakness causes demand to drop faster than expected, oil's supply-demand dynamics could shift, and prices may fall back below $70 a barrel by year-end. America's oil boom is helping drive global supply growth in 2024. While China's economy is faltering denting demand for Crude. The nation's apparent oil demand as well as imports are declining and holds potential threat on demand.



Source: Bloomberg, AH Research



Source: Bloomberg, AH Research

- **Fed rate cuts and oil prices**

Jobs data pointing to more rate than one rate cut in 2024

The recent US jobs data has shown Non-farm payrolls declining and unemployment rate rising signalling slowdown fears. This has boosted more than one rate cut expectation in the US in 2024. Oil prices usually drop during economic downturns due to a surplus supply in crude markets and dented demand. Even if central banks cut rates to boost growth, it may take time for consumption and energy demand to recover. Investors often seek safer investments during these times. Historically, recessions have led to a 30% drop in WTI prices during rate-cut cycles in 1984-86, 1989-92, 2000-03, 2007-09, and 2019-20 (Source: Bloomberg). WTI prices typically began to rise 180 days after interest rates bottomed out in those periods.

- **WTI Oil: Potential to Surpass $85?**

Supply Threat from Geopolitics and Hurricane

The Israel-Hamas war has so far had a limited global economic impact, but it remains a volatile situation with a risk of escalation. If the conflict widens to involve direct military action between Israel and Iran, oil prices could soar tremendously due to potential attacks on regional oil facilities and the closure of the Strait of Hormuz. This could lead to supply disruption. On the other hand, a lasting cease-fire in Gaza could ease trade flows in the Red Sea, but it would likely have little effect on oil prices, global growth, and inflation.

Another event that poses a supply threat to oil markets is the ongoing hurricane season. This year, the US is likely to see a strong hurricane season, which risks disrupting US oil output. Hurricane Beryl, the earliest in years to occur in July, could push oil prices higher due to supply disruptions. However, the hurricane's impact on the energy industry will depend on its path.

- US elections and oil price

Harris, Trump's Energy plans could both hit oil price

US Election is another important trigger this year which the oil markets will be closely watching. This is because of the fact that the Oil's long-term supply-and-demand dynamics could be significantly impacted by the 2024 US presidential elections, despite differing visions from Republican nominee Donald Trump and Democratic front runner Kamala Harris on climate and energy independence.

Harris may focus on climate change, aiming for net-zero carbon dioxide (CO_2) emissions by 2045 and proposing up to $10 trillion in spending to promote clean energy and rebuild infrastructure. Trump, on the other hand, prioritizes America's energy independence through lower costs and making the U.S. a net energy exporter. Oil could face greater price risks due to Harris' clean energy policies potentially reducing demand, and Trump's America First Energy Plan possibly causing a supply glut.

- **Concluding remarks**

No one truly has a crystal ball – tomorrow, circumstances could shift in the exact opposite direction. Change and volatility appear to be the only constants in the oil market. However, history has certainly taught us there is a direct correlation between geopolitical events and the markets – and with no near end in sight to the Israel- Hamas or Ukraine-Russia conflict, Crude Oil supply threat might bring in temporary bounce in Oil from time to time. Nonetheless, global slowdown fears, China woes and unwinding of OPEC+ cuts are seen exerting downward pressure on the Oil prices. Therefore, volatility is expected to be a key feature in the short to medium term for the global oil markets.

SHRI NAVEEN MATHUR

Director
Commodities, Currencies &
GIFT City, IFSC
Anand Rathi Group

COMMODITIES AS AN ASSET CLASS

Commodities are a wonderful asset elegance with returns which are in large part independent of stock and bond returns. Therefore, adding huge commodity publicity can help diversify a portfolio of shares and bonds, probably reducing the hazard of an ordinary portfolio and boosting returns.

Gold is a exceedingly liquid asset, which isn't any one's liability, carries no credit score chance, and is scarce, historically keeping its fee over the years. It additionally advantages from numerous resources of demand: as an investment, a reserve asset, gold jewellery, and a generation factor. These attributes suggest gold can beautify a portfolio in three key approaches:

- Delivering lengthy-time period returns
- Improving diversification
- Providing liquidity

Silver, as an asset magnificence, may be used in your asset allocation to diversify portfolio dangers due to the fact silver has low correlation with equities.

Silver usually outperforms gold in bull-markets. Hence it can add similarly diversification to the asset allocation in your investment portfolio.

Silver is likewise used in new age industries e.g. Sun panels, electric automobiles, smartphones, superior electronics and so forth. With the boom of those new age industries, silver demand for business use is anticipated to rise extensively within the future. Though commercial demand is rising, the delivery of silver is relatively confined. Therefore, there may be good sized scope of better returns on investment from silver.

Since base metals, such as Copper trading entails shopping for and selling copper contracts or derivatives in monetary markets. Traders purpose to take advantage of price fluctuations in copper by using speculating on its future price. Copper buying and selling can be carried out via numerous platforms, along with futures exchanges, commodities agents, and on line trading platforms.

For example, if copper prices are continuing to rise, then the overall economy may be improving. Alternatively, if prices begin to fall, it may be an indicator that the economy is shrinking in crucial areas such as homebuilding.

The strength bull market in oil, gas, power and coal will retain for the following years. After that, all bets are off, but the zone may additionally get an unexpected uplift from the nascent and surging worldwide environmental financial markets. Already, the Emissions Trading Scheme (ETS) within the EU has induced a stampede of investment into carbon hedge price range and emissions buying and selling.

Today, futures and options contracts may be traded on exchanges around the world on a large array of agricultural merchandise, metals, energy merchandise and smooth commodities. These standardized contracts enable producers of commodities to offload their fee hazard to stop customers and other financial marketplace contributors.

Commodities have also advanced as an asset class because the Nineties, with the improvement of commodity futures indexes and ultimately, investment motors that benchmark towards these indices. Today buyers can pick from an expansion of vehicles for making an investment within the commodities futures markets, from mutual price range to alternate-traded funds or notes, protecting the extensive spectrum from single commodity exposures to quarter based and broad primarily based commodity exposures.

Asset Class Performance

	Asset Class Performance			
	1 YR's	5 YR's	10 YR's	20 YR's
GOLD	16.59 %	35.93 %	25.89 %	190.36 %
SILVER	22.42 %	33.39 %	-8.33 %	227.82 %
CRUDEOIL	10.77 %	16.20 %	-37.77 %	203.17 %
NIFTY	13.11 %	78.59 %	93.02 %	235.50 %
BANKNIFTY	11.69 %	75.11 %	94.87 %	262.62 %
DOLLAR INDEX	2.87 %	4.75 %	15.67 %	-6.60 %
RUPEE	-0.56 %	-14.14 %	-11.41 %	-19.38 %

Investors usually appearance to a commodities allocation to provide 3 key advantages to their portfolios: inflation protection, diversification and return ability.

Because commodities are "real assets," they have a tendency to react to converting financial fundamentals in special methods than shares and bonds, which can be "financial assets." For instance, commodities are one of the few asset lessons that have a tendency to benefit from rising inflation. As call for items and services increases, the fee of those goods and offerings typically rises as well, as do the charges of the commodities used to provide the ones items and services. Because commodity fees generally upward thrust while inflation is accelerating, investing in commodities may additionally offer portfolios with a hedge towards inflation.

In contrast, shares and bonds have a tendency to carry out higher whilst the charge of inflation is strong or slowing. Faster inflation lowers the cost of destiny cash flows paid with the aid of stocks and bonds due to the fact that destiny cash could be capable to shop for fewer items and offerings than they could nowadays.

For these motives, returns from a vast and varied commodity index including the Bloomberg Commodity Index, Credit Suisse Commodities Benchmark or the S&P Goldman Sachs Commodity Index, have historically been largely unbiased of stock and bond returns, but definitely correlated with inflation.

How to trade in Commodity

There are various option to trade in commodity:

- Through Multi Commodity Exchange (MCX)
- Exchange traded funds (ETFs)
- Sovereign Gold bonds
- Physical delivery

SHRI ANUJ GUPTA

Head - Commodities & Currencies
HDFC Securities Limited

WHAT POTENTIAL CONSEQUENCES WILL THE PROPOSED CAPITAL GAINS TAX HAVE ON YOUR WEALTH CREATION?

The Union Budget 2024 has brought about significant changes to the capital gains tax structure, affecting both short-term and long-term investors. This tax is applied to gains from the sale of capital assets such as stocks, mutual funds, real estate, and gold, with the rate varying based on the asset type and holding period.

Investment products are broadly classified based on their underlying assets and holding periods for applying the capital gain tax rate. These classifications are as follows:

1. Funds with more than 65 percent in debt instruments will be classified as specified mutual funds under section 50AA and taxed at the investor's slab rate. Debt funds, conservative hybrid debt funds, money market funds, or debt-oriented funds fall under this category.

2. Funds with less than 65 percent in debt instruments will be treated as long-term capital gains (LTCG) and taxed 12.5 percent after 24 months of holding. Gold, silver, unlisted securities, and international funds come under this category.

3. Equity-oriented funds with more than 65 percent in equities will be taxed 12.50 percent after 12 months of holding. All listed assets, including units of business trusts (REITs and Invits), gold ETFs, all ETFs, and Nasdaq 100 ETFs, fall under this category.

The details of the proposed capital gain tax across the asset classes are as follows:

Table-1

Proposed Capital Gain Taxes

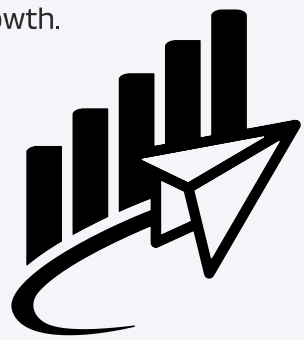
Name of the Assets	Holding period	Proposed STCG (%)	Proposed LTCG (%)
All Listed Assets:			
Stocks	12 months	20%	12.50%
Equity Mutual Funds	12 months	20%	12.50%
Debt & non-equity mutual funds	Not Applicable	Investor's Slab Rate	Investor's Slab Rate
Bonds(listed)	12 months	20%	12.50%
REITs/ InVITs	12 months	20%	12.50%
FOFs -Equity	24 months	20%	12.50%
International FOFs	24 months	Investor's Slab Rate	12.50%
ETF-Gold/Silver	12 months	20%	12.50%
Gold Funds	12 months	Investor's Slab Rate	12.50%
All Unlisted Assets:			
Real Estate(Physical)	24 months	Investor's Slab Rate	12.50%
Gold(Physical)	24 months	Investor's Slab Rate	12.50%
Stocks(unlisted)	24 months	Investor's Slab Rate	12.50%
Bonds(unlisted)	Not Applicable	Investor's Slab Rate	Investor's Slab Rate
Foreign Equity/ Debts	24 months	Investor's Slab Rate	12.50%

Note: The above rates are prepared based on the budget 2024. However, they may vary after clarifications from the government on some assets

Some experts believe the recent hike in the long-term capital gain tax will discourage long-term equity investing and enhance the appeal of other asset classes. Others view the capital gain tax rate as still lower and reasonable compared to global peers and other countries.

The vision to transform India into a developed economy by 2047, with a target of a $30 trillion economy, is not just a dream but a realistic possibility. To achieve this, GDP would need to grow nine times from today's $3.36 trillion, and per capita income would need to rise nearly eight times from today's $2392 per year. We can achieve this goal by augmenting infrastructure, increasing manufacturing capacity, boosting employment, and rationalizing taxation.

To increase employment in households and senior citizens' homes, the government should consider not imposing any tax on incomes up to ₹15 lakhs in a financial year. This initiative boosts disposable income, potentially encouraging greater consumption and investment and ultimately contributing to economic growth.



In addition, the government must provide facilities and establish business-friendly regulations for the unorganized sectors to boost employment.

The government needs to adhere to the fiscal deficit roadmap. In the financial year 2024, the fiscal deficit was 5.6 percent of the GDP. In the 2024 annual budget, the government set a target of 4.9 percent of GDP for the fiscal deficit in FY 2025, which may be challenging to achieve. Based on provisional figures, our debt-to-GDP ratio is about 58.2 percent for 2023–24. The government must reduce the debt-to-GDP ratio to meet the fiscal roadmap of below 4.5 percent.

Taxation on Equity & equity related instruments:

All listed assets, including units of business trusts (REITs and Invits), gold ETFs, all ETFs, and Nasdaq 100 ETFs, fall under this category.

In Budget 2024, the central government has raised the short-term capital gains (STCG) taxes on equities from 15 percent to 20 percent and also proposed a uniform long-term capital gains (LTCG) tax rate of 12.5 percent across all asset classes. As a result, the long-term capital gains (LTCG) tax on equity hiked from 10 percent to 12.5 percent.

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While the 33 percent increase in the STCG tax on equity may seem significant, it's important to remember that equity investments are always for the long term. On the other hand, with the hike of LTCG tax by 25 percent, post-tax returns may impact 0.25% to 0.35%, assuming the rate of returns is from 10% to 14%.

The impact of long-term capital gains under varied return rates must be analyzed with an example.

Below are the detailed calculations and analysis of long-term capital gains.

Table-2

Impact of LTCG Tax on Investor's Return				
Invested Amount ₹	1,00,000.00	1,00,000.00	1,00,000.00	1,00,000.00
Estimated Return %	10.00	12.00	12.50	14.00
Estimated Return Amount ₹	10,000.00	12,000.00	12,500.00	14,000.00
Earlier Tax(10%) ₹	1,000.00	1,200.00	1,250.00	1,400.00
Proposed Tax(12.5%) ₹	1,250.00	1,500.00	1,562.50	1,750.00
Differential LTCG Tax ₹	250.00	300.00	312.50	350.00
Post Tax impact (%)	0.25	0.3	0.31	0.35

Suppose an investor earned a 10 percent pre-tax return on an equity mutual fund. According to the existing tax rate, his post-tax return would have been 9 percent. Under the proposed new tax rate of 12.5 percent, his post-tax return will be 8.75 percent.

Hence, the differential in post-tax returns at the end of the first year is 0.25 percentage points. The examples provided clearly show that as estimated return rates increase while other factors remain constant, the difference in post-tax returns also increases.

Let's take another example with the investment amount of ₹10 lakhs in an equity mutual fund.

Table -3

Impact of LTCG tax under proposed new rate			
Invested Amount ₹	10,00,000.00	10,00,000.00	10,00,000.00
Estimated Return	12%	12%	12%
Holding period	One year	Ten Year	Ten Year
Estimated capital Gain ₹	1,20,000.00	21,05,848.00	21,05,848.00
Exemption limit ₹ *	-	-	100000/125000
Earlier Tax (10%)	12,000.00	2,10,585.00	2,00,585.00
Proposed Tax (12.5%)	15,000.00	2,63,231.00	2,47,606.00
Differential LTCG Tax ₹	3,000.00	52,646.00	47,021.00
Post Tax impact (%)	0.30	5.26	4.70

*For illustration purposes, the capital gains exemption limit has not been considered in columns no-1 &2.

Suppose the investor invests ₹10 lakhs in an equity mutual fund today. It would be worth ₹ 31.06 lakhs after ten years, assuming that the rate of return is 12 per annum. Comparing the existing capital gain tax and the proposed new tax rate without deducting the capital gains exemption threshold limits the differential in post-tax returns at the end of the 10 years to 5.26 percent. The average annual differential will be 0.52 percentage points, which is higher than 0.3 percentage points for one year. In the long term, the difference in post-tax returns increases gradually due to the compounding effect of investment returns, as illustrated above in Table No-3.

When assessing their tax liability, investors need to consider the rise in the LTCG (long-term capital gains) tax rate and the increase in the capital gains exemption from ₹ 1 lakh to ₹ 1.25 lakh. Considering the limit for capital gains exemption, the impact of the LTCG tax burden decreases. However, in the given examples, the effect of differential capital gain taxes decreases to 4.70% from 5.26%.

Taxation on Property, Gold, Gold ETF and Gold Funds:

Budget 2024 has also reduced the long-term capital gain tax on property (land and buildings) and gold from 20% to 12.5% without indexation.

The proportion of a decent allocation in a portfolio became difficult earlier when Gold ETFs & Gold Funds were being taxed at a slab rate. As per Budget 2024, Gold, Gold ETF, & Gold Funds are now excluded from the purview of Specified mutual fund definitions.

After this rationalization of capital tax, Gold, Gold ETFs, and gold Funds will be taxed at 12.50 percent based on their holding period, which may be 12 months or 24 months. However, Gold funds of funds (FOFs) will become eligible for LTCG at 12.50 percent after 24 months of holding, and short-term capital gain will be taxed at a slab rate.

Taxation of Foreign Equity:
With effect from the next financial year, the proposed foreign equity funds' capital gain taxation has been reduced from the existing rates. This may lead to investors having more foreign funds allocated in their portfolios for geographical diversification and to take advantage of another equity market in a different market cycle.

Strategy to Minimize Capital Gain Tax:

- **Hold the investment for a longer period:**

Investors should regularly review their portfolios and hold onto their assets for a longer period of time to take advantage of the lower tax rate on long-term capital gains from equity investments.

2. Utilise exemption limits:
Investors should use the enhanced long-term capital gain tax exemption limit of ₹1.25 lakhs when booking profits in a financial year to maximize tax-free gains.

3. **Periodically evaluation of portfolio :**
Investors should regularly review their portfolios based on their needs and financial goals. They should identify assets that generate decent returns and those that underperform, leading to losses, and then decide whether to hold or sell these assets.

Aggressive mutual funds are investment vehicles that aim to maximize returns by taking a higher level of risk. These funds typically invest in a portfolio of stocks, bonds, or other securities with a higher potential for growth but also come with a higher degree of volatility.

The Conservative hybrid mutual funds are suitable for lumpsum investment and systematic withdrawal plans. This fund is ideal for investors who want a risk-adjusted return for regular income.
However, Aggressive balanced funds are a type of investment vehicle that aims to provide a higher potential for growth by investing in a mix of asset classes with a higher allocation to equities. This fund is ideal for investors who want a higher potential for growth.

4. Consult your tax advisor:
It is better to always consult your tax advisor while booking profits from your investment. Due to frequent changes in tax structures and rates, one can make more losses on his investment. Even now, there are many lacunae in the tax system. The tax advisor should inform the investors about the tax rate of the portfolio and provide maximum tax advantages by offsetting gains with losses from underperforming investments in their portfolio.

Summary:
The abolition of the angel tax for all classes of investors is a good initiative and may revive start-up ecosystem activity. The rapid increase in futures and options (F&O) trading volumes incurred losses for retail investors. The higher securities transactions tax (STT) on F&O is also relatively marginal, which will help to protect retail investors by safeguarding them from risks associated with uninformed trading in this market segment.

Proactive financial planning and a comprehensive understanding of tax regulations can significantly enhance post-tax returns. Mutual funds offer the flexibility to invest in various assets and are managed by professionals. They are less risky than direct equity, have strong regulation, operational transparency, and tax efficiency, and diversify investors' money into different asset classes, generating consistent returns over the long run. Holding assets for over a year qualifies them for long-term capital gains rates (12.5%), which are lower than short-term rates (20%). After holding mutual funds for a year, you can redeem the units and enjoy tax-free limits of ₹1.25 lakhs.
On the other hand, diversifying your portfolio with different asset classes is tax-efficient and generates decent returns in the long run. Given the proposed capital gains tax rates, investors should consider strategic approaches to minimize tax liability. Market valuations are unlikely to be significantly affected despite increased capital gain taxes. The market is resilient, and any short-term impacts on investment behavior due to tax changes will likely be absorbed, leading to a return to balance. However, take a cautious note, given current market valuations and geo-political issues. Investors should consider small and mid-caps only if they can handle market volatility and have a longer investment horizon.

CMA R K MOHAPATRA

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All about Property Taxation along with latest changes proposed in Final Budget, 2024

Introduction-:

As we know, definition of Capital Asset u/s 2(14) includes property of any kind held by assessee, whether or not connected with business or not. If there is any gain or profit from transfer of capital assets then it shall be chargeable to tax under the head **<u>"Capital Gain" in the previous year in which transfer took place</u>**. As per above definition, capital asset includes immovable property hence if we sale immovable property then any profit or gain arises from transfer of that immovable property shall be taxable under the head **<u>"Capital Gain"</u>** in the year in which such property is sold.

<u>For e.g.</u> If property is sold in the year 2023-24 then any profit or gain arised from such property shall be taxable as Capital gain in the year 2023-24. Sometimes question arises in ordinary person mind that if we sale residential property then why we need to pay tax as we not consuming this property in our business or it is not commercial property. **<u>Now it is important to note that definition of capital asset has been drafted in such a way that it includes both residential as well as commercial property therefore we have to pay tax on sale of property irrespective of the nature of property</u>**. Our Honorable Finance Minister "Nirmala Sitharaman Ji" in the recent Final Budget of 2024 has proposed some important changes regarding taxation of property that will be discussed further in this article.

Pre Budget Position on Property taxation-:

<u>Type of Capital Gain on Sale of Property</u>

If the immovable property, being land or building, is sold after 24 months from the date of purchase then it shall be classified as Long Term Capital Assets and if it is sold before 24 months from the date of purchase then it shall be classified as Short Term Capital Assets.

