



भारतीय प्रबंध संस्थान रायपुर INDIAN INSTITUTE OF MANAGEMENT RAIPUR



PREPARATION MATERIAL

MANAGEMENT KIT 2022

A REFERENCE GUIDE FOR ASPIRANTS







Dear Aspirants,

IIM Raipur's warmest congratulations on getting shortlisted for Personal Interview Round. To help you prepare for this next crucial stage, we present you the PI Kit 2022. This kit encompasses necessary information which can aid your preparation for Personal Interview rounds. We would be happy to help you out with queries and clarification throughout the admissions process.

In case of Queries and Clarification, Please reach out to

IIM Raipur's PagalGuy:

https://tinyurl.com/adminquerypg

IIM Raipur's Official Admission policy:

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Warm Regards,

Admissions Committee

IIM Raipur





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Personal Interview Preparation

A personal Interview is just a formal communication through which the interviewees assess and judge various aspects of a candidate's personality. Hence it is key for a candidate to present their best holistic view possible using their verbal and nonverbal forms of communication.

Personal Interviews can be further classified into 3 different types:

1. Structured Interview

 Structured interviews encompass a pre-determined set of questions posed by the panel and this type is mainly used in a particular special skill job interview setting.

2. Unstructured interview

• Unstructured interviews are dependent on the candidate and are often customized to them. This type is more of a conversational style where cues are picked up from what is already been spoken and are very dynamic. Topics of conversations change from one candidate to another.

3. Behavioral interview

 A behavioral-based interview is an interviewing technique which employers use to evaluate a candidate's past behavior in different situations to predict their future performance. It's easier to predict success based on a candidate's past experiences than on speculation.

For the B-School interviews, the candidate can expect Unstructured and Behavioral types of interviews and must be prepared for them.

Key Parameters to be kept in mind while appearing for a Personal Interview

1. Communication Skills

Communication skills are essential in nearly every type of interview. With the right interview questions, the panel can determine whether a candidate can communicate properly in several situations and styles.



Elements of Communication:

- Tone of communication
- Volume of speech
- Pace of speech
- Body Language

2. Content

Good content is the bedrock of your interview. It can instill confidence into oneself and help in focusing on communication skills as well. Hence preparing good content is vital. **Disclaimer:** Panels are well versed with different subjects and any attempt to fake the content can prove futile.

3. Clarity of thought

Consistent and Coherent answers about yourselves showcase a clarity of thought which is required in the business world. Hence clear vision about your future and your choices along the way can help your cause in the interview process.

4. Confidence

This aspect binds together all the above-mentioned parameters together. The more understandable, prepared, and clear you are about your thoughts, the more confident you will be which shows the panel about the candidate's own ability in handling future challenges. Keeping calm and confident about your abilities can go a long way in the success of your interview.





Frequently asked Questions

Self-Based questions

1. Tell me something about yourself

- This might be the very first question the panel can ask you.
- Keep the answer to about 60-90 secs long
- Structure and precision are important. Include the following
 - Basic Introduction about yourself
 - Work Experience (if applicable)
 - Graduation
 - Achievements
 - Hobbies

2. Where do you belong to? Tell us about that.

- Key to know geographical facts about the place you belong to
- The State Capital, Chief Minister, Historical monuments, etc.

3. What are your long-term and short-term goals?

- Short-term goals must be achievable and concrete.
- Long-term goals are likely to depend on your personality and passion.

4. Tell us something about yourself which is not there in the resume?

- Deep dive into the interests which you might have.
- Passion and philosophy you follow in life can be used as supporting pillars.

5. Which was your favorite subject during graduation?

- Try and mention the subject which tickled your curiosity.
- Know a few basic topics in that subject.

6. Have you participated in extracurricular activities?

- Connect the interests and achievements while answering this question.
- Showcase the impact these activities had on your personality.



7. What has been your most challenging or rewarding academic experience so far?

- Great chance to drive the conversation towards something you are passionate about
- Use examples of teachers, classes, projects, competitions, etc. to emphasize it.

8. How do you think having work experience will help you in your MBA journey?

- Talk about how corporate life has impacted your personality.
- Instances during your tenure where you showcased your managerial skills.
- Talk about the kind of team member and a leader you would describe yourself as.

9. Why quit your job to study again? Do you think MBA is worth the opportunity cost lost?

- Here your vision and mission about your professional career are being tested.
- Talk about where you see yourself and why you chose this path of job and then MBA.
- Use instances to support your answer.
- Refrain from being negative about your employer.