Now the question arises why we need to divide the immovable property into Long Term Capital Asset and Short Term Capital Asset. This is because applicability of rate of tax on sale of capital asset is different on both Long Term Capital asset as well as Short Term Capital asset which are discussed below-:

<u>For Long Term Capital Assets (i.e. immovable property sold after 24 months)</u>

As per section 112 of Income tax Act, 1961 If we sale the Long Capital Asset then any profit or gain arises from sale of such property shall be **taxable at flat rate of 20%.**

For Short Term Capital asset (i.e. immovable property sold before 24 months)

If we sale the Short Term Capital Asset then any profit or gain arises from sale of such property shall be taxable **at normal tax rates i.e. slab rate as applicable.**

Particulars	STCG on Property	LTCG on sale of Property
Tax rates	Slab Rates	20%

Benefit of indexation

As we know Inflation rate is increasing day by day in the developing country like India. Therefore, suppose if we purchase the property in 2001-02 for Rs. 10, 00,000/-and sold it in year 2023-24 for Rs 50, 00,000/-. Now as we discussed above any profit or gain arises from sale of property shall be taxable under the head "Capital Gain" in the year in which property is sold. Calculation of profit or gain is discussed below-:

Sale Consideration i.e. sale value of property – Rs 50, 00,000

Purchase cost of property – Rs 10,00,000

Profit on sale – **Rs 40,00,000 [50L-10L]**

Now if we say profit of Rs 40,00,000 will be taxable under the head capital gain then it would be very unfair as propertyis purchased in 2001-02 and now if we take the same cost as it purchased in 2001-02 then it would not be fair as we know inflation is increasing day by day and value of property that was purchased in 2001-02 shall not same in year 2023-24 for the prospective of inflation rate..

Therefore Govt. gave the benefit of indexation on Long Term Capital Assets (i.e. sold after 24 months). Now whenever we calculate the profit or gain on sale of property then we will take indexed cost of acquisition instead of cost of acquisition.

Impact of Indexation in continuation with above example

Indexed Cost of Acquisition- Cost of acquisition x Index for the year of sale / Index for the year of acquisition

Indexed Cost of Acquisition- 10,00,000 x 348 [Index for 2023-24] / 100 [Index for 2001-02] = Rs 34,80,000/-

Profit on sale of Property = 50,00,000-34,80,000 = Rs 15,20,000/-

Now we can clearly see the impact of indexation that, now Rs 15,20,000 shall be taxable as Capital Gain as compared to Capital Gain without indexation for Rs 40,00,000. **It is important to note that we can take the benefit of indexation only on Long Term Capital Asset i.e. property sold after 24 months.**

Calculation of Long Term Capital Gain/loss

Particulars	Amount
Sale Consideration	xxxx
Less: Indexed Cost of Acquisition	xxxx
Less: Indexed Cost of Improvement	xxxx
Less: Transfer Expense	xxxx
Gross Long Term Capital Gain	xxxx
Less : Exemption u/s 54/54EC/54F	xxxx
Taxable Long Term Capital Gain	xxxx

Some Important Points to be consider on sale of property

- If the property is purchased before 01.04.2001 **then we can take the benefit of Fair Value of Property as on 01.04.2001.** It means suppose if property is purchased in year 1988-89 for Rs 10,00,000/- and fair value as on 01.04.2001 is Rs 25,00,000/- then we can take the Rs 25,00,000/- as cost of acquisition for calculating indexed cost of acquisition.

- **If the sale value exceeds the stamp duty value of property** and difference is more than 10% of consideration then as per section 50C of the Income Tax Act, stamp duty value shall be considered as **full value of consideration for calculating capital gain on sale of such property.**

For e.g. – If Sale Value is Rs 45,00,000 and stamp duty value of the same property is Rs 50,00,000. Now the difference is Rs 5,00,000 which is more than the 10% of consideration i.e. Rs 4,50,000 [45,00,000*10%]. Therefore stamp duty value i.e. Rs 50,00,000 shall be considered as full value of consideration for calculating capital gain as per section 50C.

- If there is any transfer expense like brokerage charges, registration charges on sale of property etc. then seller can also take the deduction of these expenses while calculating capital gain on sale of such property.
- If we have incurred any major expense then we can take it as Cost of improvement and if there is long term capital gain then also take it as indexed cost of improvement in the same manner as we discussed for indexed cost of acquisition.

Latest Changes Proposed by Final Budget of 2024

There are major two changes proposed by our Honorable Finance Minister in Final Budget of 2024 which are as follows-:

- LTCG Tax reduced to 12.5% from 20%
- Benefit of Indexation is removed

Let's understand the effect of above changes with the help of example-:

Suppose Mr. A purchased the property in 2001-02 for Rs 1,00,00,000 and sold the same in year 2024-25 for Rs 8,45,00,000. We have assumed this sales value based upto annual property growth of 9.3% as data published by Govt. of India.

Pre Budget Position

Sale Value – Rs 8,45,00,000

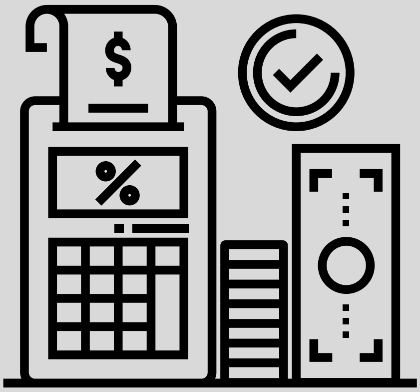
Cost of Acquisition-
Rs 1,00,00,000

Indexed cost of acquisition-
Rs 3,63,00,000 [1crore x 363]
100

Taxable Capital Gain – Rs 4,82,00,000 [8,45,00,000-3,63,00,000]

Tax Rate on sale of property – 20%

Amount of Tax payable as per section 112 –Rs 96,40,000 [4,82,00,000*20%]



Post Budget Position

Sale Value – Rs 8,45,00,000
Cost of Acquisition-
Rs 1,00,00,000
Indexed cost of acquisition- Not Available
Taxable Capital Gain –
Rs 7,45,00,000 [8,45,00,000-1,00,00,000]
Tax Rate on sale of property – 12.5%
Amount of Tax payable as per section 112 – Rs 93,12,500 [7,45,00,000*12.5%
Lower tax payable post budget – Rs. 3,27,500 [96,40,000-93,12,500]

Conclusion

As we can see from above pre-post budget analysis that Taxpayer have to pay lower tax of Rs 3,27,500 on sale of property. Even if the LTCG on sale of property is reduced to 12.5% from 20% but on the other side indexation benefit is removed which was very necessary in prospective of inflation rate. As we have discussed earlier that inflation is increasing day by day in developing country like India therefore Govt. gave the benefit of indexation earlier. **However, now Govt. proposed to remove the benefit of indexation w.e.f. 23rd July, 2024. It is true that it will increase/ decrease the Govt. tax collection in case to case basis. But it would also result in increase in amount of tax on sale of property in short term like 5-10 years which can also lead to increase in black money in real estate sector. There is already huge amount of black money involved in real estate sector but after this change there is increase in black money in real estate sector.**

CA SANGAM AGARWAL

Regional Council Member,
NIRC of ICAI

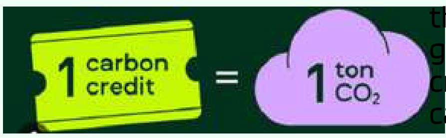
Carbon Credits : A Primer

Introduction

The Kyoto Protocol of 1997 and the Paris Agreement of 2015 were international accords that laid out international CO2 emissions goals. With the latter ratified by all but six countries, they have given rise to national emissions targets and the regulations to back them. With these new regulations in force, the pressure on businesses to find ways to reduce their carbon footprint is growing. Most of today's interim solutions involve the use of the carbon markets. What the carbon markets do is turn CO2 emissions into a commodity by giving it a price. These emissions fall into one of two categories: Carbon credits or carbon offsets, and they can both be bought and sold on a carbon market. It's a simple idea that provides a market-based solution to a thorny problem.

What is a carbon credit?

A carbon credit is a kind of permit that represents 1 ton of carbon dioxide removed from the atmosphere. They can be purchased by an individual or, more commonly, a company to make up for carbon dioxide emissions that come from industrial production, delivery vehicles or travel.



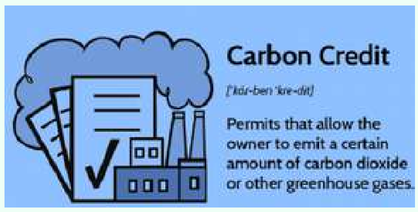
Carbon credits are most often created through agricultural or forestry practices, although a credit can be made by nearly any project that reduces, avoids, destroys or captures emissions. Individuals or companies looking to offset their own greenhouse gas emissions can buy those credits through a middleman or those directly capturing the carbon. In the case of a farmer that plants trees, the landowner gets money; the corporation pays to offset their emissions; and the middleman, if there is one, can earn a profit along the way.

Carbon credits are measurable, verifiable emission reductions from certified climate action projects. These projects reduce, avoid or remove greenhouse gas (GHG) emissions. Moreover, they also bring a whole host of other positive benefits, for example, they empower communities, protect ecosystems, restore forests, or reduce reliance on fossil fuels. Carbon credits are permits that allow the owner to emit a certain amount of carbon dioxide or other greenhouse gases (GHGs). One credit allows the emission of one ton of carbon dioxide or the equivalent of other greenhouse gases. Carbon credits are also known as carbon offsets.

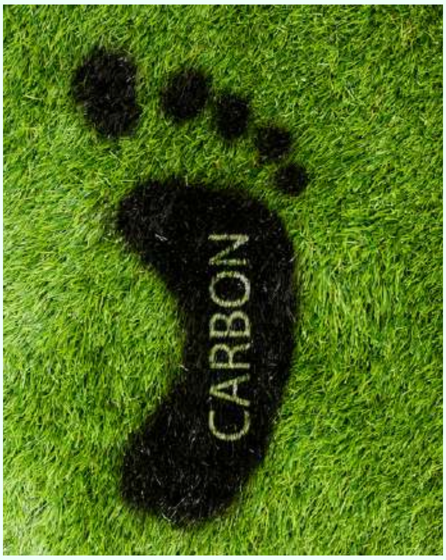
The carbon credit is half of a cap-and-trade program. Companies that pollute are issued credits that allow them to continue to pollute up to a certain limit that's periodically reduced. The company can sell any unneeded credits to other companies that need them so private companies are doubly incentivized to reduce greenhouse emissions.

Carbon credits can help companies to meet their climate-change goals

Under the 2015 Paris Agreement, nearly 200 countries have endorsed the global goal of limiting the rise in average temperatures to 2.0 degrees Celsius above preindustrial levels, and ideally 1.5 degrees. Reaching the 1.5-degree target would require that global greenhouse-gas emissions are cut by 50 percent of current levels by 2030 and reduced to net zero by 2050. More companies are aligning themselves with this agenda: in less than a year, the number of companies with net-zero pledges doubled, from 500 in 2019 to more than 1,000 in 2020.



To meet the worldwide net-zero target, companies will need to reduce their own emissions as much as they can (while also measuring and reporting on their progress, to achieve the transparency and accountability that investors and other stakeholders increasingly want). For some companies, however, it's prohibitively expensive to reduce emissions using today's technologies, though the costs of those technologies might go down in time. And at some businesses, certain sources of emissions cannot be eliminated. For example, making cement at industrial scale typically involves a chemical reaction, calcination, which accounts for a large share of the cement sector's carbon emissions. Because of these limitations, the emissions-reduction pathway to a 1.5-degree warming target effectively requires "negative emissions," which are achieved by removing greenhouse gases from the atmosphere.



How companies can offset carbon emissions

There are countless ways for companies to offset carbon emissions. Though not a comprehensive list, here are some popular practices that typically qualify as offset projects:

- **Investing in renewable energy** by funding wind, hydro, geothermal, and solar power generation projects, or switching to such power sources wherever possible.
- **Improving energy efficiency** across the world, for instance by providing more efficient cook stoves to those living in rural or more impoverished regions.
- **Capturing carbon from the atmosphere** and using it to create biofuel, which makes it a carbon-neutral fuel source.
- **Returning biomass to the soil** as mulch after harvest instead of removing or burning. This practice reduces evaporation from the soil surface, which helps to preserve water. The biomass also helps feed soil microbes and earthworms, allowing nutrients to cycle and strengthen soil structure.
- **Promoting forest regrowth** through tree-planting and reforestation projects.
- **Switching to alternate fuel types**, such as lower-carbon biofuels like corn and biomass-derived ethanol and biodiesel.

Why Should Levels of Carbon and Greenhouse Gases Be Reduced in the Atmosphere?

Scientists at the United Nations' Intergovernmental Panel on Climate Change (IPCC) have shown that increased levels of greenhouse gases (GHG) in the atmosphere are warming the planet. This creates extreme weather changes around the world. Carbon dioxide is the main GHG. It's created by burning fossil fuels that include coal, oil, and gas. Reducing the amount of carbon dioxide we emit may avoid further damage to our climate.

Why Companies Buy Carbon Credits

Companies buy carbon credits to offset their emissions. There's growing public and institutional pressure for companies to make net-zero commitments given the urgency of the climate crisis. These are pledges that companies take to cut the amount of carbon they emit throughout their operations. Reductions in emissions are possible through changes in business practices for some companies but a wholesale elimination of emissions isn't feasible for most firms. Carbon credits fund emission-reduction activities such as tree-planting or nature conservation in lieu of completely eliminating their own emissions.

Are Carbon Credits the Same as Offsets?

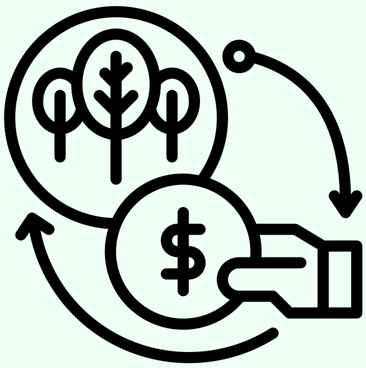
They are not. Both carbon credits and offsets are measured in tonnes of CO2e, which can make it confusing for people because offsets and credits are absolutely not the same thing. Unlike carbon credits, offsets are not created or distributed by a specific regulatory body. They are also not limited to individual regulatory jurisdictions (like carbon credits are) — in fact, they may trade freely on any number of "voluntary markets" around the world. If carbon credits are a measurement unit to "cap" emissions (meaning permissible emissions), carbon offsets can be thought of as a measurement unit to "compensate" an organization for investing in green projects or initiatives (whether natural or technological) that remove emissions.

The offset advantage: New revenue streams

There's one more big advantage of carbon offsets. If you're the company selling them, they can be a significant revenue stream! The best example of this is Tesla. Yes, that Tesla, the electric car maker, who sold carbon credits to legacy car manufacturers to the tune of $518 million in just the first quarter of 2021. That's a huge deal, and it's single-handedly keeping Tesla out of the red. If the market for carbon credits continues to go up, and the pricing of credits keeps increasing, Tesla and other environmentally beneficial businesses could reap huge dividends.

What projects create carbon credits?

Carbon credits were devised as a mechanism to reduce greenhouse gas emissions by creating a market in which companies can trade in emissions permits. Companies receive a set number of carbon credits under the system that decline over time. They can sell any excess to other companies. Carbon credits create a monetary incentive for companies to reduce their carbon emissions. Those that can't easily reduce emissions can still operate but at a higher financial cost. Proponents of the carbon credit system say that it leads to measurable, verifiable emission reductions. Carbon credits are created from projects that avoid the generation of GHG emissions or that remove GHGs from the atmosphere. These projects include "nature-based solutions," such as reforestation and regenerative agriculture efforts, and "engineered solutions," such as combusting methane emitted from landfills to electricity and direct air capture. electricity and direct air capture.



What are carbon markets?

In a nutshell, carbon markets are trading systems in which carbon credits are sold and bought. Companies or individuals can use carbon markets to compensate for their greenhouse gas emissions by purchasing carbon credits from entities that remove or reduce greenhouse gas emissions.
One tradable carbon credit equals one tonne of carbon dioxide or the equivalent amount of a different greenhouse gas reduced, sequestered or avoided. When a credit is used to reduce, sequester, or avoid emissions, it becomes an offset and is no longer tradable.

How many types of carbon markets are there?

There are broadly two types of carbon markets: compliance and voluntary.
Compliance markets are created as a result of any national, regional and/or international policy or regulatory requirement. Voluntary carbon markets – national and international – refer to the issuance, buying and selling of carbon credits, on a voluntary basis. The current supply of voluntary carbon credits comes mostly from private entities that develop carbon projects, or governments that develop programs certified by carbon standards that generate emission reductions and/or removals. Demand comes from private individuals that want to compensate for their carbon footprints, corporations with corporate sustainability targets, and other actors aiming to trade credits at a higher price to make a profit.

Examples of players in the carbon credit marketplace

- **Carbon credit registries and standards bodies:** VERRA's Verified Carbon Standard (VCS), Gold Standard, Climate Action Reserve, American Carbon Registry (ACR), Puro. Earth, and Isometric
- **Carbon credit and offsetting principles:** Integrity Council for the Voluntary Carbon Market's Core Carbon Principles and Oxford Net Zero-Aligned Offsetting Principles
- **Carbon credit verifiers:** SCS Global Services and DNV
- **Carbon credit brokers and marketplaces:** 3Degrees, Cloverly, Lune, Patch, South Pole Group, and Terrapass
- **Carbon credit ratings agencies:** BeZero, Calyx, and Sylvera

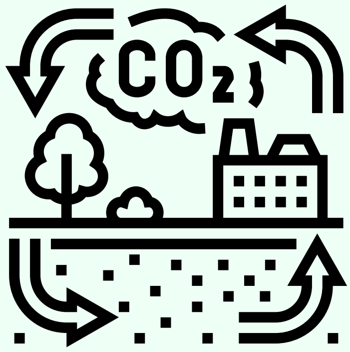
How Large Is the Carbon Credit Market?

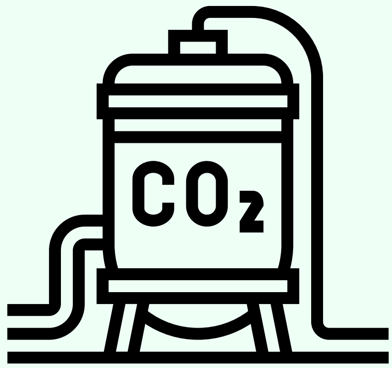
The voluntary carbon market is difficult to measure. The cost of carbon credits varies, particularly for carbon offsets, since the value is linked closely to the perceived quality of the issuing company. Third-party validators add a level of control to the process, guaranteeing that each carbon offset actually results from real-world emissions reductions, but even so there's often disparities between different types of carbon offsets. While the voluntary carbon market was estimated to be worth about $400 million last year, forecasts place the value of the sector between $10-25 billion by 2030, depending on how aggressively countries around the world pursue their climate change targets.

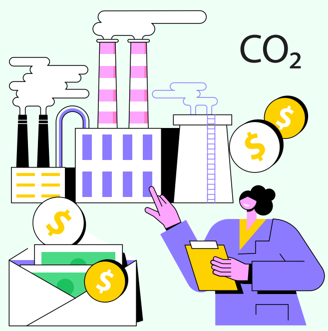
Who are the players?

Unlike with stock exchanges, carbon credits lack widely adopted standards and large centralized marketplaces. This makes it difficult to find, understand, and compare carbon credit projects.

Instead, leaders have to navigate a maze of various standards and players with frustratingly overlapping roles. There are numerous carbon credit registries and standards bodies that provide minimum requirements for various project attributes and in some cases list projects that meet their own standards.







- **Carbon credit verifiers**, also known as validation/verification bodies (VVBs), assess whether projects meet certain standards. They range from global companies to niche players that focus on just one type of project.
- **Carbon credit brokers and marketplaces** connect buyers with project developers. Some list projects they helped finance and develop, raising the potential for conflicts of interest.
- **Carbon credit ratings agencies** assess carbon credit projects along various dimensions, including but not limited to the attributes featured in standards. They tend to sell their ratings via a subscription model to prospective credit buyers. These ratings agencies provide much-needed transparency and convey key attributes of the projects they rate.

With so many players and many standards, it's no wonder companies find it difficult to navigate the landscape. The Voluntary Carbon Markets Integrity Initiative or Oxford Net-Zero Aligned Offsetting Principles provide holistic carbon credit and offsetting principles and are a great place for leaders to start, but even these are updated periodically to keep pace with the changing landscape.

How does carbon credit trading work in practice?

Carbon credit trade has three stages – create, issue, and trade/retire.

Create: Example of a farmer planting trees - first, the farmer will plant the tree. Next, the farmer, or the project developer who hired the farmer, will conduct a Baseline Emissions Assessment (BEA), i.e. an assessment of how much carbon is being removed from the atmosphere, and prepare a Project Design Document (PDD) that includes results from the BEA as well as other details about the execution and monitoring of the tree plantation project.

Issue : Then, an independent verifying body will validate the PDD and issue a report that confirms that the project is eligible for carbon credits. The project developer must then submit this report to a standards program that will officially issue the carbon credit and enter it in their records.

Trade/ Retire : The project developer can then decide to sell the carbon credit, for example to a steel company that wants to lower its net emissions. For this, they have to notify the standards program, which in turn will retire the carbon credit in their records, i.e. note that it has been claimed by the steel company and is therefore no longer in circulation.

How much is a carbon credit worth?: While there is significant international momentum around creating a standardized price for a single carbon credit, today the price for a carbon credit is highly variable ranging from a few rupees to a few thousand rupees. As with any other tradeable commodity, the price of a carbon credit comes down to its quality. Quality in this case refers to three key aspects – credibility, durability, and existence of spillover benefits.

What determines the quality of a carbon credit?

To qualify as a carbon finance project it must meet some fundamental criteria, and pass Climate Impact Partners' own stringent quality assurance requirements. Specifically, high-quality projects must meet the following criteria to establish the quality of the carbon credit. These are designed to ensure quality in carbon market approaches to meet global climate goals:

- **Real.** The avoidance or removal of CO_2e must actually occur.
- **Measurable.** It must be possible to reliably quantify an emission reduction.
- **Additional**. This means that there is a net emission reduction that would not have happened were it not for the sale of carbon credits. For example, if a project were already legally required to do what it is doing it would not count as additional, nor would it be additional if it can achieve all its funding through other mechanisms. The sale of carbon credits is required to enable the project to take place.
- **Unique**. Each tonne of CO_2e avoided or removed must count towards only one carbon credit. Companies cannot double count the same carbon credit towards separate emission reductions targets.
- **Permanent**. This focuses on how long the carbon dioxide removed or avoided will be kept out of the atmosphere. To count as permanent, the reduction must be designed to last for at least 100 years, with robust measures to prevent and compensate for future events that might reverse the reduction. Projects that are at risk of reversal, such as forestry projects that may be damaged by wildfire, must allocate a portion of carbon credits - determined by risk factors - to a central buffer pool, which cannot be traded on the voluntary carbon market. The buffer pool acts as an insurance pot, ensuring there are spare carbon credits, in the event of future worst-case scenarios.
- **Risk managed**. This involves taking steps to ensure that the project is developed as envisaged, continues to follow evolving scientific evidence and meets the relevant standard's rules, and doesn't fall foul of changing legislation and regulations. Climate Impact Partners has considerable expertise here, with more than 25 years taking projects through the full cycle, from idea through to carbon credit retirement (see below).
- **Independently** verified. An independent auditor must review each project to validate that it follows the appropriate methodology that has been set by a standard, and to verify that the monitoring and measurement of emission reductions are accurate before carbon credits are issued.

What are the challenges?

Progress has been made towards agreeing on the processes and methodologies that countries need to follow to access the carbon markets. And there are many opportunities – not least the benefits that will accrue by diverting a share of the proceeds to support the most vulnerable countries to adapt to climate change. However, there are also serious concerns including issues related to double-counting of GHG emission reductions, human rights abuses, and green washing (in which companies falsely market their green credentials, for example, misrepresentations of climate-neutral products or services). Which is why the Paris Agreement negotiations on this topic have been so complex and protracted. For carbon markets to be successful, these issues must be addressed. Emission reductions and removals must be real and aligned with the country's NDC. There must be transparency in the institutional and financial infrastructure for carbon market transactions. And there must be adequate social and environmental safeguards to mitigate against any adverse project impacts – and to promote positive ones.

Looking ahead

UN Secretary-General Antonio Guterres has urged the world to "put the pedal to the metal" in addressing the climate crisis. If held to high standards of integrity and transparency, carbon markets can help accelerate the transformation needed, by effectively putting a price on pollution and creating an economic incentive for reducing emissions. They can also help generate some of the vast sums needed to build resilience.

Conclusions

With the enormous growth in companies' use of carbon credits to meet their sustainability goals and carbon footprint reduction targets, there is an increasingly wide range of projects that are generating carbon credits from which to choose. Companies should choose the carbon credit strategy that best meets their objectives. Purchasing high-quality credits reduces the risk of negative publicity and green washing charges and bolsters the odds that the carbon you think you are avoiding or removing is actually being avoided and removed — in both the short and long terms. Last year, the Government of India announced its intent to roll out a Carbon Credit Trading Scheme by 2026. While the National Steering Committee for the Indian carbon market is yet to announce more details, the official notice referred to a voluntary as well as a compliance-based element to the scheme.

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Fourth Industrial Revolutions and the Wake-up Call for the Accountancy Profession

"For accountants to thrive in the era of digital transformation, it is essential that they adapt to emerging technologies and continuously upgrade their skills. The future of the profession depends on our ability to integrate these new tools and techniques effectively."-Michael Page2

Abstract

The Fourth Industrial Revolution (4IR) presents significant opportunities and challenges for the accounting profession. This comprehensive analysis explores how global professional bodies for Certified Management Accountants (CMAs) and Certified Public Accountants (CPAs) can respond effectively to these changes. The study covers key areas including the integration of emerging technologies into curricula, enhancing cybersecurity training, bridging the skills gap, and fostering continuous professional development (CPD). It highlights the need for updated certification programs, hands-on training with new technologies, and strong industry-academic partnerships. The analysis underscores the importance of developing global standards and ethical guidelines that reflect technological advancements. Supported by seminal research from organizations such as the International Federation of Accountants (IFAC), Chartered Institute of Management Accountants (CIMA), and Deloitte, the recommendations aim to equip accounting professionals with the skills needed to navigate the digital era. By addressing these policy issues and implementing strategic updates, professional bodies can ensure their members are well prepared for the evolving demands of the 4IR and continue to add value in a technology-driven landscape.

Keywords and Phrases: Fourth Industrial Revolution (4IR), Technological Integration in Accounting, Cybersecurity Training for Accountants, Continuous Professional Development (CPD), Skills Gap and Data Analytics, Global Standards and Ethical Guidelines

1. Introduction

1.1. Backdrop

The Fourth Industrial Revolution (4IR) is characterized by a fusion of technologies that blur the lines between the physical, digital, and biological spheres. This revolution is rapidly transforming various industries, including the accountancy profession. As new technologies such as artificial intelligence (AI), blockchain, and big data analytics become more integrated into accounting practices, professionals in this field must adapt to the changes to stay relevant. The term "Fourth Industrial Revolution" was coined by Klaus Schwab, the Founder and Executive Chairman of the World Economic Forum.

1 Prof. (Dr.) D. Mukherjee[AKA Mukhopadhyay], is an educationist and Management Scientist based at Bangaluru, Karnataka, India is currently serving the Board of M/s Simplex Infrastructure Ltd , an Infastructire Development Giant incorporated in 1920 in British India as a Chartered ed Company as an Independent Director within the meaning of Section 149 of the Companies Act, 2013 besides having served corporate sector over a period of more than one and a half decade and in University Academics for last two decades discharging the responsibilities as Professor of Management (Finance & Accounting/Law/General Management) and Director, Dean , Registrar and Vice Chancellor across pan India.

Schwab describes it as a revolution that is fundamentally changing the way we live, work, and relate to one another. The 4IR is distinct from previous industrial revolutions due to the speed, scope, and impact of the technological advancements driving it. Technologies such as AI, robotics, the Internet of Things (IoT), and quantum computing are not only enhancing productivity but also transforming business models and reshaping entire industries (Schwab, 2016). The accountancy profession is experiencing significant transformations due to the 4IR. These changes can be grouped into three main categories: technological advancements, automation of accounting tasks, and the need for new skill sets. The integration of AI and machine learning in accounting processes is revolutionizing the way financial data is analysed and interpreted. For instance, AI-powered tools can now perform complex data analysis tasks more accurately and efficiently than humans, leading to more insightful financial reporting and decision-making (Deloitte, 2017). Automation is another key impact of the 4IR on accountancy. Routine tasks such as bookkeeping, payroll processing, and tax preparation are increasingly being automated. This not only reduces the time and effort required to perform these tasks but also minimizes the risk of human error. Research indicates that by automating these processes, accounting firms can achieve significant cost savings and improve service delivery (PwC, 2018). As technology continues to evolve, the skills required for accountants are also changing. There is a growing demand for professionals who are not only proficient in traditional accounting practices but also possess technological skills and a deep understanding of data analytics. According to a study by the Institute of Management Accountants (IMA), the future accountant must be adept at leveraging technology to add value to their clients and organizations (IMA, 2019). In the 21st century, digitalization has become a pervasive force, impacting nearly every facet of social life. From individuals and societies to economies and cultures, digital technology is transforming the world. The rapid pace of technological, economic, and cognitive changes is compelling professions to adapt in line with the evolving global landscape. For modern professions, embracing digitalization has shifted from an option to an essential requirement.

Those professions that fail to adapt risk becoming obsolete. The accounting profession, like many others, is undergoing significant change due to digitization and technological advancements. Computer systems have streamlined accountants' workloads, making previously complex tasks more manageable and efficient. Looking ahead, digital transformation is crucial for the future of accounting. Traditional practices—such as manual record-keeping and paper-based transactions—are being replaced by advanced, internet-based solutions like cloud computing and blockchain technology. As digitalization continues its relentless advance, the accounting industry must evaluate its readiness to embrace this revolutionary shift

2 Michael Page (December 15, 1965-) born **in** London, England, earned his undergraduate degree in Accounting and Finance from the University of London. He later pursued a Master's degree in Business Administration (MBA) from the London Business School, where he specialized in Strategic Management. Besides, Fellow Member of the Association of Chartered Certified Accountants (ACCA) and Member of the International Federation of Accountants (IFAC). Michael Page has had a distinguished career in the accounting profession, culminating in his role as the Chief Executive Officer (CEO) of the Association of Chartered Certified Accountants (ACCA) from 2015 to 2020. During his tenure, he played a pivotal role in driving the global strategy of ACCA, focusing on innovation and technology integration within the profession. His leadership was instrumental in advancing the ACCA's global presence and enhancing the relevance of its qualifications in the face of rapid technological change. Michael Page is renowned for his contributions to modernizing accounting practices and integrating emerging technologies into the profession. Under his leadership, ACCA launched several initiatives aimed at incorporating digital skills and advanced technologies into the accounting curriculum, preparing accountants for the challenges of the Fourth Industrial Revolution. He also advocated for continuous professional development and the need for accounting professionals to embrace technological advancements to maintain their relevance in a rapidly evolving landscape. His work has been influential in shaping the future of accounting education and practice, ensuring that accountants are equipped with the skills necessary to navigate and excel in the digital age. His efforts have helped bridge the gap between traditional accounting practices and the new demands of the technological era.

1.2. Objectives and Scope of the Discourse

The primary objective of this discussion is to explore the various dimensions of the 4IR and its implications for the accountancy profession. We will examine how emerging technologies are reshaping accounting practices, the challenges and opportunities they present, and the steps accountants can take to remain relevant in this rapidly evolving landscape. Additionally, this discussion aims to provide policy recommendations for supporting the transition to a tech-enabled accountancy profession. Michael Page emphasizes the critical need for accountants to adapt to technological advancements in order to remain relevant and effective. He highlights that digital transformation is not just a passing trend but a fundamental shift that requires accountants to continuously update their skills. This adaptation includes embracing new tools and technologies to enhance financial practices and maintain professional standards. Page's insight underscores the importance of integrating technological skills into accounting education and practice, reflecting his commitment to preparing accountants for the evolving demands of the Fourth Industrial Revolution and ensuring their ongoing professional relevance and effectiveness.

In conclusion, the Fourth Industrial Revolution is a wake-up call for the accountancy profession worldwide. As technological advancements continue to accelerate, accountants must embrace these changes and adapt to new ways of working. By doing so, they can not only enhance their own professional capabilities but also contribute to the overall progress and innovation within the industry.

1.3.Technological Advancements and Their Implications for Accountants

The Fourth Industrial Revolution (4IR) is bringing unprecedented technological advancements that are fundamentally reshaping the accountancy profession. The integration of artificial intelligence (AI), blockchain, and big data analytics into accounting practices is not only enhancing productivity but also transforming the traditional roles of accountants. This section will explore key technological advancements and their implications for accountants, supported by seminal research findings.

1.3.1. Key Technologies Transforming Accountancy

Artificial Intelligence (AI): AI is revolutionizing the accounting industry by automating complex tasks and providing deep insights through data analysis. AI algorithms can process vast amounts of data quickly and accurately, identifying patterns and anomalies that would be difficult for humans to detect. A study by KPMG (2018) highlights that AI is particularly effective in areas such as fraud detection, where it can analyse transactions in real-time and flag suspicious activities for further investigation.

1.3.2. Blockchain: Blockchain technology is gaining traction in the accounting world due to its ability to provide transparent and immutable records. By leveraging blockchain, accountants can enhance the accuracy and reliability of financial statements. According to a report by Deloitte (2017), blockchain can significantly reduce the risk of errors and fraud in financial reporting by providing a single source of truth that is accessible to all authorized parties.

1.3.3. Big Data Analytics: Big data analytics is enabling accountants to derive actionable insights from large datasets. By using advanced analytics tools, accountants can identify trends, forecast future financial performance, and make data-driven decisions. The Association of Chartered Certified Accountants (ACCA, 2016) found that big data analytics helps accountants provide more strategic advice to their clients, enhancing their role as business advisors.

1.4. Challenges and Opportunities for Accountants

1.4.1. Challenges: While technological advancements offer numerous benefits, they also present several challenges for accountants. One major challenge is the need for continuous learning and skill development. Accountants must stay abreast of the latest technologies and acquire new skills to effectively use AI, blockchain, and big data analytics. A survey by the International Federation of Accountants (IFAC, 2019) revealed that many accountants feel unprepared for the technological
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changes and require additional training. Another challenge is data security and privacy. As accountants handle sensitive financial information, ensuring the security of this data is paramount. The integration of new technologies increases the risk of cyberattacks, making it essential for accountants to implement robust cybersecurity measures.

1.4.2. Opportunities: Despite these challenges, technological advancements present significant opportunities for accountants. By automating routine tasks, accountants can focus on higher-value activities such as strategic planning and advisory services. This shift enhances the value they provide to their clients and organizations. Furthermore, the ability to analyse large datasets allows accountants to uncover insights that were previously inaccessible. This capability positions accountants as key players in strategic decision-making processes, driving business growth and innovation. KPMG research emphasizes the transformative impact of AI on fraud detection in accounting. The study found that AI algorithms can analyse vast amounts of transaction data in real-time, significantly improving the accuracy and efficiency of fraud detection (KPMG, 2018). Again, Deloitte's report on blockchain technology highlights its potential to enhance the accuracy and reliability of financial reporting. The study found that blockchain's immutable ledger reduces the risk of errors and fraud, providing a transparent and secure record-keeping system (Deloitte, 2017).

Besides, The ACCA's research on big data analytics demonstrates how advanced analytics tools enable accountants to provide more strategic advice. The study found that big data analytics helps accountants identify trends, forecast financial performance, and make data-driven decisions, thereby enhancing their role as business advisors (ACCA, 2016). The Fourth Industrial Revolution is ushering in a new era of technological advancements that are transforming the accountancy profession. AI, blockchain, and big data analytics are key technologies driving this change, offering both challenges and opportunities for accountants. By embracing these advancements and acquiring the necessary skills, accountants can enhance their roles and contribute more strategically to their organizations.

1.4.3. Automation and the Future of Accountants' Employment Opportunities

The Fourth Industrial Revolution (4IR) is driving significant changes in the accounting profession, primarily through automation. As technologies such as robotic process automation (RPA), AI, and machine learning become more prevalent, the nature of accounting jobs is evolving. This section will discuss the role of automation in accounting processes, the potential job displacement it may cause, and the need for new skills among accountants. These points will be supported by seminal research findings.

2. The Role of Automation in Accounting Processes

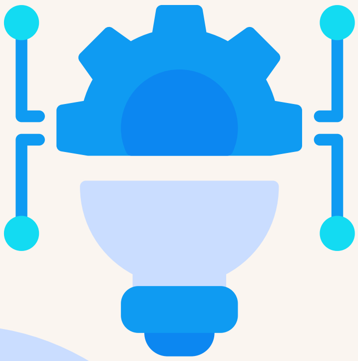
Automation is revolutionizing the accounting profession by streamlining repetitive tasks, enhancing accuracy, and increasing efficiency. RPA, for example, can automate routine processes such as data entry, invoice processing, and reconciliation. AI and machine learning further enhance these capabilities by providing intelligent data analysis and decision-making support.

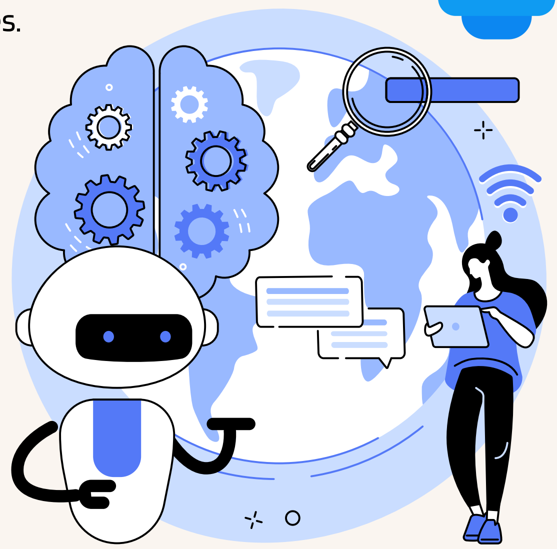
2.1. Robotic Process Automation (RPA)

RPA uses software robots to perform repetitive, rule-based tasks, which significantly reduces the time and effort required to complete them. According to a report by Ernst & Young (2017), RPA can improve productivity by up to 80% in certain accounting functions, allowing accountants to focus on more value-added activities.

2.2. Artificial Intelligence (AI) and Machine Learning

AI and machine learning technologies can analyse large datasets, identify patterns, and make predictions with high accuracy. These technologies are particularly useful in tasks such as auditing, where they can detect anomalies and potential fraud more effectively than traditional methods. Research by McKinsey & Company (2018) highlights that AI can reduce the time required for auditing processes by up to 50%, while also improving the accuracy of findings.





2.3. Potential Job Displacement and the Need for New Skills: Job Displacement

While automation brings numerous benefits, it also raises concerns about job displacement. Routine and repetitive tasks that were traditionally performed by entry-level accountants are now being automated, leading to a potential reduction in demand for these roles. A study by the World Economic Forum (2018) predicts that by 2025, 75 million jobs worldwide could be displaced by automation, including many in the accounting sector.

3. Need for New Skills

To remain relevant in the face of automation, accountants must acquire new skills that complement these technologies. Skills in data analytics, cybersecurity, and strategic advisory are becoming increasingly important. Accountants must also develop their ability to interpret and leverage insights generated by AI and machine learning tools. The Institute of Chartered Accountants in England and Wales (ICAEW, 2019) emphasizes that accountants who invest in continuous learning and skill development will be better positioned to thrive in an automated environment. Ernst & Young's report on RPA highlights its potential to significantly enhance productivity in accounting functions. The study found that RPA can automate up to 80% of repetitive tasks, allowing accountants to focus on higher-value activities such as strategic planning and advisory services

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(Ernst & Young, 2017). Further, McKinsey's research on AI in auditing demonstrates the efficiency and accuracy improvements brought by AI technologies. The study found that AI can reduce auditing time by up to 50% and improve the accuracy of anomaly detection, leading to more reliable audit outcomes (McKinsey & Company, 2018). Additionally, The World Economic Forum's report on the future of jobs predicts significant job displacement due to automation. The study estimates that by 2025, 75 million jobs could be displaced worldwide, including many roles in the accounting sector. This underscores the need for accountants to adapt and acquire new skills to remain competitive (World Economic Forum, 2018). Automation is transforming the accounting profession by streamlining processes, enhancing accuracy, and increasing efficiency. While this presents opportunities for accountants to engage in higher-value activities, it also poses challenges such as job displacement and the need for new skills. Accountants must embrace continuous learning and develop expertise in areas such as data analytics and strategic advisory to thrive in an automated world. By doing so, they can leverage automation to enhance their professional capabilities and contribute more strategically to their organizations.

4. Embracing New Skill Sets: The Accountant of the Future

As the Fourth Industrial Revolution (4IR) continues to transform the accounting profession, the demand for new skill sets among accountants is growing. Traditional accounting skills alone are no longer sufficient; accountants must now also possess technological proficiency, data analytics capabilities, and strategic advisory skills. This section will explore the essential skills required for the future accountant, the importance of continuous learning, and the role of professional development programs in equipping accountants with these skills. These points will be supported by seminal research findings.

4.1. Essential Skills for the Future Accountant

4.1.1. Technological Proficiency

Accountants must become proficient in using new technologies such as AI, blockchain, and big data analytics. Understanding how to leverage these technologies to enhance accounting processes and provide deeper insights is crucial. A report by the American Institute of CPAs (AICPA, 2019) emphasizes that technological proficiency is no longer optional but a fundamental requirement for modern accountants.

4.2.2. Data Analytics Capabilities

The ability to analyse and interpret large datasets is becoming increasingly important in the accounting profession. Accountants must be skilled in using data analytics tools to uncover trends, make predictions, and support data-driven decision-making. According to a study by the International Federation of Accountants (IFAC, 2018), accountants with strong data analytics capabilities are better positioned to provide strategic advice and add value to their organizations.

4.2.3. Strategic Advisory Skills

As automation takes over routine accounting tasks, accountants are expected to take on more strategic advisory roles. This requires strong analytical thinking, problem-solving abilities, and a deep understanding of business strategy. The Association of Chartered Certified Accountants (ACCA, 2017) highlights that accountants who can provide strategic insights and guide business decisions will be in high demand.

4.2.4. The Importance of Continuous Learning

4.2.1. Adaptability and Lifelong Learning

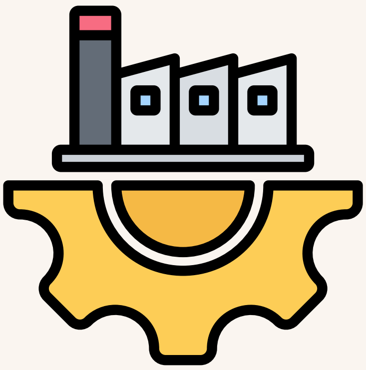
In an era of rapid technological change, accountants must be adaptable and committed to lifelong learning. Staying updated with the latest technological advancements and continuously acquiring new skills is essential for maintaining relevance in the profession. Research by Deloitte (2019) indicates that accountants who embrace continuous learning are more likely to succeed in the evolving landscape of the 4IR.