10. If you could change one thing about your professional life, what would it be and why?

• Do not go technical about it and try to keep your answer within the business realm. You do not want the panel wondering why you decided to pursue MBA at all.

11. Tell us some of your strengths and weakness.

- Strengths
 - Don't just list your strengths, back them up with stories where you have incorporated them to bring about fruitful results.
 - Try to avoid common strengths such as hard work, teamwork, etc. The panel is interested in finding out what makes you stand out from others and these common strengths will not cut it for you.
 - Have at least 3 personality traits in your arsenal which you can back with a story.
 - Introspection, close friends and families, and mentors are the resources you must use to figure out your strengths.
- Weaknesses
 - Refrain from disguising your strength as a weakness.
 - Refrain from claiming to not have any weaknesses.



- It is natural to think that why should I reveal my weakness which can cost me
 a B school seat. Do understand that this is your personality test and no one is
 perfect.
- How to structure your answer:
 - Name your weakness
 - Incident where that weakness led to sub-optimal results
 - Most Important- Improvement Plan and how you wish to overcome the weakness.

12. Who is your role model?

- Name the role model
- Explain why is s/he your role model.
- Give 3-4 qualities you admire along with short anecdotes.

13. Do you have any questions for me/us?

• This is your chance to address any concerns that you have about the program. You should have at least 2-3 specific questions prepared.

MBA Based questions

1. Why MBA?

- An Important question that can make or break the interview. Prepare this well.
- Conduct efficient research about aspects of MBA.
- Clarity over Short time career goal
- Synchronized mention of long-term career goals with short-term goals.
 - Is MBA the only way to achieve your goals?
 - MBA will help you change your career trajectory and how?
- Highlight any unique resources that you are particularly interested in.

2. There are so many qualified applicants. Why should we admit you?

- Know about how you stand out from the crowd and what unique you bring to the table.
- Achievements and Accolades should be used to back the answer.



3. Instances from the past that showcase your management skills.

- Narrate how you have solved a problem by using managerial skills.
- If you have work experience, talk about instances where you led a project or a team.

4. Which Specialization are you interested in and why?

- This answer must align with the career goals and consist of the knowledge about the specialization itself.
- Be aware of the happenings in that field of choice.

Behavioral Questions

The purpose of behavioral interview questions is to understand who you are, how you think, and how you approach real-world dilemmas. Your answers to these behavioral questions can help the interviewer gauge how you may (or may not) complement in the B-school and further into the Business world.

While the goal of the interviewer is to learn more about you, your goal is to position yourself in the best possible light. Each of your answers should highlight at least one amongst self-awareness, growth, self-reliance, empathy, willingness to help others, etc.

Abstract Topics

This category contains a variety of questions. In general, the goal of asking these questions is to examine the candidate's mental process and their presence of mind. Examples:

- What are your thoughts about the colour green?
- Do you believe in luck? How would you measure it?
- Coca-Cola or Pepsi? Apple or Microsoft? Nike or Adidas?
- Would you rather have an inferiority or superiority complex?
- If a lion entered this room at this moment, what would you do?
- What would your biography be called?
- Explain what management is to an eight-year-old.
- Would you rather have the ability to fly or be invisible whenever you want?





Sample Questions:

- 1. Who is your role model? What impact have they had on you?
- 2. Tell about the historical importance of places you have stayed for more than a year?
- 3. Describe yourself in 3 words.
- 4. If you are admitted to our program, what do you think your biggest challenge will be?
- 5. What has been the most stressful situation you have ever found yourself in at work? How did you handle it?
- 6. Tell me about a time when you had to adjust to a colleague's working style to complete a project or achieve your objectives.
- 7. What steps do you follow to study a problem before deciding? Why?
- 8. What obstacles or difficulties have you ever faced in communicating your ideas to a manager/Supervisor?
- 9. What has been the best decision of your life? How?
- 10. Describe a situation in which you recognized a potential problem as an opportunity. What did you do? What was the result? What, if anything, do you wish you had done differently?
- 11. Describe a situation where you found yourself dealing with someone who didn't like you. How did you handle it?
- 12. Describe a situation that required you to do several things at the same time. How did you handle it? What was the result?
- 13. How do you prioritize projects and tasks when scheduling your time? Give me some examples.
- 14. Describe a situation where others you were working with on a project disagreed with your ideas. What did you do?
- 15. What was the biggest mistake you have made when delegating work as part of a team project?
- 16. Tell us about CSR activities your organization is involved with?
- 17. What are the decisions you regret in your life? Why?
- 18. You're working on a project with a tight deadline, but you find that you're unable to complete your section because your co-workers and your supervisor are unavailable to answer a few key questions. How do you deal with the situation?
- 19. How do you think your academic background is relevant to (specialisation of your choice)?
- 20. Tell us about famous personalities pursuing your hobby as a profession.
- 21. If an aggressive person enters this room suddenly and shouts for no reason, how will you tackle the situation?
- 22. On a scale of 10, grade yourself for ethical values. Justify your answer.