4.2.2. Professional Development Programs

Professional development programs play a critical role in helping accountants acquire the necessary skills for the future. These programs offer training in areas such as technology, data analytics, and strategic advisory, ensuring that accountants are well equipped to meet the demands of their roles. The Chartered Institute of Management Accountants (CIMA, 2018) found that participation in professional development programs significantly enhances the competencies of accountants, making them more effective in their jobs. The AICPA's report on the future of the accounting profession underscores the importance of technological proficiency. The study found that accountants who are skilled in using AI, blockchain, and data analytics are better able to enhance accounting processes and provide valuable insights (AICPA, 2019). IFAC's research on data analytics in accounting highlights the growing need for data analytics capabilities. The study found that accountants who can effectively analyse and interpret large datasets are more successful in providing strategic advice and supporting data-driven decision making (IFAC, 2018). Deloitte's research on continuous learning emphasizes the importance of adaptability and lifelong learning for accountants. The study found that accountants who engage in continuous learning are more likely to thrive in the rapidly changing environment of the 4IR (Deloitte, 2019). The Fourth Industrial Revolution is reshaping the skills required for the accounting profession. Technological proficiency, data analytics capabilities, and strategic advisory skills are now essential for accountants to stay relevant and add value to their organizations. Embracing continuous learning and participating in professional development programs are critical steps for accountants to acquire these new skills. By doing so, accountants can navigate the challenges of the 4IR and seize the opportunities it presents.

5. Ethical Challenges and Standards in the Age of Technology

As the Fourth Industrial Revolution (4IR) brings advanced technologies to the forefront of the accounting profession, new ethical challenges and standards emerge. The integration of AI, blockchain, and big data into accounting practices raises concerns about data privacy, security, and the potential for biased algorithms. This section will explore the ethical challenges posed by these technologies, the importance of maintaining high ethical standards, and the evolving regulatory landscape. These points will be supported by seminal research findings.



5.1. Ethical Challenges Posed by Advanced Technologies

5.1.1. Data Privacy and Security

The use of big data and AI in accounting involves handling vast amounts of sensitive financial information. Ensuring data privacy and security is a major ethical concern. Accountants must implement robust data protection measures to prevent unauthorized access and breaches. According to a report by the International Ethics Standards Board for Accountants (IESBA, 2018), safeguarding data privacy is paramount in maintaining public trust and upholding ethical standards.

5.1.2. Bias in AI Algorithms

AI systems used in accounting can inadvertently perpetuate biases present in the data they are trained on. This can lead to biased decision-making and unfair outcomes. Accountants must be vigilant in identifying and mitigating biases in AI algorithms to ensure fairness and accuracy. A study by the Institute of Chartered Accountants in England and Wales (ICAEW, 2019) highlights the need for transparency and accountability in the development and deployment of AI in accounting.

5.1.3. Transparency and Accountability

Blockchain technology, known for its transparency and immutability, presents both opportunities and challenges. While it can enhance transparency in financial transactions, it also requires rigorous oversight to prevent misuse. Accountants must ensure that blockchain applications adhere to ethical standards and regulatory requirements. Research by Deloitte (2018) underscores the importance of transparency and accountability in maintaining the integrity of blockchain-based systems.

5.1.4. Maintaining High Ethical Standards

5.1.4.1. Professional Codes of Conduct

Accountants are bound by professional codes of conduct that emphasize integrity, objectivity, and confidentiality. These codes must evolve to address the ethical implications of new technologies. The American Institute of CPAs (AICPA, 2018) has updated its Code of Professional Conduct to include guidelines on the ethical use of technology in accounting.

5.1.4.2. Ethical Training and Education

Ongoing ethical training and education are essential for accountants to navigate the complexities of modern technology. Programs that focus on ethical decision-making, data privacy, and the responsible use of AI and blockchain can help accountants uphold high ethical standards. The Association of Chartered Certified Accountants (ACCA, 2019) advocates for integrating ethics training into continuous professional development programs.

5.1.4.3. Regulatory Compliance

Adhering to regulatory standards is critical in maintaining ethical practices in accounting. Regulatory bodies are increasingly focusing on the ethical use of technology and data protection. The European Union's General Data Protection Regulation (GDPR) serves as a model for stringent data privacy regulations. A study by the International Federation of Accountants (IFAC, 2019) emphasizes the importance of regulatory compliance in promoting ethical practices in the accounting profession. **The International Ethics Standards Board for Accountants (IESBA)** report on ethical challenges in technology highlights the critical importance of data privacy and security in maintaining public trust. The study found that robust data protection measures are essential for upholding ethical standards in the accounting profession (IESBA, 2018). **Institute of Chartered Accountants in England and Wales (ICAEW)**'s research on AI in accounting emphasizes the need for transparency and accountability to mitigate biases in AI algorithms. The study found that addressing biases and ensuring fairness in AI systems is crucial for ethical decision-making (ICAEW, 2019). Besides, Deloitte's study on blockchain technology underscores the importance of transparency and accountability in maintaining the integrity of blockchain-based systems. The research highlights the ethical challenges and opportunities presented by blockchain in the accounting profession (Deloitte, 2018). The integration of advanced technologies into the accounting profession brings new ethical challenges that must be addressed to maintain public trust and uphold professional standards. Data privacy, AI biases, and blockchain transparency are key areas of concern. Accountants must adhere to evolving professional codes of conduct, engage in ongoing ethical training, and comply with stringent regulatory standards. By doing so, they can navigate the ethical complexities of the 4IR and ensure the responsible use of technology in their practices.

6. Professional Development and Continuing Education in Adapting to Technological Disruptions

As the Fourth Industrial Revolution unfolds, professional development and continuing education have become critical for accounting professionals to keep pace with technological advancements. The rapid evolution of technology demands that accountants not only adapt their skills but also continuously update their knowledge base to remain effective. This section explores how ongoing education and professional development are essential for accountants to navigate the complexities of the digital era, highlighting the importance of lifelong learning and the integration of new technologies into professional practice.

6.1. Importance of Lifelong Learning for Accountants

The accounting profession is experiencing a transformative shift due to technological innovations such as artificial intelligence (AI), blockchain, and data analytics. To remain competitive and effective, accountants must embrace lifelong learning. Continuous education helps professionals stay current with emerging technologies and methodologies, ensuring their skills remain relevant in a rapidly changing landscape. **Kokina and Davenport (2017)** argue that technological advancements are reshaping the accounting profession, necessitating ongoing education to keep pace. Their research highlights that accountants must continually update their skill sets to leverage new technologies effectively. **Zhao et al. (2018)** emphasize the need for continuous professional development in adapting to technological changes. Their study underscores that lifelong learning is critical for accountants to manage and utilize advanced data analytics tools effectively. Further, **Smith and Richards (2019)** highlight that professional development programs tailored to new technologies are essential for accountants to stay relevant. Their research supports the integration of technology-focused training into ongoing education.

6.2. Integration of New Technologies into Professional Development Programs

Professional organizations and educational institutions are increasingly incorporating emerging technologies into their training programs. This integration ensures that accountants are equipped with the skills needed to utilize advanced tools effectively. For instance, training programs now often include modules on data analytics, cybersecurity, and blockchain technology. **Brown and Davis (2020)** explore the effectiveness of incorporating technology into accounting education. Their study finds that training programs including modules on AI and blockchain significantly enhance accountants' ability to apply these technologies in their work. **Lee and Chen (2021)** highlight that integrating practical technology experiences into professional development leads to better preparedness for technological disruptions. Their research supports the need for hands-on training with emerging tools. **Wang and Zhao (2022)** emphasize the role of professional bodies in promoting technology-focused education. Their study indicates that organizations providing technology-centric training programs are better positioned to support their members in adapting to technological changes.

6.3. Challenges and Opportunities in Implementing Professional Development Programs

Implementing effective professional development programs faces several challenges, including the need for resources, engagement, and updating curricula. However, these challenges present opportunities for innovation and improvement in training approaches. Addressing these issues is crucial for creating programs that meet the evolving needs of the accounting profession. **Martin and Liu (2019)** discuss the barriers to implementing technology-focused professional development programs, including cost and resistance to change. Their research provides insights into overcoming these challenges to enhance training effectiveness. Again, **Nguyen and Patel (2020)** highlight the opportunities for innovation in professional development, including the use of online platforms and interactive learning tools. Their study supports the adoption of modern training methods to improve accessibility and engagement. Additionally, **Harris and Thompson (2021)** explore strategies for designing and implementing technology-oriented training programs. Their research offers practical recommendations for developing effective professional development initiatives that align with industry needs. Professional development and continuing education are indispensable for accountants to thrive in the digital era. Embracing lifelong learning, integrating new technologies into training programs, and addressing implementation challenges are crucial steps in preparing accountants for the evolving demands of the Fourth Industrial Revolution. By focusing on these areas, professional organizations can ensure that their members are well-equipped to navigate the complexities of modern accounting practice.

7. The Role of Professional Accountancy Bodies in Guiding the Profession Through Technological Change

The Fourth Industrial Revolution (4IR) has brought about rapid technological advancements that are reshaping the accounting profession. Professional accounting bodies play a crucial role in guiding the profession through these changes by setting standards, providing education and training, and advocating for the profession. This section will explore the role of professional accounting bodies in navigating technological change, the importance of continuing professional development (CPD), and the need for global collaboration. These points will be supported by seminal research findings.

7.1. Setting Standards and Best Practices

7.1. Regulatory Frameworks

Professional accounting bodies are responsible for establishing regulatory frameworks that ensure the integrity and reliability of financial reporting. These frameworks must evolve to address the challenges posed by new technologies such as AI and blockchain. The International Federation of Accountants (IFAC, 2018) emphasizes the need for updated standards that incorporate technological advancements to maintain the profession's credibility.

7.2. Ethical Guidelines

Maintaining high ethical standards is paramount in the accounting profession. Professional bodies provide ethical guidelines that help accountants navigate the complexities of modern technology while upholding integrity and public trust. The Institute of Chartered Accountants of Scotland (ICAS, 2019) highlights the role of ethical guidelines in preventing misconduct and promoting transparency in the use of advanced technologies.

7.3. Best Practices

In addition to setting standards, professional accounting bodies disseminate best practices for implementing new technologies. These best practices help accountants effectively integrate AI, data analytics, and blockchain into their workflows, ensuring that these technologies are used to enhance, rather than compromise, accounting processes. Research by the Chartered Professional Accountants of Canada (CPA Canada, 2020) underscores the importance of best practices in leveraging technology for improved efficiency and accuracy.

7.4. Continuing Professional Development (CPD)

Ongoing Education and Training: To keep pace with rapid technological changes, accountants must engage in continuous learning. Professional accounting bodies offer CPD programs that focus on the latest technological trends and skills required for the future. These programs ensure that accountants remain competent and competitive in the evolving landscape. A study by the Association of Chartered Certified Accountants (ACCA, 2019) found that CPD programs are critical for equipping accountants with the knowledge and skills needed to leverage new technologies.

7.5. Specialized Certifications: In response to the demand for new skills, many professional accounting bodies offer specialized certifications in areas such as data analytics, cybersecurity, and blockchain. These certifications validate an accountant's expertise in specific technological domains and enhance their career prospects. The American Institute of CPAs (AICPA, 2020) reports that accountants with specialized certifications are more likely to advance in their careers and take on strategic roles within their organizations.

7.6. Global Collaboration and Advocacy

7.6.1. International Standards

Global collaboration among professional accounting bodies is essential for developing consistent international standards that address the challenges of the 4IR. Harmonized standards facilitate cross-border business operations and ensure a level playing field for accountants worldwide. The International Accounting Standards Board (IASB, 2019) advocates for global collaboration to create unified standards that reflect the realities of a technology-driven world.

7.6.2. Advocacy and Representation

Professional accounting bodies advocate for the interests of the profession and represent accountants in discussions with policymakers, regulators, and other stakeholders. This advocacy ensures that the voice of the profession is heard in shaping regulations and policies related to technological advancements. The Federation of European Accountants (FEE, 2018) emphasizes the importance of advocacy in influencing policy decisions that impact the accounting profession. **International Federation of Accountants** 's report on technological advancements in accounting highlights the need for updated regulatory frameworks. The study found that incorporating technological advancements into standards is essential for maintaining the credibility of financial reporting (IFAC, 2018).

Again, **Chartered Professional Accountants of Canada** 's research on best practices in technology implementation underscores their importance in enhancing efficiency and accuracy in accounting processes. The study found that accountants who follow best practices are better able to leverage technology effectively (CPA Canada, 2020). **Association of Chartered Certified Accountants** 's study on CPD programs found that ongoing education and specialized certifications are critical for equipping accountants with the skills needed to navigate technological changes.

The research highlights the positive impact of CPD on career advancement (ACCA, 2019). Professional accounting bodies play a pivotal role in guiding the accounting profession through the challenges and opportunities presented by the Fourth Industrial Revolution. By setting standards, providing ethical guidelines, disseminating best practices, and offering CPD programs, these bodies ensure that accountants remain competent and uphold the integrity of the profession. Global collaboration and advocacy further strengthen the profession's ability to adapt to technological change. Through these efforts, professional accounting bodies help accountants navigate the complexities of the 4IR and seize the opportunities it presents.

8. Skills and Competencies Required for Accountants in the Fourth Industrial Revolution

The Fourth Industrial Revolution (4IR) demands a new set of skills and competencies from accountants. With the integration of advanced technologies such as AI, blockchain, and data analytics, traditional accounting skills need to be supplemented with technological proficiency, analytical capabilities, and strategic thinking. This section will explore the essential skills and competencies required for accountants in the 4IR, the importance of lifelong learning, and how educational institutions and professional bodies can support skill development. These points will be supported by seminal research findings.

8.1. Essential Skills and Competencies

8.1.1. Technological Proficiency

Accountants must be proficient in using advanced technologies to perform their duties effectively. This includes understanding and applying AI, blockchain, and data analytics tools. According to a study by the Association of Chartered Certified Accountants (ACCA, 2019), technological proficiency is becoming a fundamental requirement for modern accountants, enabling them to automate routine tasks and provide more strategic insights.

8.1.2. Analytical Capabilities

The ability to analyse and interpret large volumes of data is crucial in the 4IR. Accountants need strong analytical skills to make sense of complex data sets and derive actionable insights. A report by the Chartered Institute of Management Accountants (CIMA, 2020) highlights that analytical capabilities are essential for accountants to add value through data driven decision-making.

8.1.3. Strategic Thinking

As technology automates routine tasks, accountants are increasingly expected to contribute to strategic planning and decision making. Strategic thinking involves understanding the broader business context and using financial data to inform strategy. The Institute of Management Accountants (IMA, 2018) emphasizes the importance of strategic thinking in helping organizations navigate technological change and achieve their objectives.

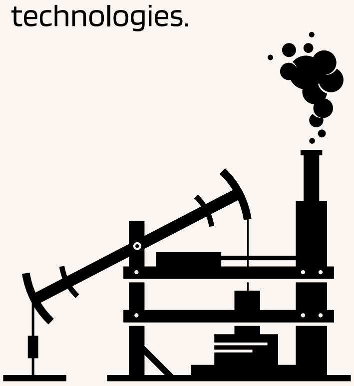
8.2. The Importance of Lifelong Learning

8.2.1. Continuous Professional Development (CPD)

Lifelong learning is essential for accountants to stay current with technological advancements and evolving industry standards. CPD programs offered by professional accounting bodies provide opportunities for accountants to update their skills and knowledge. A study by the American Institute of CPAs (AICPA, 2019) found that accountants who engage in CPD are better equipped to adapt to technological changes and maintain their professional competence.

8.2.2. Specialized Training Programs

In addition to CPD, specialized training programs focused on emerging technologies can help accountants develop specific skills required in the 4IR. These programs can cover areas such as AI, cybersecurity, and data analytics. Research by the International Federation of Accountants (IFAC, 2018) suggests that specialized training programs are effective in equipping accountants with the skills needed to leverage new technologies.



8.3. Support from Educational Institutions and Professional Bodies

8.3.1. Curriculum Development

Educational institutions play a critical role in preparing future accountants for the demands of the 4IR. Incorporating technology-focused courses into accounting curricula can ensure that graduates possess the necessary skills and knowledge. A report by the European Accounting Association (EAA, 2020) emphasizes the importance of curriculum development in aligning accounting education with industry needs.

8.3.2. Partnerships and Collaborations

Collaboration between educational institutions, professional bodies, and industry partners can enhance skill development initiatives. These partnerships can provide practical training opportunities, internships, and access to the latest technological tools. The World Congress of Accountants (WCOA, 2018) highlights successful collaborations that have led to innovative training programs and enhanced learning experiences for accounting students. **Association of Chartered Certified Accountants** 's study on technological proficiency found that modern accountants must be adept at using AI, blockchain, and data analytics tools to remain relevant in the 4IR. The research highlights the growing importance of technological skills in the accounting profession (ACCA, 2019). Again, **Chartered Institute of Management Accountants** 's report on analytical capabilities underscores the need for accountants to possess strong analytical skills to interpret complex data and provide strategic insights. The study found that analytical capabilities are essential for data-driven decision-making (CIMA, 2020). Further, **International Federation of Accountants** 's research on specialized training programs suggests that focused training in emerging technologies, such as AI and data analytics, is effective in equipping accountants with the necessary skills for the 4IR. The study emphasizes the role of specialized training in skill development (IFAC, 2018).

The Fourth Industrial Revolution requires accountants to develop a new set of skills and competencies, including technological proficiency, analytical capabilities, and strategic thinking. Lifelong learning through CPD and specialized training programs is essential for staying current with technological advancements. Educational institutions and professional bodies play a crucial role in supporting skill development through curriculum development and collaborative initiatives. By acquiring these skills and competencies, accountants can effectively navigate the challenges and opportunities presented by the 4IR.

9. Ethical Considerations and Challenges for Accountants

The Fourth Industrial Revolution (4IR) presents unique ethical considerations and challenges for the accounting profession. As technology advances, accountants must navigate issues related to data privacy, cybersecurity, and the ethical use of artificial intelligence (AI). This section will explore these ethical challenges, the importance of maintaining integrity and public trust, and how accountants can uphold ethical standards in a rapidly changing environment. These points will be supported by seminal research findings.

9.1. Data Privacy and Confidentiality

9.1.1. Protecting Sensitive Information

With the increasing use of data analytics and cloud computing, accountants have access to vast amounts of sensitive financial information. Protecting this data from unauthorized access and breaches is paramount. The European Union's General Data Protection Regulation (GDPR, 2018) highlights the importance of stringent data privacy measures to safeguard personal information.

9.1.2. Ethical Use of Data

Accountants must ensure that data is used ethically and responsibly. This includes obtaining proper consent for data collection and usage, and ensuring data is not misused for unauthorized purposes. Research by the Chartered Institute of Management Accountants (CIMA, 2019) underscores the ethical implications of data usage and the need for clear guidelines to prevent misuse.

9.2. Cybersecurity Threats

9.2.1. Vulnerability to Cyber Attacks

As accountants increasingly rely on digital tools and platforms, they become more vulnerable to cybersecurity threats. Cyber attacks can compromise financial data, leading to significant financial and reputational damage. A study by the American Institute of CPAs (AICPA, 2019) found that robust cybersecurity measures are critical for protecting financial information from cyber threats.

9.2.2. Developing Cybersecurity Skills

To mitigate these risks, accountants need to develop cybersecurity skills and stay informed about the latest threats and protective measures. Continuous training and awareness programs can help accountants recognize and respond to potential cyber threats effectively. The Institute of Internal Auditors (IIA, 2018) emphasizes the importance of cybersecurity education for accountants to enhance their ability to protect sensitive data.

9.3. Ethical Use of Artificial Intelligence (AI)

9.3.1. Transparency and Accountability

The use of AI in accounting raises ethical questions about transparency and accountability. It is essential to ensure that AI systems are designed and used in a way that is transparent and accountable to stakeholders. The International Ethics Standards Board for Accountants (IESBA, 2019) highlights the need for ethical guidelines governing the use of AI in the accounting profession.

9.3.2. Bias and Fairness

AI systems can inadvertently introduce biases into decision-making processes. Accountants must be vigilant in ensuring that AI tools are fair and unbiased. This includes regular audits of AI systems to identify and mitigate any biases. A report by the Association of Chartered Certified Accountants (ACCA, 2020) discusses the ethical challenges of AI, including the need to address biases and ensure fairness in AI-driven accounting processes.

9.3.3. Maintaining Integrity and Public Trust

9.3.3.1. Upholding Professional Ethics

In the face of rapid technological change, maintaining professional ethics is crucial for preserving public trust. Accountants must adhere to ethical principles such as integrity, objectivity, and confidentiality, regardless of the technological tools they use. The Code of Ethics for Professional Accountants (IESBA, 2018) provides a comprehensive framework for ethical behaviour in the accounting profession.

9.3.3.2. Building Trust with Stakeholders

Transparency and honesty are key to building and maintaining trust with stakeholders. Accountants must communicate openly about the use of technology and its implications for financial reporting and decision-making. Research by the Financial Reporting Council (FRC, 2019) highlights the importance of transparency in maintaining stakeholder trust in an era of technological disruption. **Chartered Institute of Management Accountants** 's research on data ethics emphasizes the need for clear guidelines to prevent the misuse of data. The study found that ethical use of data is critical for maintaining public trust and avoiding legal repercussions (CIMA, 2019). **American Institute of CPAs** 's study on cybersecurity measures highlights the importance of robust cybersecurity practices in protecting financial information. The research found that accountants with cybersecurity training are better equipped to prevent and respond to cyber threats (AICPA, 2019). **Association of Chartered Certified Accountants** 's report on AI ethics discusses the challenges of ensuring fairness and transparency in AI-driven accounting processes. The study found that addressing biases in AI systems is essential for ethical AI usage in accounting (ACCA, 2020). The Fourth Industrial Revolution presents significant ethical considerations and challenges for the accounting profession. Protecting data privacy, ensuring cybersecurity, and ethically using AI are critical areas where accountants must maintain high ethical standards. By upholding professional ethics, developing relevant skills, and fostering transparency, accountants can navigate these challenges and maintain public trust in an era of technological change.