ECONOMICS

Economics is the social science which deals with the prioritization of options available by individuals, society, and government for using the scarce resources to meet the various needs of life.

Microeconomics: Microeconomics is the branch of economics that deals with decisions made by individuals to use the resources, interactions between the individuals for utilization, and distribution of the scarce resources.

Macroeconomics: Macroeconomics is another branch of economics that deals with the aggregate behavior of the economy (regional, national or global) in terms of performance parameters such as inflation, GDP, national income, price levels, etc.

Capitalist Economy: It is the economy where the decisions about what to produce, how much to produce, and the price at which to sell is solely taken by the market or the private enterprises in the system and the state has no economic role. This concept was originated in the famous work of Adan Smith-Wealth of Nations (1776).

State Economy: It is the economy where the decision production, distribution, supply, and price are solely taken by the state.

Mixed Economy: It is the economy where some elements of the economy are controlled by the state and the rest of the elements are regulated by the market. In another way, it can be said that it is the combination of a capitalist economy and a state economy.

National Income: Income of the Nation can be calculated in four ways: GDP, NDP, GNP, NNP, which is also a subject in 'National Income Accounting'.

GDP: Gross Domestic Product is the value of all the final goods and services produced within the boundary of the nation during one year. It is the summation of national private consumption, gross investment, government spending, and trade balance.

NDP: Net Domestic Product (NDP) is the GDP minus the depreciation of the goods and services produced.



GNP: Gross National Product is the summation of the GDP of a nation and the income of the nation from outside of the nation. GNP indicates both the quantitative and qualitative aspects of the economy.

NNP: Net National Product (NNP) is the GNP minus the depreciation of the economy. Inflation: Inflation is the quantitative measure of the increase in the general price level of goods and services which results in the decrease of the purchasing power per unit of a currency.

Stagflation: Stagflation is the situation of an economy when inflation and unemployment both are at higher levels that are opposite to the conventional situation. The conventional belief is that a trade-off exists between inflation and the unemployment rate according to Phillips Curve.

GDP Deflator: It is the measure of price behavior. It is the ratio of GDP at current price and GDP at constant price.

Fiscal Policy: The policy in which the nation's economy is regulated and monitored by the government's adjustment in spending and taxation.

Monetary Policy: The policy in which price stability and money supply and inflation rate regulation are taken by the central bank of a country to achieve the macroeconomic objectives.

Cash Reserve Ratio: Cash Reserve Ratio is the mandatory percentage of share a bank has to keep with the Reserve Bank of India in liquid cash to combat inflation and keep the liquidity in check.

SLR: Statutory Liquidity Ratio is the share of a bank's deposits kept with RBI in the form of Liquid assets to ensure the bank's solvency and money flow in the economy.

Bank Rate: Based on the monetary policies, commercial banks can borrow loans from banks from the central bank. The interest rate charged by the RBI on these types of loans and advances to the banks is known as bank rate.

Repo Rate: Repo rate is the interest rate at which RBI lends money to the banks for a short term. With the help of Repo Rate, RBI can regulate the inflation and liquidity of the economy of the country.



Reverse Repo Rate: Reverse Repo Rate is the rate at which commercial banks give loans to the RBI. Reverse Repo Rate helps to regulate the money supply in the economy.

Direct Taxes: The tax amount levied directly on an individual or organization's income or property by the imposing body. It is based on the principle of ability-to-pay, which means the entity with more resources has to pay more amount of tax. Examples of Direct Taxes are income tax, wealth tax, property tax, corporate tax, etc.

Indirect tax: It is the tax collected by an intermediary and paid to the government by passing the tax burden on the consumer buying that good or service. It is the tax imposed on the goods and services instead of on a person or organization's income, earnings, or property. Examples of Indirect tax: Value Added Tax, Customs Duty, Service Tax.

Goods and Services Tax (GST): It is a destination-based indirect tax that is imposed on the value addition at each stage till the final sale to the consumer. It has replaced many indirect taxes in India. The Goods and Services are divided into five tax slabs for the collection of the tax: 0%, 5%, 12%, 18%, and 28%.

Sample Questions

- 1. What do you know about the US-China Trade War?
- 2. Do you think a recession is still going on?
- 3. What is Macro Economics? How is it different from Microeconomics?
- 4. How do you define Utility?
- 5. What is the law of diminishing marginal utility? Explain with an example.
- 6. Tell me something about GST.
- 7. Tell us about the functioning of RBI, who is the current governor of RBI?
- 8. What are CRR, Repo Rate, Reverse Repo Rate, and Bank Rate, how are they used by RBI?
- 9. What are direct and indirect taxes?
- 10. What is a Budget?
- 11. What are the centre's role and the state's role in planning?
- 12. What are export data and import data?
- 13. What is the Keynesian theory?
- 14. What are economies of scale?
- 15. What are the essential features of Liberalization, Privatization, and Globalization?
- 16. What do you mean by a normal good?



HUMAN RESOURCES

Human Resource Management (HRM) is the term used to describe formal systems devised for the management of people within an organization. The responsibilities of a human resource manager fall into three major areas: staffing, employee compensation and benefits, and defining/designing work. Essentially, the purpose of HRM is to maximize the productivity of an organization by optimizing the effectiveness of its employees. This mandate is unlikely to change in any fundamental way, despite the ever-increasing pace of change in the business world.

Roles and responsibilities of an HR Professional:

- Tying performance appraisal and compensation to competencies.
- Developing competencies that enhance individual and organizational performance.
- Increasing the innovation, creativity, and flexibility necessary to enhance competitiveness.
- Applying new approaches to work process design, succession planning, career development, and inter-organizational mobility.

Key Performance Indicators (KPI)

Key Performance Indicators (KPI's) are defined as a set of quantifiable measures that an organization uses to gauge the performance of the organization and its employees to meet its strategic and operational goals. KPI's are directly linked to the overall goals of the company. Once an organization has set its mission, identified all its stakeholders, and defined its goals it then needs a way to measure progress towards its goals. KPI's are utilized to track or measure actual performance against key success factors.

Concepts related to HR:

Management by Objective (MBO): Management by Objectives is a personnel management technique where managers and employees work together to set, record, and monitor goals for a specific period. Organizational goals and planning flow top-down through the organization and are translated into personal goals for organizational members. It aims to improve the performance of an organization by clearly defining objectives that are agreed to by both management and employees.



Performance Management: Performance management is a process by which managers and employees work together to plan, monitor, and review an employee's work objectives and overall contribution to the organization. More than just an annual performance review, performance management is the continuous process of setting objectives, assessing progress, and providing ongoing coaching and feedback to ensure that employees are meeting their objectives and career goals.

360-degree Performance Appraisal: A 360-degree appraisal is a type of employee performance review in which subordinates, co-workers, and managers all anonymously rate the employee. This information is then incorporated into that person's performance review. The feedback is often used as a benchmark within the employee's development plan.

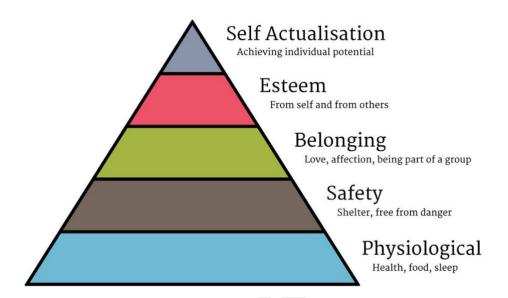
Balance Scorecard: The balanced scorecard is a strategic planning and management system that is used extensively in business and industry, government, and non-profit organizations worldwide to align business activities to the vision and strategy of the organization, improve internal and external communications, and monitor organization performance against strategic goals.

McKinsey 7S Framework: The model is based on the theory that, for an organization to perform well, these seven elements need to be aligned and mutually reinforcing. So, the model can be used to help identify what needs to be realigned to improve performance or to maintain alignment (and performance) during other types of change.

Maslow's Need Hierarchy Theory

Maslow's hierarchy of needs is a motivational theory in psychology comprising a five-tier model of human needs, often depicted as hierarchical levels within a pyramid. Maslow stated that people are motivated to achieve certain needs and that some needs take precedence over others. Our most basic need is for physical survival, and this will be the first thing that motivates our behavior. Once that level is fulfilled the next level up is what motivates us, and so on. This five-stage model can be divided into deficiency needs and growth needs. The first four levels are often referred to as deficiency needs (D-needs), and the top-level is known as growth or being needs (B-needs)





Personality

Personality is an easy concept to grasp for most of us. It's what makes you "you". It encompasses all the traits, characteristics, and quirks that set you apart from everyone else. Human resources professionals often use the Big Five personality dimensions to help place employees.