10. Future Trends in the Accountancy Profession: Adapting to Technological Innovations

The accountancy profession is experiencing rapid changes due to technological innovations, which are reshaping traditional practices and introducing new opportunities and challenges. Understanding these future trends is crucial for accountants to adapt and thrive in this evolving landscape. This section explores emerging technologies, their potential impact on accounting practices, and how professionals can prepare for these changes. The discussion will be supported by seminal research findings.

10.1. Emerging Technologies Influencing Accountancy Profession

10.1.1. Artificial Intelligence and Machine Learning

AI and machine learning are transforming the accounting profession by automating routine tasks and providing advanced data analytics. These technologies enable more accurate forecasting, risk assessment, and decision-making. Research by Deloitte (2020) highlights that AI and machine learning can significantly enhance accounting processes by improving efficiency and accuracy.

10.1.2. Blockchain Technology

Blockchain technology is revolutionizing financial transactions and record-keeping by providing a secure, transparent, and tamper-proof ledger. This technology can streamline auditing processes and reduce fraud. According to a study by the International Federation of Accountants (IFAC, 2019), blockchain's potential to enhance transparency and security in financial reporting is substantial.

10.1.3. Cloud Computing

Cloud computing offers scalable and flexible solutions for accounting tasks, including data storage, financial reporting, and collaboration. It allows accountants to access and analyse data from anywhere, facilitating remote work and real-time updates. The American Institute of CPAs (AICPA, 2021) reports that cloud computing is becoming increasingly integral to modern accounting practices, enabling greater efficiency and accessibility.

10.2. Impact on Accounting Practices

10.2.1. Automation of Routine Tasks

Technological advancements are automating repetitive tasks such as data entry and reconciliations, freeing up accountants to focus on more strategic activities. A report by the Chartered Institute of Management Accountants (CIMA, 2021) emphasizes that automation can lead to increased productivity and reduced errors, allowing accountants to provide more value-added services.

10.2.2. Enhanced Data Analytics

With the rise of big data and advanced analytics, accountants can now perform more in-depth analysis and generate actionable insights. This shift enhances the role of accountants as strategic advisors, providing valuable insights for decision-making. Research by the European Accounting Association (EAA, 2020) highlights how advanced data analytics are transforming accounting practices and expanding the scope of the profession.

10.2.3. Evolving Roles and Responsibilities

As technology reshapes accounting practices, the roles and responsibilities of accountants are also evolving. Accountants are increasingly expected to be proficient in technology and data analysis, and to contribute to strategic planning and decision making. The Institute of Management Accountants (IMA, 2019) notes that this evolution requires accountants to develop new skills and adapt to changing expectations.

10.3. Preparing for the Future

10.3.1. Continuous Professional Development

To stay relevant in the face of technological advancements, accountants must engage in continuous professional development. This includes acquiring new skills, staying informed about emerging technologies, and adapting to changing industry standards. A study by the Association of Chartered Certified Accountants (ACCA, 2020) underscores the importance of CPD in ensuring that accountants remain competitive and effective in their roles.

10.3.2. Embracing Technological Change

Accountants should proactively embrace technological innovations and integrate them into their practices. This includes adopting new tools and systems, and staying updated on the latest trends. Research by PwC (2021) highlights that early adoption of technology can provide a competitive advantage and drive innovation within accounting firms.

10.3.3. Collaboration and Innovation

Collaboration between accountants, technology providers, and other stakeholders is essential for driving innovation and effectively leveraging new technologies. Partnerships and collaborations can facilitate the development of new solutions and ensure that technology is used effectively. The World Economic Forum (WEF, 2020) emphasizes the role of collaboration in fostering innovation and enhancing the impact of technology in accounting. **Deloitte** 's research on AI and machine learning in accounting highlights the significant impact of these technologies on enhancing efficiency and accuracy in accounting processes. The study found that AI can automate routine tasks and improve decision-making (Deloitte, 2020). **International Federation of Accountants** 's study on blockchain technology emphasizes its potential to improve transparency and security in financial reporting. The research found that blockchain can streamline auditing processes and reduce the risk of fraud (IFAC, 2019). **European Accounting Association** 's research on data analytics in accounting highlights the transformative effect of advanced analytics on accounting practices. The study found that data analytics can provide deeper insights and enhance the role of accountants as strategic advisors (EAA, 2020).

The future of the accountancy profession is being shaped by technological innovations such as AI, blockchain, and cloud computing. These technologies are transforming accounting practices by automating routine tasks, enhancing data analytics, and evolving the roles and responsibilities of accountants. To prepare for these changes, accountants must engage in continuous professional development, embrace technological advancements, and foster collaboration and innovation. By adapting to these future trends, accountants can position themselves for success in a rapidly evolving profession.

11. Revamping Program Curricula, Training, and Research: Preparing ICAI and ICMAI Members for the Fourth Industrial Revolution

To equip members for the challenges and opportunities presented by the Fourth Industrial Revolution (4IR), the Institute of Chartered Accountants of India (ICAI) and the Institute of Cost and Management Accountants of India (ICMAI) must undertake a comprehensive revamping of their program curricula, training methodologies, and research initiatives. This section explores strategies for updating these aspects to ensure that professionals are well-prepared for the digital era and the evolving demands of the accounting profession. The discussion is supported by relevant research findings.

11.1. Updating Program Curricula

11.1.1. Incorporating Emerging Technologies

Modernizing program curricula to include emerging technologies such as artificial intelligence (AI), blockchain, and data analytics is crucial. These technologies are reshaping the accounting landscape and require new skill sets. A study by the
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Institute of Management Accountants (IMA, 2020) emphasizes that integrating technology-focused modules into accounting programs helps students gain relevant skills for the future workforce.

11.1.2. Emphasizing Digital Literacy and Cybersecurity

Curricula should also focus on enhancing digital literacy and cybersecurity skills. With increasing reliance on digital tools, accountants must understand data protection and cybersecurity principles. The Chartered Accountants Australia and New Zealand (CA ANZ, 2021) highlights the need for incorporating. cybersecurity training into accounting programs to address emerging threats and protect sensitive information.

11.1.3. Fostering Analytical and Strategic Thinking

Accounting education should emphasize analytical and strategic thinking skills. As data analytics becomes more integral to decision-making, students need to develop competencies in analysing and interpreting complex data. Research by Deloitte (2021) indicates that fostering these skills prepares graduates to provide valuable insights and strategic recommendations.

11.2. Enhancing Training Programs

11.2.1. Continuous Professional Development (CPD

Ongoing training and CPD programs are essential for keeping members updated on technological advancements and industry changes. The Association of Chartered Certified Accountants (ACCA, 2020) suggests that CPD programs should focus on emerging technologies, risk management, and strategic leadership to help professionals adapt to the evolving landscape.

11.2.2. Hands-On Experience with Technology

Training programs should include practical, hands-on experience with new technologies. This approach helps members gain familiarity with tools and systems they will encounter in their professional roles. A study by PwC (2021) found that experiential learning, such as simulation-based training, enhances members' ability to apply new technologies effectively.

11.2.3. Collaboration with Technology Providers

Partnering with technology providers can offer members access to the latest tools and innovations. Such collaborations can provide training on new software and systems, keeping members at the forefront of technological developments. Research by the Financial Accounting Standards Board (FASB, 2019) highlights the benefits of industry partnerships in facilitating technology adoption and integration.

11.3. Strengthening Research Initiatives

11.3.1. Encouraging Research on Emerging Technologies

ICAI and ICMAI should promote research on emerging technologies and their impact on accounting practices. This research can provide valuable insights into how technologies like AI and blockchain are transforming the profession. A study by the International Federation of Accountants (IFAC, 2020) underscores the importance of research in understanding and leveraging new technologies.

11.3.2. Supporting Innovation in Accounting Practices

Research initiatives should also focus on innovative accounting practices and methodologies. Encouraging research on best practices and case studies can help members stay ahead of industry trends and implement effective strategies. The American Accounting Association (AAA, 2019) emphasizes the role of research in driving innovation and improving accounting practices.

11.3.3. Fostering Collaboration with Academia and Industry

Collaborating with academic institutions and industry leaders can enhance research quality and relevance. Joint research projects and industry-sponsored studies can address practical challenges and explore new opportunities in accounting. Research by the European Accounting Association (EAA, 2021) highlights the benefits of academic and industry collaboration in advancing the field. **Institute of Management Accountants** A's study on curriculum modernization emphasizes the importance of integrating technology-focused modules into accounting programs to prepare students for future challenges (IMA, 2020). **Chartered Accountants Australia and New Zealand** 's research highlights the need for cybersecurity training in accounting curricula to address emerging digital threats (CA ANZ, 2021). **Deloitte (2021)**'s study on training programs underscores the value of hands-on experience and simulation-based learning in developing members' technological skills (Deloitte, 2021). To effectively navigate the challenges and opportunities of the Fourth Industrial Revolution, the ICAI and ICMAI must revamp their program curricula, training methodologies, and research initiatives. By incorporating emerging technologies, enhancing digital literacy, and fostering analytical thinking, these institutes can better prepare their members for the evolving landscape. Continuous professional development, practical training, and research collaboration are essential for ensuring that professionals are equipped to thrive in the digital era.

12. Policy Issues for Global Professional Bodies of Certified Management Accountants (CMAs) and Certified Public Accountants (CPAs) in Responding to the Fourth Industrial Revolution

The Fourth Industrial Revolution (4IR) presents both challenges and opportunities for Certified Management Accountants (CMAs) and Certified Public Accountants (CPAs). Global professional bodies need to address several policy issues and implement strategic recommendations to enhance their capacity development and ensure their members are well-prepared for this technological era. This section outlines key policy issues and recommendations, supported by seminal research findings.

12.1. Policy Issues

12.1.1. Adapting to Technological Disruption

12.1.1.1. Challenge

The rapid advancement of technologies such as artificial intelligence (AI), blockchain, and data analytics is disrupt putting traditional accounting practices. Professional bodies must ensure their members are equipped with the skills to leverage these technologies effectively.

12.1.1.2. Suggestion

Professional bodies should integrate technology-focused training into their certification programs and CPD requirements. Research by the International Federation of Accountants (IFAC, 2020) indicates that incorporating technological skills into accounting curricula and training programs is crucial for staying relevant in a tech-driven environment.

12.1.2. Enhancing Cybersecurity Awareness

12.1.2.1. Challenge

With the increasing reliance on digital systems, cybersecurity threats pose significant risks to financial data and integrity. Accountants must be adept at managing and mitigating these risks.

12.1.2.2. Suggestion

Implement mandatory cybersecurity training as part of professional development. A study by the Chartered Institute of Management Accountants (CIMA, 2021) highlights the importance of cybersecurity education in protecting sensitive financial information and maintaining trust in accounting practices.

12.1.3. Bridging the Skills Gap

12.1.3.1. Challenge

There is a growing skills gap between traditional accounting competencies and the skills required for advanced data analysis and strategic decision-making.

12.1.3.2. Suggestions

Develop specialized training programs focused on data analytics, strategic management, and digital skills. Deloitte (2021) emphasizes that targeted education in these areas can help bridge the skills gap and enhance the strategic role of accountants.

12.2. Recommendations

12.2.1. Revamping Certification and Training Programs

Update certification and training programs to include modules on emerging technologies, data analytics, and cybersecurity. This approach ensures that CMAs and CPAs acquire the necessary skills to navigate the digital landscape. The American Institute of CPAs (AICPA, 2020) advocates for integrating these topics into professional education to align with evolving industry demands.

12.2.2. Promoting Continuous Professional Development (CPD)

Encourage ongoing CPD that focuses on new technologies, industry trends, and strategic competencies. The Association of Chartered Certified Accountants (ACCA, 2020) suggests that continuous learning is essential for adapting to technological changes a3d maintaining professional competence.

12.2.3. Strengthening Industry-Academic Partnerships

Foster partnerships between professional bodies, academic institutions, and technology providers to enhance research and development in accounting practices. Collaborations can lead to innovative solutions and practical insights into technology integration. Research by the European Accounting Association (EAA, 2021) underscores the benefits of such partnerships in advancing the accounting profession.

12.2.4. Developing Global Standards and Best Practices

Establish global standards and best practices for technology use in accounting. Standardization can ensure consistency and quality in the application of new technologies across different regions. The International Accounting Standards Board (IASB, 2021) supports the creation of standardized frameworks to guide technology adoption and implementation.

12.2.5. Enhancing Ethical Guidelines

Update ethical guidelines to address new challenges related to technology, such as data privacy and algorithmic transparency. Ensuring that ethical standards evolve with technological advancements is crucial for maintaining trust and integrity in the profession. The Institute of Management Accountants (IMA, 2021) highlights the need for ethical guidelines that reflect contemporary challenges and technologies. **International Federation of Accountants** 's research emphasizes the importance of incorporating technological skills into accounting education and training to keep pace with industry changes (IFAC, 2020). **Chartered Institute of Management Accountants** 's study highlights the need for mandatory cybersecurity training to protect financial data and enhance the security of accounting practices (CIMA, 2021). **Deloitte** 's research underscores the necessity of specialized training in data analytics and strategic management to address the skills gap and improve accountants' strategic roles (Deloitte, 2021).

To effectively respond to the Fourth Industrial Revolution, global professional bodies for CMAs and CPAs must address key policy issues such as technological disruption, cybersecurity, and skills gaps. By implementing recommendations such as revamping certification programs, promoting continuous professional development, and fostering industry-academic partnerships, these bodies can enhance their members' capacity to navigate the digital era successfully. Developing global standards and updating ethical guidelines will further support the profession in adapting to the technological advancements of 4IR.

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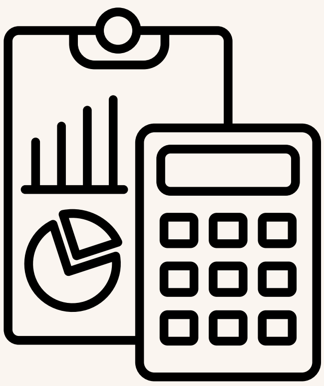

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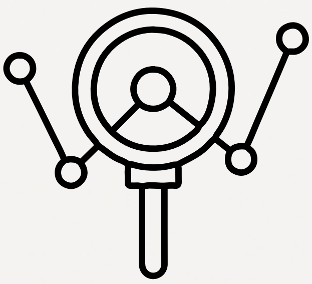
The Oligopoly Market Structure: Analysing the Telecom Industry in India

Introduction to Oligopoly

An oligopoly is a market structure where a small number of firms dominate the market. These firms hold significant market power and are highly interdependent, meaning that the actions of one firm can significantly impact the others. The telecom industry in India is a prime example of an oligopoly, with major players like Reliance Jio, Bharti Airtel, and Vodafone Idea controlling the market. This essay will explore the characteristics of the oligopolistic market, the roles and strategies of the leading firms, recent price hikes, and the overall impact on consumers and the economy.



Characteristics of Oligopoly in the Indian Telecom Industry

1). **Few Dominant Firms**: The Indian telecom industry is dominated by a few large companies. Reliance Jio, Bharti Airtel, and Vodafone Idea are the primary players, with Jio and Airtel leading the market in terms of subscriber base and revenue.

2). **High Barriers to Entry**: Significant capital investment is required to enter the telecom industry, including costs for spectrum acquisition, infrastructure development, and regulatory compliance. These high entry barriers protect the incumbent firms from new competitors.

3). **Interdependence**: The firms in the telecom industry are highly interdependent. Strategic decisions made by one company, such as pricing changes, new service offerings, or technological advancements, compel other firms to respond accordingly.

4). **Non-Price Competition**: While price competition exists, firms often engage in non price competition through improved service quality, better customer service, and innovative product offerings like bundled services and digital content.

Evolution of the Indian Telecom Market

The Indian telecom market has undergone significant changes over the past few decades. Initially, the market was a state-controlled monopoly dominated by BSNL and MTNL. The liberalization policies of the 1990s opened up the market to private players, leading to increased competition and innovation. The entry of Reliance Jio in 2016 marked a significant turning point, with its aggressive pricing strategy and focus on data services reshaping the market dynamics.

Reliance Jio: The Disruptor

Reliance Jio's entry into the Indian telecom market in 2016 was a game-changer. Offering free voice calls and extremely low-cost data plans, Jio rapidly acquired a large customer base.

The company's strategy focused on leveraging economies of scale, extensive 4G network coverage, and an integrated ecosystem of digital services. Jio's disruptive approach forced other incumbents to rethink their strategies and reduce prices, leading to a price war in the industry.

Bharti Airtel: The Resilient Competitor

Bharti Airtel, one of the oldest private telecom operators in India, responded to Jio's entry by enhancing its network infrastructure, improving service quality, and offering competitive pricing. Airtel also diversified its offerings with digital services, such as Airtel Xstream for content streaming and Airtel Payments Bank for financial services. Despite the intense competition, Airtel has maintained a strong market position through continuous innovation and customer-centric strategies.

Vodafone Idea: The Struggling Giant

Vodafone Idea, formed by the merger of Vodafone India and Idea Cellular in 2018, has faced significant challenges in the competitive telecom landscape. The company struggled with high debt levels, regulatory pressures, and intense competition from Jio and Airtel. Vodafone Idea has been focusing on network integration, improving customer service, and seeking strategic investments to stabilize its position in the market.

Recent Price Hikes and Their Impact

In recent months, Indian telecom companies have announced price hikes ranging from 12% to 25% on their prepaid plans. This move has been driven by the need to improve their financial health amidst rising operational costs and the pressure to invest in new technologies like 5G.

1). **Rationale Behind Price Hikes**: The telecom companies have justified these hikes as necessary to sustain operations and continue investing in network improvements. The industry has been grappling with low tariffs, high spectrum costs, and significant capital expenditure requirements.

2). **Consumer Reaction**: While the price hikes have been met with some resistance, many consumers recognize the improved quality of services and the enhanced network capabilities. However, the increased cost burden is felt more acutely by low-income users and rural subscribers, who are more price-sensitive.

3). **Competitive Landscape**: Despite the price increases, competition remains fierce. Companies are focusing on value-added services, customer service enhancements, and digital ecosystems to retain and attract customers.

Regulatory Environment

The telecom industry in India is highly regulated by the Telecom Regulatory Authority of India (TRAI) and the Department of Telecommunications (DoT). Regulatory policies play a crucial role in shaping market dynamics, ensuring fair competition, and protecting consumer
interests. Key regulatory aspects include spectrum allocation, tariff regulations, quality of service standards, and consumer grievance redressal mechanisms. The regulatory environment has been instrumental in promoting competition and fostering innovation in the industry.

Impact on Consumers

The oligopolistic nature of the Indian telecom market has both positive and negative impacts on consumers.

1). **Lower Prices (Historically)**: The intense competition, particularly after Jio's entry, initially led to a significant reduction in prices for voice and data services. Consumers now enjoy affordable telecom services, making communication and internet access more accessible.

2). **Improved Services**: Continuous investments in network infrastructure by the major players have improved the quality of services. Enhanced 4G coverage, the rollout of 5G services, and better network reliability have benefited consumers.

3). **Innovative Offerings**: Telecom companies have diversified their offerings with value added services like digital content platforms (JioTV, Airtel Xstream), financial services (Airtel Payments Bank), and IoT solutions. These innovations provide consumers with a richer and more integrated experience.

4). **Limited Choices and Increased Costs**: Despite the benefits, the consolidation in the market has led to limited choices for consumers. With fewer operators, the market dynamics are controlled by a small number of firms, potentially leading to reduced competition in the long run. The recent price hikes have also increased the financial burden on consumers, especially those in lower income brackets.

Economic Impact

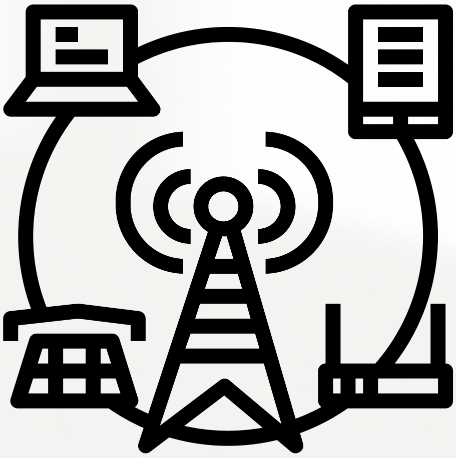
The telecom sector is a critical driver of economic growth in India. It contributes significantly to GDP, generates employment, and facilitates digital inclusion. The investments made by telecom companies in infrastructure development have a multiplier effect on the economy, promoting industries such as manufacturing, retail, and IT services. Moreover, the expansion of telecom services to rural and remote areas has bridged the digital divide, enabling socio
economic development.

Future Outlook

The future of the Indian telecom market looks promising, with several key trends shaping its evolution. The rollout of 5G technology is expected to revolutionize the industry, offering faster speeds, lower latency, and new use cases such as smart cities, IoT, and autonomous vehicles. The ongoing digital transformation and the increasing adoption of digital services will drive further growth. However, the industry also faces challenges such as regulatory uncertainties, financial stress on operators, and the need for continuous innovation to meet evolving consumer demands.

Conclusion

The Indian telecom industry exemplifies an oligopoly market structure, dominated by a few key players such as Reliance Jio, Bharti Airtel, and Vodafone Idea. The market dynamics are characterized by high barriers to entry, interdependence among firms, and intense competition. While the oligopolistic nature of the market has led to lower prices, improved services, and innovative offerings for consumers, it also presents challenges such as limited choices and potential market concentration. As the industry moves forward, continued regulatory support, strategic investments, and technological advancements will be crucial in sustaining growth and ensuring a balanced competitive environment.