Big Five Model of Personality

The Big Five traits are Openness, Conscientiousness, Extroversion, Agreeableness, and Neuroticism or OCEAN:

- **Openness:** Openness includes traits like being insightful and imaginative and having a wide variety of interests.
- **Conscientiousness:** People that have a high degree of conscientiousness are reliable and prompt. Traits include being organized, methodic, and thorough.
- Extraversion: Extraverts get their energy from interacting with others, while introverts get their energy from within themselves. Extraversion includes the traits of energy, talkative, and assertive.
- **Agreeableness:** These individuals are friendly, cooperative, and compassionate. People with low agreeableness may be more distant.
- **Neuroticism:** Neuroticism is also sometimes called Emotional Stability. This dimension relates to one's emotional stability and degree of negative emotions.



Changing trends in HR

As HR has become more aligned with business, evidence-based HR and HR analytics are increasingly important. Without rigorously tracking HR investments and outcomes, HR decisions and priorities remain whims, not science. With HR analytics, line managers and HR professionals can better justify, prioritize and improve HR investments. While many HR decisions require insight and judgment, improved HR metrics help HR move towards professional respectability and decision-making rigor.

Big Data & HR Analytics

Big Data in HR refers to the use of the many data sources available to your organization, including those not traditionally thought of in HR; advanced analytic platforms; cloud-based services; and visualization tools to evaluate and improve practices including talent acquisition, development, retention, and overall organizational performance. This involves integrating and analyzing internal metrics, external benchmarks, social media data, and government data to deliver a more informed solution to the business problem facing your organization. Using these tools, HR organizations can perform analytics and forecasting to make smarter and more accurate decisions, better measure efficiencies, and identify management "blind spots".

Gamification

Gamification is the process of enabling the participants to learn in the learning and development scenarios through applying games and making them more engaging for the learner. In this process, the learner competes with the co-participants or participates individually and through this interactive exercise learns and earns rewards for his/her performance. Fast-growing digital gaming technology is used to implement gamification in learning. The technological development in HR has helped in implementing e-learning techniques in different organizations, but usage of gaming is a completely different and new concept that is still evolving.

Sub-domains of Human Resources

Recruiting & Selection

Recruitment: The process of searching for prospective employees and attracting them to apply for jobs in the organization. This involves:

- Discovering the sources of manpower to meet the requirements of the staffing schedules
- Employing effective measures for attracting that manpower in adequate numbers to facilitate effective selection of an efficient workforce for a vacant job position.



Recruitment Process:

- Finding out the requirement (hiring vs. exit), upcoming vacancies, kind of employees needed
- Developing best techniques to attract suitable candidates attracting the talent pool

Selection: It is the process of differentiating between applicants to identify and hire those with a greater likelihood of success in a job.

Selection Process (Sequential Steps):

- 1. Preliminary Interview
- 2. Administering Selection Tests
- 3. Employment Interview
- 4. Reference and Background Analysis * (Important, Latest Trend picking up)
- 5. Selection Decision
- 6. Physical Examination
- 7. Job Offer and Employment Contract

Performance Management System (PMS)

Performance Appraisal + Feedback + Coaching = Performance Management System

A performance Management System (PMS) is a continuous process of identifying, measuring, and developing the performance of individuals and teams and aligning performance with the strategic goal of the organization. It is based on four pillars:

- 1. Setting clear and measurable goals
- 2. Implementing concrete actions
- 3. Imposing rigorous consequences
- 4. Objectivity

Performance Appraisal

A performance appraisal (PA) system is an objective assessment of an individual's performance against well-defined benchmarks. Performance appraisals are a part of career development and consist of regular reviews of employee performance. Other aspects of individual employees are considered as well, such as organizational citizenship behavior, accomplishments, the potential for future improvement, strengths and weaknesses, etc.



Compensation & Benefits

This function involves creating and implementing Compensation policies for the employees.

- Payroll Administration
- Performance Appraisals
- Rewards & Recognition
- Provide Wage Comparisons
- Group Health, Dental & Vision Insurance
- Life & Disability Insurance
- Accident, Sickness & Cancer Insurance
- Flexible Spending Accounts
- Retirement Plan Administration
- Employee / Employer Relations
- Intermediary between Parties
- Open-door Policy for Employee Questions & Concerns
- Strict Privacy Policy on Employee Records, Exit Interviews

Learning and Development

The need for Training and Development is determined by the employee's performance deficiency, computed as follows.

Training & Development Need = Standard Performance –Actual Performance

Training: Training refers to the process of imparting specific skills. An employee undergoing training is presumed to have had some formal education. No training program is complete without an element of education. Hence, we can say that Training is offered to operatives.

Development: Development means those learning opportunities designed to help employees to grow. Development is not primarily skills-oriented. Instead, it provides general knowledge and attitudes, which will be helpful to employers in higher positions. Efforts towards development often depend on personal drive and ambition. Development activities such as those supplied by management development programs are generally voluntary.

Employee Engagement

Employee engagement is the measure of how involved and committed the workers are towards their organization and values. A well-engaged employee is well aware of the day-to-day



happenings of the organization and works with his or her colleagues to improve the performance of the individual and works towards the betterment of the organization. It is an optimistic attitude that the employees hold towards their organization.

Health & Safety

Safety implies an absence of accidents i.e., ensuring the protection of workers from workplace hazards. Providing safety to employees has a moral dimension as well as a legal requirement. Thousands of employees suffer from accidents every day – this could lead to total, temporary or permanent disability. Laws are covering occupational health and safety, and penalties for non-compliance. An employer needs to ensure that an accident doesn't lead to the incapacitation/death of an employee. Monetary compensation does not bring back a person as a healthy individual.

Industry Relations

Industry Relations (IR) is concerned with the management of relations between workers and employers (management) and the role of regulatory mechanisms in resolving any dispute. Employers, Employees, Unions, Government, and Judiciary have stakes in IR. IR assumes its significance owing to its direct linkage with productivity, ethical dimensions, and legal compliance.

Strategic planning

HRM makes strategic management effective by supplying human capital that is competent and committed and works in sync with organizational strategic goals.

Sample Questions

- 1. How do you think your academic background is relevant to the field of HR?
- 2. What are the three qualities in HR which influence you?
- 3. Can you give a short description of an ideal HR workplace for you?
- 4. What is self-Actualization for you?
- 5. What is the difference between a group and a team? Do you consider yourself a team player?
- 6. Have you handled or led a team comprised of workers from different backgrounds? If you have, can you share your experience with us?
- 7. Have you ever led a project team, and have you ever addressed a dysfunction within a team?
- 8. What do you like least about the world of human resources?
- 9. As an HR Person, what is your view on job eliminations?



INFORMATION TECHNOLOGY

Information technology is the use of computers, storage, networking, and other physical devices, infrastructure, and processes to create, process, store, secure, and exchange all forms of electronic data.

Analytics

Analytics is the process of discovering, interpreting, and communicating significant patterns in data which helps to take meaningful decisions.

Data can help businesses better understand their customers, improve their advertising campaigns, personalize their content, and improve their bottom lines.

Types of Data Analytics

- Descriptive Analytics
- Diagnostic Analytics
- Predictive Analytics
- Prescriptive Analytics





Uses of data analytics:

- **Improved decision making:** Companies can use the insights they gain from data analytics to inform their decisions, leading to better outcomes. Data analytics eliminates much of the guesswork from planning marketing campaigns, choosing what content to create, developing products, and more.
- More effective marketing: Data analytics also gives you useful insights into how your campaigns are performing so that you can fine-tune them for optimal outcomes.
- **Better customer service:** Data analytics provide you with more insights into your customers, allowing you to tailor customer service to their needs, provide more personalization and build stronger relationships with them.
- More efficient operations: Data analytics can help you streamline your processes, save money and boost your bottom line. When you have an improved understanding of what your audience wants, you waste less time on creating ads and content that don't match your audience's interests.

Business Analytics

Business analytics is a set of automated data analysis practices, tools, and services that help you understand both what is happening in your business and why to improve decision-making and help you plan for the future.

The term "business analytics" is often used in association with business intelligence (BI) and big data analytics.

Business Analytics helps you to

- Make faster and more confident decisions
- Cut down the costs and increase the velocity
- Anticipate and respond to the unexpected changes

Cloud Computing

Cloud computing is the delivery of computing services—including servers, storage, databases, networking, software, analytics, and intelligence over the Internet (cloud) to offer faster innovation, flexible resources, and economies of scale.