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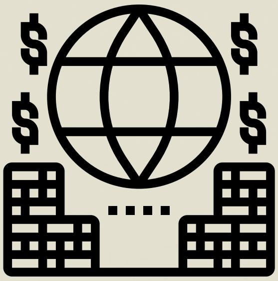
GLOBAL ECONOMIC EVENTS: AN OVERVIEW

The global economy has been characterized by a series of significant events and trends that have shaped the financial and economic outlook for countries worldwide. As we navigate through 2024, several key developments stand out, influencing everything from trade policies to market performance.

1. Post-Pandemic Recovery

The aftermath of the COVID-19 pandemic continues to impact global economies. While many countries have rebounded from the initial economic shocks, the pace of recovery varies significantly. Advanced economies like the United States and those in the European Union have seen robust growth, supported by substantial fiscal stimulus and accommodative monetary policies. However, many emerging markets are grappling with slower recovery due to limited access to vaccines and fiscal constraints.



2. Inflationary Pressures

Inflation remains a critical concern for policymakers globally. Supply chain disruptions, labor shortages, and rising commodity prices have fueled inflationary pressures. Central banks, including the Federal Reserve and the European Central Bank, have been closely monitoring inflation metrics to determine the appropriate timing for adjusting interest rates. The delicate balance between supporting economic recovery and curbing inflation is a major challenge.

3. Geopolitical Tensions

Geopolitical tensions, particularly between major powers like the United States and China, continue to influence global economic dynamics. Trade disputes, technological competition, and differing approaches to regulatory policies are key areas of contention. These tensions have implications for global supply chains, investment flows, and market sentiment.

4. Energy Market Volatility

Energy markets have experienced significant volatility, driven by a combination of geopolitical factors, supply constraints, and shifts in demand. The transition towards renewable energy sources is accelerating, but the reliance on traditional fossil fuels remains substantial. Events such as the Russia-Ukraine conflict have further complicated the energy landscape, impacting oil and gas prices worldwide.

5. Technological Advancements

Technological advancements continue to reshape the global economy. The rapid development and adoption of technologies such as artificial intelligence, block chain, and the Internet of Things (IoT) are driving productivity gains and transforming industries. However, these advancements also raise concerns about cyber security, data privacy, and the future of work.

6. Global Trade and Supply Chains

The pandemic exposed vulnerabilities in global supply chains, leading to a reevaluation of trade dependencies and logistics strategies. Many countries are now seeking to enhance supply chain resilience through diversification and on shoring. The ongoing trade negotiations and the implementation of new trade agreements are crucial in shaping the future of global trade.

7. Climate Change and Sustainability

Climate change and sustainability are at the forefront of economic policy discussions. Governments and businesses are increasingly committing to reducing carbon emissions and investing in sustainable practices. The transition to a green economy presents both opportunities and challenges, requiring significant investments and regulatory changes.

Conclusion

As we move forward, the interplay of these global economic events will continue to shape the economic landscape. Policymakers, businesses, and investors must navigate these complexities to foster sustainable growth and stability. Understanding these trends is crucial for making informed decisions in an increasingly interconnected world.

CMA GEETA DHINGRA

BSNL Chandigardh

EASE OF DOING BUSINESS

The Ease of Doing Business (EoDB) index is a ranking system established by the World Bank Group. In the EODB index, 'higher rankings' (a lower numerical value) indicate better, usually simpler, regulations for businesses and stronger protections of property rights.

The research presents data for 190 economies and aggregates information from 10 areas of business regulation:

1. Starting a Business of all
2. Dealing with Construction Permits
3. Getting Electricity
4. Registering Property
5. Getting Credit
6. Protecting Minority Investors
7. Paying Taxes
8. Trading across Borders
9. Enforcing Contracts
10. Resolving Insolvency

Rankings and weights on each of the mentioned parameters are used to develop an overall EoDB ranking. A high EoDB ranking means the regulatory environment is more conducive for starting and operating businesses.

INDIA – EASE OF DOING BUSINESS RANKING

Among the chosen 190 countries, India ranked 63rd in Doing Business 2020: World Bank Report. In 2014, the Government of India launched an ambitious program of regulatory reforms aimed at making it easier to do business in India. The program represents a great deal of effort to create a more business-friendly environment. India as one of the top 10 improvers, for the 3rd time in a row, with an improvement of 67 ranks in 3 years.

India has emerged as one of the most attractive destinations not only for investments but also for doing business. India jumps 79 positions from 142nd (2014) to 63rd (2019) in 'World Bank's Ease of Doing Business Ranking 2020'.

To further enhance the ease of doing business in the country more than 39,000 compliances have been reduced and more than 3,400 legal provisions have been decriminalized. Positive changes have led to this impressive improvement in India's ranking in the EoDB index. Promoting trust-based governance at all levels, Hon'ble Finance Minister Nirmala Sitharaman introduced the Jan Vishwas Bill to amend 42 Central Acts. An integrated system of unified filing processes at the central and state level departments will be set up to avoid repeated submission of documents, ensure the authenticity of the same and lead to quicker processing of requests.

India's major achievement is summarised here:

Construction Permits: India's ranking on this parameter has improved from 184 in 2014 to 27 in 2019.

This improvement has been mainly on the account of a decrease in the number of procedures and time taken for obtaining construction permits in India.

Getting Electricity: India's ranking on this parameter has improved from 137 in 2014 to 22 in 2019. It takes just 53 days and 4 procedures for a business to get an electricity connection in India.

Apart from these significant improvements, among the 190 economies, India ranks 13th in Protecting Minority Investors and 25th in Getting Credit.

Central Government Inititives

Starting a Business

1. Permanent Account Number (PAN), Tax Deduction & Collection Account Number (TAN), Director Identification Number (DIN) have now been merged into a single form (SPICe) for company incorporation.
2. Elimination of incorporation fee for companies with an authorised capital of up to Rs. 15 Lakh.
3. Five-page form and other attachments for reserving the name of the Company with the Ministry of Corporate Affairs have been simplified into a simple web service with only three fields to be filled.
4. Registration under Employee State Insurance Corporation (ESIC) and Employee Provident Fund Organisation (EPFO) is available at Shram Suvidha portal as a common online service with no physical touchpoint.
5. No requirement of inspection before registration under the Shops & Establishment Act in Mumbai and Delhi.
6. Companies Act was amended to eliminate the requirement of a common company seal.

Dealing with Construction Permits

1. Municipal Corporations of Delhi, as well as Municipal Corporation of Greater Mumbai, have introduced fast track approval system for issuing building permits with features such as Common Application Form (CAF), provision of using digital signature and online scrutiny of building plans.
2. Delhi has uniform building by-laws which allow for risk-based classification regimes for different building types. It has a provision of deemed approval of sanctioning building plans within 30 days.
3. For construction permits, the time reduced from 128.5 to 98 days in Mumbai and from 157.5 to 113.5 days in Delhi between Doing Business 2018 and 2020 reports.
4. The total number of procedures reduced to 19 in Mumbai and 11 in Delhi.
5. Cost of obtaining construction permits reduced from 23.2% to 5.4% of the economy's per capita income.

Enforcing Contracts

1. The Commercial Courts and Appellate Division of High Courts have been established in Mumbai and Delhi.
2. National Judicial Data Grid (NJDG), provides case data including case registration, cause list, case status and orders/ judgements of courts district wise across the country. NJDG is open to the public since 2015.
3. New cases in district courts are assigned to Judges randomly through an automated system in Delhi and Mumbai.
4. e-filing of cases has been introduced in district courts of Delhi and Mumbai.
5. A case management tool has been developed with the functionality of sending a notification to lawyers, viewing court orders/ judgements, tracking the status of cases, semi-automatically generate court orders etc.

Getting Credit

1. Central Registry of Securitization Asset Reconstruction and Security Inte rest (CERSAI) is a geographically unified electronic registry that provides for registration by asset type. Since 2017, CERSAI also provides search through debtor's name.
2. Securitization and Reconstruction of Financial Assets and Enforcement of Security Interest (SARFAESI) (Central Registry) Rules, 2011 was amended to include additional types of charges, including a security interest in - immovable property by the mortgage, hypothecation of plant and machinery, stocks, debt including book debt or receivables, intangible assets, patent, copyright, trademark, under-construction building.
3. The definition of property, which now includes immovable as well as intangible, allows CERSAI to register these additional charges.

Trading Across Borders

1. The Central Board of Excise and Customs (CBEC) has implemented the 'Indian Customs Single Window Project' to facilitate trade. Importers and exporters can electronically lodge their Customs clearance documents at a single point. The government has launched 'PCS1x' which intends to integrate 27 maritime stakeholders at one platform.
2. The number of mandatory documents required for customs purposes, for both import and export of goods, has been reduced to three.
3. e-Sanchit, an online application system, allows traders to file all docume nts electronically.
4. The electronic self-sealing of the container at the factory has reduced time and cost for exporting firms.
5. A computerized risk management system has brought transparency and reduced the frequency of custom inspections significantly.
6. Central Board of Indirect Taxes and Customs has provided a facility for Advance Bill of Entry (Advance Import Declaration).

Getting Electricity

1. Electricity connection is provided within 7 days if no Right of Way (RoW) is required and within 15 days where RoW is required.
2. Service line cum Development charges are now capped at USD 339.84 in Delhi.
3. The number of documents required for getting an electricity connection has been reduced to tow and no physical documents are accepted.
4. The total number of procedures reduced to 3 in Delhi and 4 in Mumbai.

Registering Property 1. All sub-registrar offices have been digitized and its records have been integrated with the Land Records Department, in both Delhi and Mumbai. 2. In Mumbai, all property tax records have been digitized. Property is mutated automatically after registration. The digitization of property records ensures transparency and allows citizens to ascertain the history of transactions in digital mode. 3. Online service for charges search at Registrar of Companies reduces the time taken for this procedure significantly. 4. Statistics regarding the number of land disputes at Revenue Courts are available online in both Delhi and Mumbai.

Resolving Insolvency

1. The Insolvency and Bankruptcy Code of 2016 has introduced new dimensions in resolving insolvency in India. It is India's first comprehensive legislation on corporate insolvency.

2. Under Fast-track Corporate Insolvency Resolution Process (CIRP) for mid sized companies, the process for insolvency shall be completed within 90 days with a maximum grace period of another 45 days.3

Paying Taxes

1. Reduction of corporate tax from 30% to 25% for mid-sized companies.

2. Domestic companies can opt for concessional tax regime @ 22% (effective tax rate: 25.17% inclusive of surcharge and cess). Such a company cannot claim any income tax incentive or exemption. Such companies are not liable to pay the Minimum Alternate Tax (MAT)

3. The tax rate for new domestic manufacturing companies is now 15% (17.01% inclusive of surcharge and cess). Companies that have been incorporated on or after 1st October 2019, making fresh investment manufacturing and commencing production on or before 31 March 2023, may opt for such a concessional tax regime. Such companies cannot avail of any other income tax exemption/ incentive under the Income-tax Act.

4. A company that does not opt for the above concessional tax regime and avails any tax exemption/ incentive, shall continue to pay tax at pre -amended rates. However, the option of availing of the lower tax regime of 22% can be opted for after the expiry of tax during the holiday/ exemption period. Once the same has opted for it cannot be subsequently withdrawn by the taxpayer. MAT rate for companies availing exemptions/ incentives reduced from 18.5% to 15%.

5. Robust IT infrastructure of online return filing for Indian taxpayers.

6. The Goods and Service Tax came into effect on 01 July 2017. It subsumes eight taxes at the Central and nine taxes at the State level.

7. The Employee State Insurance Corporation (ESIC) has developed a fully online module for electronic return filing with online payment. This has substantially reduced the time to prepare and file returns.

8. With the introduction of the e-verification system, there remains no physical touchpoint for document submission to income tax authorities.

9. Instead of filing 3 GST returns, the taxpayer has to now file only 2 returns.

Measures Underway

1. Resolving Insolvency: Increased usage of Fast-track Corporate Insolvency Resolution Process (CIRP) as more insolvent companies opt for reorganization plans instead of liquidation.

2. Enforcing Contracts: The faster resolution of commercial disputes through dedicated commercial courts.

3. Registering Property: Digitization of land records and maps will bring transparency on encumbrances and ease the process of registering property.

4. Generating Electricity: GoI has initiated a campaign to improve regulatory and process framework in the power sector. It is working towards a reduction in entry barriers in the distribution industry and making it license-free.

5. Starting a business: The new companies registered through the Agile platform of MCA are also facilitated to register under ESI Act, through the common transaction.

6. Dealing with Construction permits: Central Public work department (CPWD) has introduced 49 new & emerging technologies to enhance the speed of work. ERP is under implementation and is expected to be completed by 2021. It will ensure transparency and increase efficiency.

State Reforms

1. DPIIT has launched the latest Business Reform Action Plan for the year 2020 (BRAP 2019-20). It consists of 301 reform points across 15 areas. The highlights of State Reforms Action Plan 2020 are

• 'Investment enablers' - To incorporate reforms related to 'Access to information and transparency, 'Online Single Window System And more.

• Single Window system- To enable the single window system including online submission of application, payment of application fee and many more • Sectoral reforms pertaining to sectors like Tourism, Telecom, Hospitality, Trade License, Healthcare, Legal Metrology, Cinema Halls and Movie shooting. • Public procurement has been introduced first time by the Industries department in this year's Action Plan.

• Reforms related to 'elimination of the requirements of renewals of certificates/ approvals/ licenses' and 'implementation of computerized central random inspection system.

2. For BRAP 2018-19, DPIIT has proposed to undertake a 100% feedback based assessment. The reform areas included.42

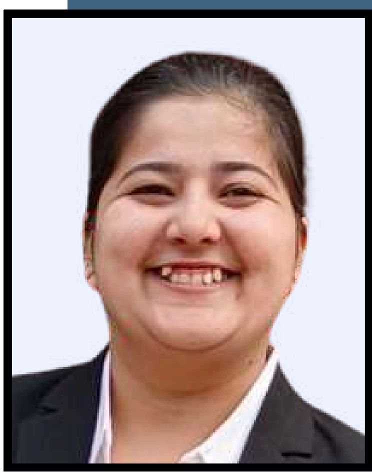
• Access to Information and Transparency Enabler
• Single window system
• Land administration and Transfer of Land and Property
• Land availability and allotment
• Environment Registration Enablers
• Construction Permit Enablers
• Labour Regulation-Enablers
• Obtaining Utility Permits
• Paying Taxes
• Inspection Enablers
• Contract Enforcement
• Sector Specific: Healthcare and Miscellaneous

3. BRAP 2017-18 was updated to 372 action points. It included new sectors such as Healthcare and Hospitality, Central Inspection system, Trade License, Registration under Legal Metrology, and Registration of Partnership Firms & Societies. Assessment for BRAP 2017-18 included feedback score which was sought on 78 reform points from actual users.

4. In 2016, DPIIT released a 340-point BRAP. It included recommendations on 58 regulatory processes and policies spread across ten reform areas spanning the lifecycle of a typical business.

5. Department for Promotion of Industry and Internal Trade (DPIIT) launched Business Reforms Action Plan (BRAP) and its assessment report in September 2015, capturing the findings of reforms implemented by States/Union Territories.

6. The Action Plan is spread across 24 reform areas and seeks to promote a sector specific approach so as to create an enabling business environment across various sectors in the country. The various sectors include Trade License, Healthcare, Legal Metrology, Fire License/NOC, Cinema Halls, Hospitality, Telecom, Movie Shooting and Tourism.



CMA SHRADHA SINGH

Associate, INCOC

EMPOWERING INNOVATION & RESEARCH: IEFCI'S ROLE IN START-UP JOURNEY

Introduction

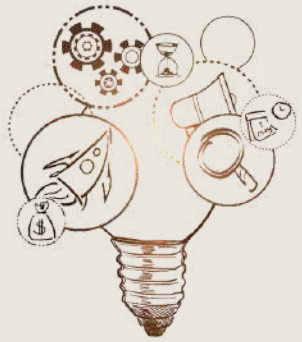
In today's dynamic economic landscape, the journey of launching a new business venture, often referred to as a start-up, represents a pivotal moment for entrepreneurial visionaries. Start-ups, typically driven by innovative ideas and spearheaded by passionate founders, play a crucial role in fostering economic growth, job creation, and technological advancement. However, the path to success for these nascent enterprises is fraught with challenges, chief among them being securing adequate funding and navigating legal complexities.

Recognizing the importance of nurturing these fledgling enterprises, the Government of India introduced the "Start-up India Scheme" on January 16, 2016. This landmark initiative, launched by Prime Minister Narendra Modi under the Ministry of Commerce and Industry's Department of Promotion of Industry and Internal Trade, aims to catalyse entrepreneurial spirit, stimulate business creation, and unlock economic potential. With a vision to transform India into a hub for innovation and start-ups, this initiative has already set the stage for significant growth, with projections indicating a rise from approximately 4,400 start-ups to over 13,000 by the end of 2021.

Amidst this backdrop of burgeoning entrepreneurial activity, the International Economic Forum of Commerce and Industry (IEFCI) emerges as a stalwart supporter and catalyst for start-up success. As a leading non-governmental, not-for-profit organization, IEFCI stands as the voice of international business and industry, advocating for policies that foster an enabling environment for start-ups and Micro, Small, and Medium Enterprises (MSMEs). IEFCI plays a pivotal role in empowering start-ups by offering comprehensive legal solutions from inception to expansion.

Through strategic partnerships with entities such as the Ministry of Commerce and Industry and initiatives like the Atal Incubation Centre, and NITI Aayog, IEFCI facilitates a robust ecosystem

that supports start-ups and MSMEs. By streamlining incorporation processes, facilitating intellectual property rights registrations, and providing robust dispute resolution mechanisms such as arbitration and mediation, IEFCI ensures that start-ups can navigate legal complexities with confidence. Moreover, IEFCI's commitment extends beyond legal support, encompassing initiatives like Hackathons on AI, Law, Health care, E-commerce etc., and MSME promotion events, which serve to bolster the entrepreneurial spirit and innovation landscape in India.



In essence, IEFCI's dedication to promoting start-ups not only contributes to the economic prosperity of India but also aligns with global sustainability goals. By providing networking opportunities, policy advocacy platforms, and specialized training programs, IEFCI equips entrepreneurs with the tools and resources needed to thrive in a competitive market environment. As start-ups continue to redefine industries and drive innovation forward, IEFCI remains steadfast in its mission to empower these ventures, ensuring they achieve sustainable growth and contribute meaningfully to the global economic ecosystem.

In the subsequent sections, we delve deeper into how IEFCI's initiatives and partnerships are reshaping the start-up landscape, empowering entrepreneurs, and fostering a culture of innovation. Through its multifaceted approach, IEFCI not only supports start-ups in overcoming initial hurdles but also positions them for long-term success in an increasingly interconnected world.

Purpose and Objectives

1. Advocating for International Business

IEFCI advocates for the interests of international business and industry, ensuring a platform for dialogue and consensus-building among global stakeholders. By articulating industry concerns and influencing policy decisions, IEFCI promotes a favourable environment for business growth and innovation.

2. Supporting Start-ups and MSMEs

IEFCI is dedicated to supporting start-ups and Micro, Small, and Medium Enterprises (MSMEs) through comprehensive legal solutions and strategic initiatives. By facilitating business incorporations, streamlining intellectual property (IP) registrations, and providing robust dispute resolution mechanisms such as arbitration and mediation, IEFCI empowers start
ups to navigate legal complexities and achieve sustainable growth.

3. Collaborating for Entrepreneurship Promotion

IEFCI collaborates extensively with start-ups, MSMEs, legal professionals, government bodies, and industry associations to promote entrepreneurship and facilitate business growth. This collaborative approach ensures tailored legal solutions and advisory services that meet the diverse needs of emerging businesses across various sectors.

4. Leadership in Legal and Regulatory Expertise

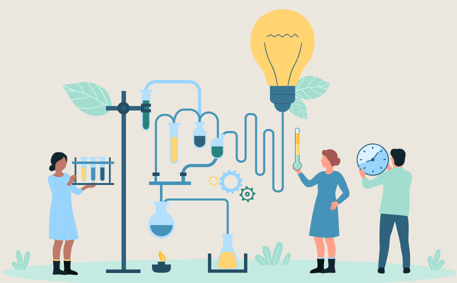
Led by experienced professionals in legal, regulatory, and business domains, IEFCI ensures the effective delivery of services and support to start-ups and MSMEs. The organization's leadership is instrumental in providing guidance and fostering a conducive business environment that encourages innovation and economic development.

5. Establishing Business Incubators & Start-Up

The hackathons organized and facilitated by IEFCI serve as catalysts for establishing business incubators that support the growth of start-ups. The Hackathon is organized by the ICAICSRD in collaboration with the International Economic Forum of Commerce and Industry (IEFCI), with the gracious support of the Atal Incubation Centre, NITI Aayog. Hackathon Challenge, designed to support the establishment of business incubators for startups and university students specializing in various applications. The challenge, open to multidisciplinary teams from various colleges, aims to stimulate innovation in industrial, healthcare, financial, and commercial sectors, with a particular focus on fostering an innovation-based economy. Participants who successfully clear the challenge will receive specialized training from the Atal Incubation Centre, facilitated by NITI Aayog, and will be assisted in the incorporation and legal formalities of their startup by IEFCI along with funding by the government to some extent. The training, conducted online, allows participation from anywhere across India, ensuring inclusivity and accessibility.

7. Promoting "Make in India" Initiatives

IEFCI actively supports the "Make in India" and "Made in India" initiatives, recognizing the pivotal role of MSMEs in strengthening the Indian economy. By promoting local manufacturing and entrepreneurship, IEFCI contributes to job creation, economic growth, and national self sufficiency.



IEFCI's Contribution to Indian Youth Start-up Achievement

India's vibrant youth population is a cornerstone of its economic growth and development trajectory. Recognizing this potential, the Government of India has launched several initiatives aimed at fostering entrepreneurship and innovation among young Indians. These programs not only provide crucial financial support but also serve as platforms for aspiring entrepreneurs to translate their ideas into viable businesses.

Among these initiatives, the Start-up India scheme, initiated in 2015, stands out as a flagship program designed to create a supportive ecosystem for start-ups. It offers tax exemptions, funding opportunities, and a streamlined regulatory framework through a single-window clearance system. This scheme has been instrumental in nurturing a culture of innovation and entrepreneurship among India's youth, encouraging them to explore new ideas and ventures.

Additionally, schemes like the Pradhan Mantri Mudra Yojana and the Atal Innovation Mission further bolster the entrepreneurial landscape. The Mudra Yojana provides financial support to micro and small enterprises, while the Atal Innovation Mission focuses on promoting innovation through funding, mentorship, and infrastructure support. These initiatives collectively empower young entrepreneurs across various sectors by providing them with the necessary resources and guidance to kick-start and sustain their ventures.

In states like Sikkim, the Skilled Youth Start-Up Scheme (SYSS) specifically targets educated unemployed youth. It offers financial assistance and subsidy support to eligible projects, aiming to reduce unemployment and promote self-employment. Such localized initiatives play a crucial role in harnessing local talent and fostering entrepreneurship at the grassroots level.

The International Economic Forum of Commerce and Industry (IEFCI) plays a pivotal role in supporting start-ups and Micro, Small, and Medium Enterprises (MSMEs) through its comprehensive legal and advisory services. IEFCI has signed an MOU with various Universities across India to organize National and zonal events for promoting start-ups.

IEFCI's commitment to supporting start-ups is exemplified through its initiatives such as AI Hackathons, Start-Up Initiatives, and MSME promotion events. Moreover, IEFCI's role extends beyond traditional legal support. It provides consultancy in cyber laws, corporate governance, and other legal issues critical to the digital age. The organization also hosts various online courses aimed at empowering entrepreneurs and professionals with the skills necessary for business success in a competitive global landscape.

1. Catalyst for Innovation and Entrepreneurship

India's youth are pivotal in driving economic growth and innovation. Through IEFCI's proactive support and initiatives, young entrepreneurs are empowered to transform innovative ideas into thriving businesses. IEFCI provides crucial legal guidance, fosters networking opportunities, and advocates for start-ups, thereby creating a conducive environment for youth
led ventures.

2. Leveraging Government Initiatives for Growth

IEFCI collaborates closely with governmental bodies to leverage initiatives like Start-up India and the Atal Innovation Mission. By aligning with these programs, IEFCI enhances accessibility to funding, regulatory simplification, and infrastructural support. This strategic alignment empowers youth entrepreneurs to navigate challenges and accelerate their business growth.

3. Tailored Legal and Advisory Services

IEFCI offers comprehensive legal solutions tailored to the unique needs of start-ups. From incorporation to IP protection and dispute resolution, IEFCI ensures that legal complexities do not hinder entrepreneurial ambitions. By providing expert guidance in cyber laws, corporate governance, and more, IEFCI equips young entrepreneurs with the knowledge and tools for sustainable business success.

4. Promoting a Culture of Entrepreneurship

IEFCI actively promotes a culture of entrepreneurship through initiatives like AI Hackathons and MSME promotion events. These platforms not only showcase innovative solutions but also inspire collaboration among youth from diverse backgrounds. By fostering creativity and problem-solving skills, IEFCI cultivates a dynamic ecosystem were ideas flourish into impactful businesses.

India's burgeoning start-up ecosystem offers immense potential for young entrepreneurs to forge successful enterprises. Despite the inherent risks, the key to navigating this landscape lies in innovation, unique concepts, and attracting suitable investors. Crucial to nurturing this ecosystem is the government's pivotal role in establishing robust infrastructure, including state of-the-art incubators and cutting-edge technology access. Equally important are comprehensive training programs for federal and state officials, essential in providing unwavering support to emerging entrepreneurs.

The International Economic Forum of Commerce and Industry stands at the forefront of

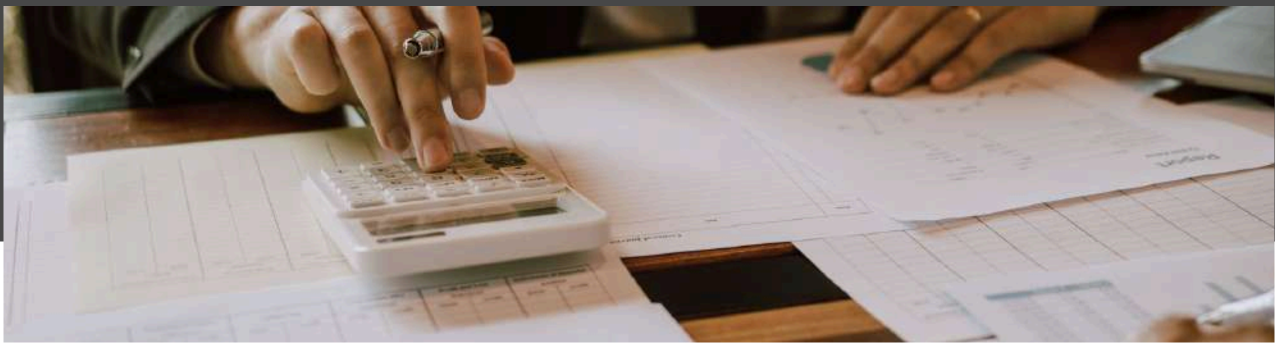
advocating for international business interests and fostering peace, prosperity, and opportunities globally. Its initiatives, including comprehensive legal support and collaborative events like hackathons, bolster start-up ecosystems, underscoring IEFCI's commitment to societal advancement and economic growth.

Furthermore, The International Economic Forum of Commerce and Industry fostering a business-friendly environment necessitates streamlined regulations and policies conducive to start-up growth. Addressing challenges such as the scarcity of unsecured seed capital is vital to removing barriers for aspiring entrepreneurs. By encouraging risk-taking, and offering mentorship, expertise, and financial backing, the government empowers youth to unleash their entrepreneurial potential. This holistic approach not only fuels individual success but also propels India towards becoming a global hub for start-ups, thereby contributing significantly to societal development, human capital enhancement, and overall economic prosperity.

ADVOCATE SHRUTI BIST

Supreme Court Of India
Chamber -63 ,lawyers
Chamber Supreme Court

Profit Puzzles: Job Costing Secrets for the Curious Mind



In the dynamic world of business, precise cost analysis is the key to navigating a course towards profitability. While traditional accounting methods offer a general sense of direction, job costing emerges as a more precise compass. This careful system delves into the depths of individual projects, carefully tracking every expenditure – a financial treasure map leading to a clear understanding of true costs. Unlike battling stormy seas with unreliable estimates, job costing acts as a lighthouse, illuminating the hidden currents of material expenses, labour costs, and the ever-present undertow of overhead. With job costing as your first mate, you can confidently steer your projects towards financial success, leaving behind the murky waters of uncertainty and charting a course towards a prosperous horizon. So, unfurl the sails of knowledge and prepare to embark on a thrilling voyage of financial discovery!

What is Job Costing?

CIMA London defines job costing as **the category of basic costing methods which is applicable where the work consists of separate contracts, jobs or batches each of which is authorised by specific order or contract**. The method is also known under various other names, such as specific order costing, production order costing, job lot costing or lot costing.

In essence, job costing involves identifying and accumulating all the costs associated with a specific job or project, including direct costs (like materials, labour, & subcontractor costs directly attributable to the job) and indirect costs (like overhead expenses allocated to the job based on a predetermined allocation method).

Why Job Costing?

Job costing is a vital tool for businesses across industries, enabling precise financial management by tracking expenses down to the smallest detail. For example, in a custom furniture workshop, job costing ensures that every cost associated with building a dining table—materials, labour, overhead, and transportation—is carefully recorded. This allows the workshop to accurately price its products and maintain profitability.

Similarly, in a marketing agency handling multiple client campaigns, job costing helps allocate costs like creative team salaries, advertising expenditures, and client meetings to specific projects. This not only ensures clients are billed accurately but also provides insights into which campaigns are most cost-effective.

In construction, job costing tracks expenses such as materials, equipment rental, subcontractor fees, and labour for each project. This level of detail allows construction companies to optimize costs, improve budget accuracy, and make informed decisions on future bids. Overall, job costing empowers businesses to manage finances with precision, enhance profitability, and make strategic decisions based on comprehensive financial insights.

Implementing Job Costing

Implementing job costing requires careful planning and adherence to certain steps:

- **Identify Direct Costs**: Determine which costs are directly attributable to each job. This typically includes materials, labour, and any direct expenses incurred exclusively for the job.
- **Allocate Indirect Costs**: Establish a method to allocate indirect costs (like rent, utilities, administrative expenses) to each job. Common allocation methods include labour hours, machine hours, or square footage used.
- **Tracking and Recording**: Develop a system to track and record costs for each job accurately. This may involve using specialized accounting software or creating customized spreadsheets.
- **Regular Reviews and Adjustments**: Regularly review job costing data to ensure accuracy and relevance. Adjust cost estimates and allocation methods as necessary to improve accuracy over time.

Benefits of Job Costing

- **Enhanced Cost Control**: Businesses can identify cost overruns early and take corrective actions to control expenses.
- **Improved Pricing Decisions**: Accurate cost data helps in setting competitive prices that reflect the true cost of delivering products or services.
- **Better Resource Allocation**: Understanding cost patterns enables businesses to allocate resources efficiently, reducing waste and improving productivity.
- **Customer Satisfaction**: Delivering projects within budget enhances customer satisfaction and fosters long-term relationships.

What kind of businesses can use Job Costing?

Job costing serves as a versatile tool utilized by a myriad of businesses that specialize in producing unique or customized outputs. Here are several illustrative examples:

Construction companies rely on job costing to carefully track the costs associated with each building project, including materials, labour, equipment rental, and overhead expenses. This ensures accurate budgeting and cost control throughout the construction process.

Manufacturing companies benefit from job costing when producing specialized parts or limited-edition products. By allocating costs such as raw materials, direct labour, and overhead to each production run, they can assess profitability and make informed pricing decisions.

Service businesses such as advertising agencies, law firms, and IT consultants employ job costing to monitor expenses related to client projects. This includes tracking hours worked by staff, external consultant fees, and any direct costs incurred, ensuring accurate billing and project profitability analysis.

Job costing extends its application across various other industries and businesses where accurate cost allocation and financial management are crucial for operational success and profitability.

Case Study Corner: Unveiling the Power of Practical Job Costing for Exciting Success!

Imagine a bustling garment manufacturing floor, where every thread and seam tell a story of careful craftsmanship and financial precision. Now, shift gears to the high-voltage world of electricity distribution, where each maintenance task is a strategic endeavour in cost management and operational efficiency. These worlds may seem vastly different, but they share a common thread: the power of job costing. In both industries, job costing isn't just a tool—it's a strategic compass guiding decisions and ensuring profitability. Let's explore how job costing transforms these sectors, from the assembly lines of fashion to the networks that power our cities.

- **Thread by Thread: Job Costing in Garment Manufacturing**

XYZ Garments, a garment manufacturer in Delhi, India, faced difficulties with cost estimation. Their current system allocated overhead costs as a percentage of direct labour, leading to inaccurate pricing and potential profit loss. For instance, a batch of 100 cotton shirts, under the old system, might have shown a cost of ₹900 per shirt (direct materials + direct labour + overhead %). However, the true cost could be higher due to inefficiencies or variances in material usage.

To gain better control, XYZ Garments implemented job costing. This tracked direct costs like fabric and labour for the same batch of 100 shirts. Additionally, they allocated a more accurate share of overhead costs based on machine usage, bringing the total cost to ₹120000. This translates to ₹1200 per shirt, a significant difference from the initial estimate.

The shift to job costing empowered XYZ Garments to identify areas for improvement. They realized the shirt style required more fabric than initially assumed, leading to higher material costs. They also streamlined the cutting process, reducing labour hours by 20%. With this newfound cost transparency, XYZ Garments could adjust pricing to reflect true production costs, improve profitability, and make informed decisions about future production runs.

- **Unmasking the Magic: How Job Costing Turns Meters into Margins**

Previously, XYZ Power Ltd. relied on the lowest rate charged by a few contractors for similar jobs when assigning payment. However, this approach didn't guarantee selecting the most cost-effective option. There was a chance the lowest bid might not reflect the true cost of the job.

To address this issue, XYZ Power implemented job costing. This method involves closely monitoring each contractor's activities and material consumption on a specific site. A dedicated cost accountant now visits each job location, observes the work, and calculates the associated internal costs. This allows XYZ Power to determine the actual cost of each job, leading to more informed decisions when negotiating fair compensation with contractors.

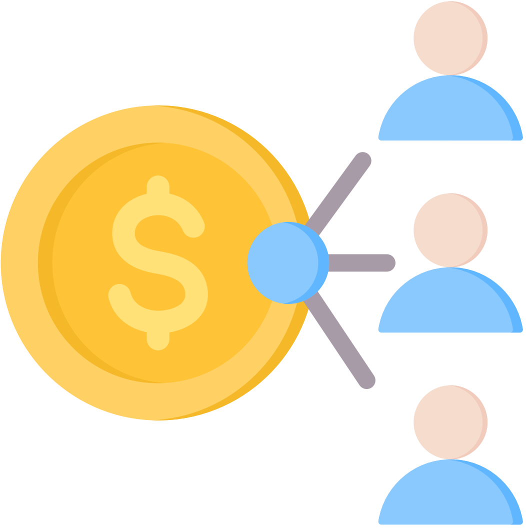
For example, with meter installations, job costing identified potential for increased efficiency compared to initial estimates. Similarly, site monitoring revealed possibilities for streamlining the configuration process, potentially reducing the proposed time per meter. Finally, observations suggest an alternative approach to labour allocation, using a combination of skilled and unskilled labour for potentially optimized costs.

After carefully calculating the job cost based on the observed efficiencies, it was revealed that the contractor had been incorporating a 40% margin. Through productive negotiations, a mutually agreeable 10% margin was established, resulting in a significant 30% cost saving for XYZ Power Ltd. This shift to job costing exemplifies the "**Meter to Margin**" philosophy in action. By gaining granular control over project costs, XYZ Power was empowered to optimize contractor performance and secure substantial financial benefits.

Conclusion

While traditionally associated with manufacturing and construction, job costing proves equally valuable in the service sector. As demonstrated by XYZ Power Ltd.'s experience in the electricity distribution industry, this method empowers service businesses to gain deep insights into project costs, leading to significant improvements. **Similarly, for manufacturers like XYZ Garments, job costing helps pinpoint inefficiencies in production lines or identify areas for material waste reduction.**

In conclusion, job costing is not just for factories and construction sites. It's a powerful tool that can benefit any business – from service providers to manufacturers – seeking to optimize costs, improve efficiency, and achieve lasting financial success.



CMA RISHABH JAIN

Practicing Cost Accountant

Worldonomics Summary

United States

1. CNN's Presidential Debate: The debate between President Joe Biden and former President Donald Trump on June 27 drew significant viewership, becoming CNN's highest-rated program in its history.
2. Hunter Biden's Trial: Hunter Biden's trial garnered widespread attention, with a focus on the Biden family.
3. Israel's Hostage Rescue: The successful rescue operation by Israel was a major international story, with implications for US foreign policy.
4. E.U. Elections Impact: The results of the E.U. elections, which saw the far-right making significant gains, were closely watched in the US.
5. Pro-Palestinian Protests in Washington: Large-scale protests took place in Washington, D.C., in response to the situation in Gaza.
6. Landslide in Wyoming: A significant landslide in Wyoming caused part of a highway to collapse, impacting local communities.
7. Biden's Visit to France: President Biden's visit to a military cemetery in France, which former President Trump had once snubbed, was a notable event.
8. Sacramento Mass Shooting Suspect: The suspect in the 2022 Sacramento mass shooting died in county jail.
9. Retail Comeback: Reports indicated a surprising comeback for shopping centers, defying the trend of retail decline.
10. India-Pakistan Cricket Match: The cricket match between India and Pakistan in Long Island drew a large crowd, highlighting the sport's growing popularity in the US

China

1. China's Trade Data: China's exports grew by 8.6% in June, beating forecasts, while imports fell by 2.3%.
2. Severe Flooding in Southern China: Unprecedented downpours led to severe flooding across southern provinces like Guangdong, Guangxi, and Fujian, causing significant damage and prompting large-scale rescue operations.
3. Economic Stimulus Measures: The Chinese government announced new economic stimulus measures to boost domestic consumption and support the economy amid weak domestic demand.
4. US-China Trade Tensions: Trade tensions between the US and China escalated, with both countries imposing new tariffs on each other's goods.
5. Electric Vehicle Exports: China faced accusations from the US and the EU of overproducing and flooding overseas markets with cheap electric vehicles, leading to new tariffs.
6. Manufacturing Activity: Factory activity in China remained flat in June, with the manufacturing purchasing managers index staying unchanged at 49..
7. Flood Relief Efforts: Extensive relief efforts were undertaken in flood-affected areas, including the distribution of food, water, and other essential supplies.
8. Economic Growth Concerns: Analysts expressed concerns about the sustainability of China's strong export growth amid weakening global demand and increasing trade conflicts.
9. Infrastructure Spending: The Chinese government issued new bonds to increase infrastructure spending, aiming to lift demand for industrial commodities.
10. ASEAN Trade: Trade with the Association of Southeast Asian Nations (ASEAN) surged, cementing the bloc's position as China's largest trading partner by region.

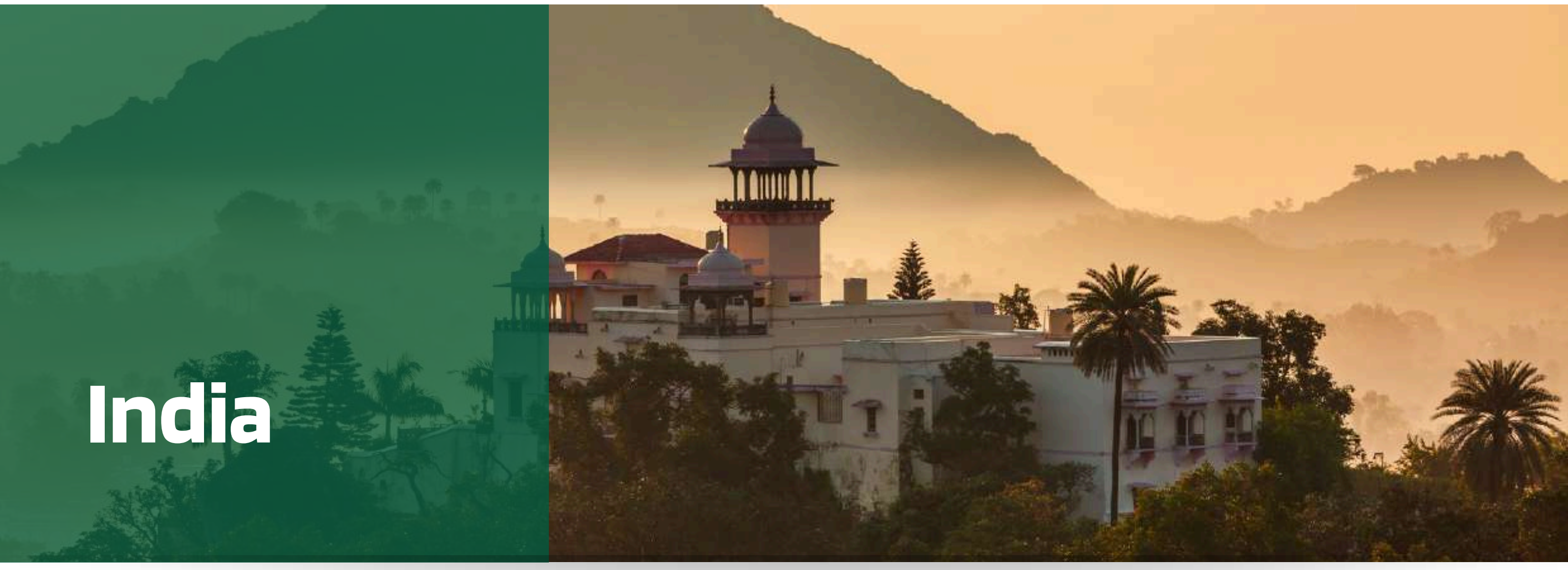
Japan

- Severe Flooding: Heavy rains caused severe flooding in several regions, leading to significant damage and displacement of residents.
- Economic Stimulus: The Japanese government announced new economic stimulus measures to support the economy amid global uncertainties.
- Flesh-Eating Bacteria Outbreak: Japan faced an outbreak of streptococcal toxic shock syndrome (STSS), leading to increased health warnings.
- Tax Cut Announcement: Prime Minister Fumio Kishida announced a 40,000-yen tax cut per person to alleviate the impact of inflation.
- Tokyo Gubernatorial Election: The election campaign was marked by pranks and controversies, adding to the political drama.
- Mount Fuji Incidents: Several tragic incidents occurred on Mount Fuji, including the discovery of bodies and climber fatalities.
- US-Japan Relations: Strengthening of US-Japan relations with new agreements on maritime safety and defense cooperation.
- Rice Price Surge: A combination of heatwaves and a tourism boom led to a significant increase in rice prices.
- Hiroshima Anniversary: Hiroshima marked the 79th anniversary of the atomic bombing with renewed calls for peace.
- Stock Market Volatility: The Nikkei index experienced significant fluctuations, reflecting global economic uncertainties.