Cloud computing helps you to lower your operating costs, run your infrastructure more efficiently and scale as your business needs change.



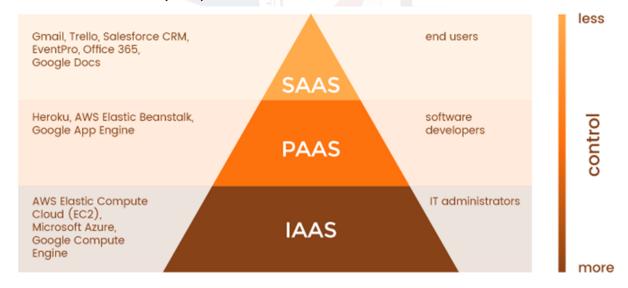
Cloud computing helps you to reduce the cost of buying and maintaining the infrastructure (both hardware and software), increases speed, productivity, and performance. It is more reliable and secured, which in turn helps to increase scalability

Types of Clouds

- **Public Clouds:** These are owned and operated by a third-party cloud service provider, which delivers their computing resources like servers and storage over the Internet.
- **Private clouds:** These are owned and operated by a single business or organization. Private clouds can be physically located on the company's on-site datacenter
- Hybrid clouds: Hybrid clouds are the combination of both public and private clouds which are bound together by technology that allows data and applications to be shared between them.
 Hybrid cloud gives you greater flexibility in business, provides more deployment options, and helps to optimize the existing infrastructure, security, and compliance

Types of Cloud services

- Infrastructure as a service (laaS)
- Platform as a service (PaaS)
- Software as a service (SaaS)



Big Data

Big Data is a collection of data that is huge in volume yet growing exponentially with time. It is data with so large size and complexity that none of the traditional data management tools can store it or process it efficiently.



Types of Big Data:

- **Structured:** The data that can be processed, accessed, and stored as a fixed format is termed structured data
- Unstructured: Any data with an unknown form or structure is classified as unstructured data.
- **Semi-Structured:** This is one of the types of big data related to the data containing both the formats that are unstructured and structured data.

Characteristics of Big Data

Big Data contains mainly 6Vs

VOLUME	VARIETY	VELOCITY	VERACITY	VALUE	VARIABILITY
The amount of data from myriad sources.	The types of data: structured, semi-structured, unstructured.	The speed at which big data is generated.	The degree to which big data can be trusted.	The business value of the data collected.	The ways in which the big data can be used and formatted.
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Artificial intelligence

Artificial intelligence is a wide-ranging branch of computer science concerned with building smart machines capable of performing tasks that typically require human intelligence.

All is accomplished by studying how the human brain thinks, and how humans learn, decide, and work while trying to solve a problem, and then using the outcomes of this study as a basis for developing intelligent software and systems.

Types of Artificial Intelligence

- Reactive Machines
- Limited Memory
- Theory of Mind
- Self-Awareness

Some of the uses of artificial intelligence in the current world:

1. **Chatbots** are always on, delivering smart and flexible analytics through conversations on mobile devices using standard messaging tools and voice-activated interfaces. This dramatically reduces the time to collect data for all business users, thereby accelerating



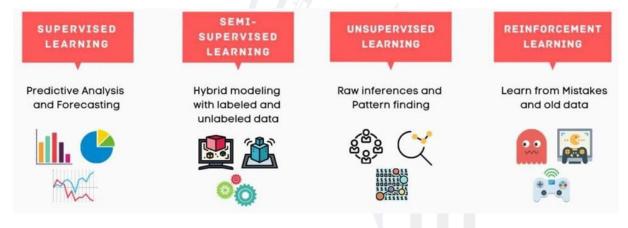
- the pace of business and streamlines the way analysts use their time, preparing companies for the growing data needs of the near future.
- 2. **E-commerce** Al is enabling shoppers to discover associated products whether it is size, color, shape, or even brand. The visual capabilities of Al are improving every year. By first obtaining visual cues from the uploaded imagery, the software can successfully assist the customer in finding the product they desire.

Machine Learning

Machine learning is a method of data analysis that automates analytical model building. It is a branch of artificial intelligence based on the idea that systems can learn from data, identify patterns, and make decisions with minimal human intervention.

There are four types of machine learning algorithms:

- Supervised
- Semi-supervised
- Unsupervised
- Reinforcement



Augmented reality

Augmented reality is defined as "an enhanced version of reality created by the use of technology to add digital information on an image of something." AR is used in apps for smartphones and tablets. AR apps use your phone's camera to show you a view of the real world in front of you, then put a layer of information, including text and/or images, on top of that view. Apps can use AR for fun, such as the game Pokémon GO, or information, such as the app Layar.