Germany

1. Severe Flooding: Southern Germany experienced significant flooding, particularly in Baden-Württemberg and Bavaria, leading to evacuations and extensive damage.
2. European Football Championship: Germany hosted the UEFA European Football Championship, which kicked off in Munich on June 14th.
3. Dual Citizenship Law: Germany's new dual citizenship law came into effect on June 27th, allowing non-EU citizens to naturalize without surrendering their original citizenship.
4. Economic Stimulus: The German government announced new economic stimulus measures to support the economy amid global uncertainties.
5. Opportunity Card Visa: The Chancenkarte (Opportunity Card) visa was launched, making it easier for non-EU citizens to move to Germany for work.
6. European Elections: Germany participated in the European elections on June 9th, with a notable increase in eligible voters due to the inclusion of 16- and 17-year-olds.
7. IamExpat Fair: The first-ever IamExpat Fair in Germany took place in Berlin on June 8th, offering resources and networking opportunities for expats.
8. Digital BahnCards: Deutsche Bahn transitioned its BahnCard 25 and 50 to digital-only formats starting June 6th.
9. Flood Relief Efforts: Extensive relief efforts were undertaken in flood-affected areas, including the distribution of essential supplies and support for public sanitation.
10. Stock Market Volatility: The German stock market experienced significant fluctuations, reflecting global economic uncertainties.

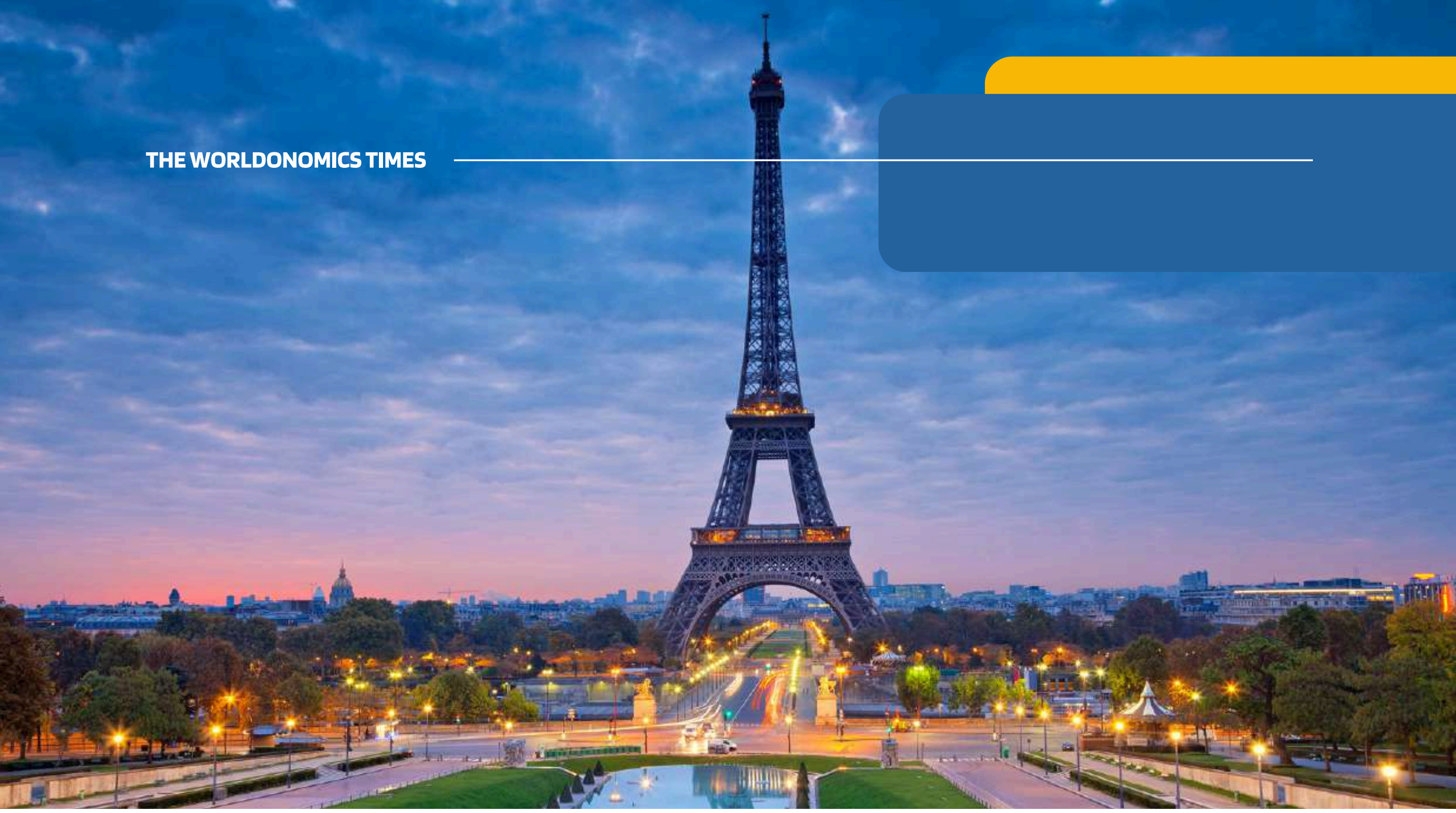
India



1. Modi's Third Term: Prime Minister Narendra Modi began his third term, retaining key ministers like Amit Shah, Rajnath Singh, and Nirmala Sitharaman in his cabinet.
2. Severe Heatwave: Northern India experienced an intense heatwave, with temperatures soaring above 45°C, leading to health warnings and water shortages.
3. Economic Growth: India reported a robust GDP growth rate of 7.8% for the first quarter of 2024, driven by strong performance in the manufacturing and services sectors.
4. Chandrayaan-3 Mission: ISRO's Chandrayaan-3 mission successfully landed on the moon, making India the fourth country to achieve a soft landing on the lunar surface.
5. Protests Against Agnipath Scheme: Protests erupted across several states against the Agnipath military recruitment scheme, with demonstrators demanding its rollback.
6. Monsoon Arrival: The southwest monsoon arrived earlier than expected, bringing much-needed relief to drought-affected regions.
7. Digital India Expansion: The government announced new initiatives to expand the Digital India program, aiming to improve internet connectivity in rural areas.
8. Stock Market Surge: The Indian stock market reached new highs, with the Sensex crossing the 70,000 mark for the first time.
9. Health Initiatives: The government launched a new health initiative aimed at combating malnutrition and improving maternal health in rural areas.
10. India-Pakistan Relations: Diplomatic tensions between India and Pakistan eased slightly, with both countries agreeing to resume bilateral talks on trade and security issues.

United Kingdom

- Severe Flooding: Heavy rains caused severe flooding in parts of the UK, particularly affecting areas in the Midlands and the North.
- Economic Growth: The UK reported a GDP growth rate of 1.5% for the second quarter of 2024, showing signs of economic recovery.
- Cost of Living Crisis: The government announced new measures to address the ongoing cost of living crisis, including subsidies for energy bills and food prices.
- NHS Strikes: NHS workers went on strike demanding better pay and working conditions, leading to disruptions in healthcare services.
- UEFA European Football Championship: The UK hosted several matches of the UEFA European Football Championship, with significant public interest and attendance.
- Climate Change Protests: Large-scale climate change protests took place in London and other major cities, calling for more aggressive action on environmental policies.
- Royal Family News: Prince William and Kate Middleton celebrated their 13th wedding anniversary with public appearances and charity events.
- Housing Market Trends: The UK housing market showed signs of cooling down, with a slight decrease in property prices and sales.
- Tech Industry Growth: The UK tech industry continued to grow, with several major companies announcing new investments and job creation.
- Brexit Trade Talks: Ongoing Brexit trade talks with the EU remained a key focus, with discussions on tariffs and regulations continuing.



France

1. French Parliamentary Elections: The first round of the parliamentary elections took place on June 30, 2024. The far-right National Rally led by Jordan Bardella gained significant traction, but the outcome remains uncertain with a second round scheduled for July 7.
2. Left-Wing Alliance Victory: In a surprising turn of events, the left-wing New Popular Front won the most seats in the French parliament, preventing the far-right from taking power.
3. Carlos Alcaraz Wins French Open: Carlos Alcaraz claimed his third Grand Slam title by winning the Men's singles at the French Open, defeating Alexander Zverev in the final.
4. Chanel Store Robbery: A Chanel store on Avenue Montaigne in Paris was targeted in a car-ramming attack as part of a robbery.
5. Nuit Blanche in Paris: The annual Nuit Blanche event, an all-night arts festival, took place on June 1.
6. Médievales de Provins: France's most important Medieval Fair was held from June 1 to 24.
7. 80th Anniversary of D-Day: Commemorations for the 80th anniversary of the Normandy landings took place on June 6.
8. Political Uncertainty: Following the elections, France faces political uncertainty with no party achieving an absolute majority, leading to a hung parliament.
9. Macron Rejects PM's Resignation: President Emmanuel Macron refused to accept Prime Minister Gabriel Attal's resignation, asking him to stay on to ensure stability.
10. Former President Hollande Wins Seat: Former President Francois Hollande won a seat in the parliament, marking his return to active politics.

Italy

1. Prime Minister Giorgia Meloni's Success in EU Vote: Prime Minister Giorgia Meloni solidified her position by coming out on top in the European Parliament elections.
2. Republic Day Celebrations: Italy celebrated Republic Day on June 2 with grand patriotic events, including a military parade in Rome and an aerial display by the Frecce Tricolori.
3. Luminara of San Ranieri: Pisa's Lungarni was illuminated by 70,000 wax candles on June 16 for the Luminara of San Ranieri, honoring the city's patron saint.
4. Calcio Storico Final: The historic and intense football tournament, Calcio Storico, held its final in Florence on June 24.
5. Milan Pride Parade: The Milan Pride Parade took place on June 29, celebrating LGBTQ+ rights and diversity.
6. First Palio di Siena: The historic horse race, Palio di Siena, was held from June 29 to July 2 in the picturesque city of Siena.
7. Tourism Boom: Italy saw a significant increase in tourism, with many visitors flocking to popular destinations like Rome, Florence, and Venice.
8. Heatwave: A severe heatwave hit Italy in late June, causing temperatures to soar and prompting health warnings.
9. Economic Growth: Italy reported positive economic growth figures for the second quarter of 2024, driven by strong performance in the tourism and manufacturing sectors.
10. Cultural Festivals: Various cultural festivals took place across Italy, celebrating the country's rich heritage and traditions.

Brazil

1. Flooding in Southern Brazil: Severe flooding in the state of Rio Grande do Sul caused widespread devastation, displacing nearly 580,000 people and resulting in over 170 deaths.
2. Waterborne Disease Outbreak: Following the floods, there was a significant outbreak of waterborne diseases, including leptospirosis, which has claimed 17 lives.
3. Climate Change Impact: Scientists reported that climate change has made such extreme flooding events twice as likely, exacerbated by the El Niño phenomenon.
4. Pantanal Wetlands Fires: Fires in the Pantanal wetlands surged to record levels due to weak rains, threatening the unique ecosystem and wildlife.
5. Economic Growth: Brazil's economy showed signs of recovery with positive growth figures for the second quarter of 2024, driven by the agriculture and manufacturing sectors.
6. Political Developments: President Luiz Inácio Lula da Silva announced new policies aimed at reducing deforestation and promoting sustainable development.
7. Healthcare Advances: Brazil made significant strides in healthcare, with new initiatives to improve access to medical services in rural areas.
8. Cultural Festivals: Various cultural events, including the Festa Junina celebrations, took place across the country, highlighting Brazil's rich traditions.
9. Sports Achievements: Brazilian athletes performed well in international competitions, bringing home several medals from the South American Games.
10. Tourism Boom: Brazil experienced a surge in tourism, with popular destinations like Rio de Janeiro and São Paulo seeing increased visitor numbers.

Canada

1. Wildfires in British Columbia: Severe wildfires ravaged parts of British Columbia, leading to evacuations and significant property damage.
2. Economic Growth: Canada reported positive economic growth for the second quarter of 2024, driven by strong performance in the technology and natural resources sectors.
3. Flooding in Alberta: Heavy rains caused flooding in several areas of Alberta, prompting emergency responses and community support efforts.
4. Healthcare Advances: New healthcare initiatives were launched to improve access to mental health services across the country.
5. Indigenous Rights: The government announced new policies aimed at advancing Indigenous rights and addressing historical injustices.
6. Climate Change Policies: Canada introduced stricter climate change policies to reduce carbon emissions and promote renewable energy.
7. Toronto International Film Festival: The Toronto International Film Festival (TIFF) announced its lineup for 2024, featuring a diverse range of films from around the world.
8. Sports Achievements: Canadian athletes excelled in various international competitions, including the Paris Olympics, where the women's rowing team won a silver medal.
9. Housing Market: The Canadian housing market showed signs of stabilization after a period of rapid price increases.
10. Cultural Festivals: Numerous cultural festivals took place across Canada, celebrating the country's rich diversity and heritage.

PSU Appointments

Adhip Nath Palchaudhuri
CMD of Balmer Lawrie

Adhip Nath Palchaudhuri has been named the new Chairman and Managing Director of Balmer Lawrie & Co. Ltd. He previously served as the company's Director of Service Businesses. Palchaudhuri took over the role on July 1, succeeding Adika Ratna Sekhar who retired.

Vivek Chandrakant Tongaonkar
Director (Finance) of ONGC

Vivek Chandrakant Tongaonkar has been named the new Director (Finance) of ONGC. He brings over 37 years of experience in the energy sector. Tongaonkar previously served as the Director (Finance) and CFO at MRPL, where he achieved significant financial improvements, including debt reduction and increased market capitalization.

Chandra Shekhar Verma
Independent Director in Shyam Metalics

Former SAIL chief joins Shyam Metalics
Shyam Metalics has appointed Chandra Shekhar Verma, ex-CMD of SAIL, as its independent director. Verma will contribute to the company's strategic decision-making.

Mundkur S Kamath

Director (Finance) of MRPL

MRPL MD Gets Additional Charge

Mundkur S Kamath, the current Managing Director of MRPL, has been given the additional responsibility of Director (Finance) for a temporary period of three months. This decision was made by the petroleum PSU.

KP Mahadevaswam

Director (Finance) of NBCC

NBCC CMD Takes on Additional Role

KP Mahadevaswamy, the current Chairman and Managing Director of NBCC, has been given the temporary responsibility of the company's Director (Finance). This additional role will last for three months or until a permanent appointment is made.

Sandeep Kumar

Director (Finance) of PFC

Sandeep Kumar Promoted at PFC

Sandeep Kumar has been elevated to the position of Director (Finance) at Power Finance Corporation Limited (PFC). With over 34 years of experience in the power and financial sectors, Kumar has been instrumental in PFC's financial success. He played a key role in implementing government schemes and advancing the company's ESG initiatives.

Vijay Chand
Head of NTPC Talcher Thermal Power Project

Vijay Chand New Head of NTPC Talcher Thermal

NTPC veteran Vijay Chand has been appointed as the new Head of Project at NTPC Talcher Thermal. With over three decades of experience in the power sector, Chand will oversee the 1320 MW Stage-III project.

Anjeev Kumar Jain
Director (Finance) of NBCC

Anjeev Kumar Jain to Head NBCC Finance

Anjeev Kumar Jain, currently with RITES Limited, has been selected for the post of Director (Finance) at NBCC (India) Limited. He was chosen from a pool of 11 candidates by the PESB. Jain's appointment is subject to necessary clearances and approvals.

Arvind Kumar
Director (Refineries) of Indian Oil

Arvind Kumar appointed Director (Refineries) at Indian Oil

Indian Oil has announced the appointment of Arvind Kumar as its new Director (Refineries). Previously the MD of CPCL, Kumar brings a wealth of experience in the oil and gas sector. His leadership at CPCL led to significant achievements including record-breaking throughput and the production of crucial fuels for ISRO and DRDO.

Vinod Kumar Tripathy

Director on MOIL board

New Government Director for MOIL

Vinod Kumar Tripathy, a Joint Secretary in the Ministry of Steel, has been appointed as the new government director on the board of MOIL Limited. He replaces Sanjay Roy.

Tripathy brings a wealth of experience in administration, engineering, and public policy to his new role. MOIL is India's largest manganese ore producer.

Samir Chandra Saxena

Director (Market Operation) of Grid-India

Samir Chandra Saxena New Head of Grid-India Market Operations

Samir Chandra Saxena has taken over as Director (Market Operation) for Grid Controller of India Limited. With over two decades of experience in the power sector, Saxena brings extensive knowledge in grid operations and electricity markets. He will oversee various aspects of electricity market operations including open access, power exchange, and integration of renewable energy.

Saloma Yomdo

Director (E&D) at Oil India

Saloma Yomdo New Head of Exploration at Oil India

Saloma Yomdo has been appointed as the new Director of Exploration & Development at Oil India Limited. With a strong background in petroleum engineering and extensive experience at Oil India, Yomdo will oversee the company's exploration and development activities.

DK Murali

CMD of BECIL

Cmde DK Murali appointed BECIL CMD

Former Indian Navy officer Cmde DK Murali has taken over as the new Chairman and Managing Director of BECIL. With a 35-year naval career and extensive experience in leadership and management, Murali is set to lead BECIL towards new heights.

Sanjay Kumar Singh

Director (Projects) of NHPC

Sanjay Kumar Singh appointed Director (Projects) at NHPC

NHPC has appointed Sanjay Kumar Singh as its new Director (Projects). With over 32 years of experience in the power and infrastructure sector, Singh brings a wealth of knowledge in project execution. He has previously led key projects at SJVN and played a crucial role in the construction of major hydroelectric projects in India and Bhutan.

Manoj Mittal

CMD of SIDBI

Manoj Mittal Takes Charge as SIDBI CMD

Manoj Mittal has been appointed the new Chairman and Managing Director of SIDBI. With over 33 years of experience in the finance sector, including previous roles at IFCI and SIDBI, Mittal brings significant expertise to his new position.

IPO'S UPDATES

Upcoming IPO's

Ceigall India Ola Electric FirstCry Unicommerce eSolutions	Saraswati Saree Dhariwalcorp Picturepost Studios Afcom Holdings

Issuer Company	Open Date	Close Date	Listing Date
Chetana Education Limited IPO	Jul 24, 2024	Jul 26, 2024	Jul 31, 2024
Manglam Infra and Engineering Limited IPO	Jul 24, 2024	Jul 26, 2024	Jul 31, 2024
V.L.Infraprojects Limited IPO	Jul 23, 2024	Jul 25, 2024	Jul 30, 2024
VVIP Infratech Limited IPO	Jul 23, 2024	Jul 25, 2024	Jul 30, 2024
SAR Televenture Limited FPO	Jul 22, 2024	Jul 24, 2024	Jul 29, 2024
RNFI Services Limited IPO	Jul 22, 2024	Jul 24, 2024	Jul 29, 2024
Sanstar Limited IPO	Jul 19, 2024	Jul 23, 2024	Jul 26, 2024
Kataria Industries Limited IPO	Jul 16, 2024	Jul 19, 2024	Jul 24, 2024
Macobs Technologies Limited IPO	Jul 16, 2024	Jul 19, 2024	Jul 24, 2024
Tunwal E-Motors Limited IPO	Jul 15, 2024	Jul 18, 2024	Jul 23, 2024
Aelea Commodities Limited IPO	Jul 12, 2024	Jul 16, 2024	Jul 22, 2024
Sati Poly Plast Limited IPO	Jul 12, 2024	Jul 16, 2024	Jul 22, 2024
Prizor Viztech Limited IPO	Jul 12, 2024	Jul 16, 2024	Jul 22, 2024
Three M Paper Boards Limited IPO	Jul 12, 2024	Jul 16, 2024	Jul 22, 2024
Sahaj Solar Limited IPO	Jul 11, 2024	Jul 15, 2024	Jul 19, 2024
Effwa Infra & Research Limited IPO	Jul 05, 2024	Jul 09, 2024	Jul 12, 2024

3rd Foundation Day (23.07.2024) New Delhi International Navodaya Chamber of Commerce

Shri Atul Gupta Ji, Former President, The Institute of Chartered Accountants of India, Shri Sanjay Gupta Ji, Former President, The Institute of Cost Accountants of India, Shri Vijay Aggarwal Ji, GM Finance, ONGC Videsh, Shri Saurabh Srivastva Ji, CGM HSCC & Shri R C Gupta Ji from GAIL India

INCOC

Shri Sanjay Jindal Ji, Director Finance, Engineers India Limited, Shri Bimal Jain Ji, Indirect Tax Expert, Shri B K Sabharwal Ji, Former President, Commodity Participants of India (CPAI).

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International Navodaya Chamber of Commerce (INCOC)

Welcome to the International Navodaya Chamber of Commerce (INCOC), a dedicated catalyst for positive change, empowerment, and community development. We are committed to enhancing brand value, nurturing essential skills, and facilitating societal growth through a collaborative and community-centric approach.

Our Mission

At INCOC, our mission is to harness the collective potential of individuals and businesses to create a lasting impact. We believe in the power of collaboration, empowerment through knowledge, and a community-centric approach to address local needs and promote inclusivity. Our initiatives are designed to inspire actionable impact, foster continuous learning and adaptation, and contribute to building a brighter future.

How We Operate

- **Collaborative Synergy:** We thrive on collaboration, bringing together diverse minds, expertise, and resources to foster an environment where ideas flourish and innovation thrives.
- **Empowerment through Knowledge:** Knowledge is the cornerstone of growth. At INCOC, we provide access to valuable insights, expert advice, and resources that empower individuals and businesses to make informed decisions and drive positive change.
- **Community-Centric Approach:** Communities are at the heart of change. Our initiatives are designed to address local needs, promote inclusivity, and create a sense of belonging, tailoring our efforts to have a meaningful impact where it's needed most.
- **Actionable Impact:** Our programs inspire action and create tangible results, from skill development workshops to societal initiatives that drive positive change, focusing on making a real difference.
- **Continuous Learning and Adaptation:** We embrace continuous learning and adaptation to stay relevant in a rapidly changing landscape, ensuring that our strategies remain effective and aligned with the needs of the times.