Virtual Reality

Virtual Reality is defined as "the use of computer technology to create a simulated environment." When you view VR, you are viewing a completely different reality than the one in front of you. Virtual reality may be artificial, such as an animated scene, or an actual place that has been photographed and included in a virtual reality app. With virtual reality, you can move around and look in every direction-up, down, sideways and behind you, as if you were physically there.

BlockChain

Blockchain is a shared, immutable ledger that facilitates the process of recording transactions and tracking assets in a business network.

- Key Elements of Blockchain
- Distributed ledger technology
- Immutable records
- Smart contracts
- How Blockchain works
- Each transaction occurs, it is recorded as a "block" of data
- Each block is connected to the ones before and after it
- Transactions are blocked together in an irreversible chain: a blockchain

Bitcoin

Bitcoin is a decentralized digital currency, without a central bank or single administrator, that can be sent from user to user on the peer-to-peer bitcoin network without the need for intermediaries.

Key points

- Bitcoin was launched in 2009 and it is the world's largest cryptocurrency by capitalization
- There is no physical form of Bitcoin, and it is created, distributed, traded with the use of a decentralized ledger system called Blockchain
- Bitcoins are not issued by any banks or governments and no single institute controls the bitcoin network



Sample Questions

- 1. What are the key requirements for becoming a Data Analyst?
- 2. What are the important responsibilities of a data analyst?
- 3. What does "Data Cleansing" mean? What are the best ways to practice this?
- 4. Name the best tools used for data analysis.
- 5. What is the difference between data profiling and data mining?
- 6. What is the difference between Data Analytics and Business Analytics?
- 7. What is your opinion on industry 4.0?
- 8. What do you understand by the term "Technology Management"?
- 9. Can you explain the current trends in Information Technology?
- 10. Why can't someone go for a Data Analytics course rather than join an IIM for MBA?
- 11. What is the difference between Analytics and Analysis?
- 12. Your opinion on startups that are mainly based on the latest technologies like Blockchain, Artificial Intelligence, and Machine Learning?
- 13. Can you explain a few applications of Artificial Intelligence in the Health sector?
- 14. What is Management Information System?
- 15. Can you explain the latest cyber-attacks that affected IT firms to a larger extent?



FINANCE

Finance is the science of managing money, i.e., how institutions generate and manage their wealth. A degree in finance prepares future professionals to guide corporations through uncertainties, short-term and long-term planning. Finance majors in various business firms evaluate their market positions, profitability, and economic policies that have implications for their businesses.

Finance is defined as the management of money and includes activities like investing, borrowing, lending, budgeting, saving, and forecasting.

There are three main types of finance: (1) personal, (2) corporate, and (3) public/government.

Three Main Financial Statements

1. **Income Statement** - Income Statement reports how much revenue the company generated, the expenses it incurred and the resulting profits or losses during a period (usually the financial year). The basic equation underlying the income statement is:

Revenue – Expenses = Income

- Revenue which is also known as "Top Line", is the amount of money the company receives during the period.
- Expenses are summarized and charged in the income statement as deductions from the income before assessing income tax.
- Income is the increase in the net inflow of cash or other assets during an accounting period.
- 2. **Balance Sheet** The Balance Sheet shows a company's assets, liabilities, and equity. It can be viewed as a statement of sources and usage of funds.

The Balance Sheet summarizes a company's assets, liabilities, and shareholder's equity at a particular point in time. It presents a snapshot of the financial position of the company. It is based on the following accounting model:

Assets = Liabilities + Shareholders Equity

Assets are of two types:

- 1. Fixed assets- Assets that are purchased for the long term. E.g.- Building, Land, etc.
- 2. Current assets- Assets that can be quickly converted into cash. E.g.-Cash and cash equivalents (Mutual Funds).



Liabilities are obligations of the company, payable to another entity. Liabilities are incurred to fund the ongoing activities of a business. If the obligation is due within the next 12 months, it is classified as a current liability.

Shareholder's equity represents the amount of business holdings that aren't purchased using debt(loans).

3. Statement of Cash Flows/Cash Flow Statement - The Cash Flow Statement provides information about the cash flows associated with the period's operations and also about the entity's investing and financing activities during the period. The cash flow statement tabulates how much cash is coming into the firm and going out of the firm.

There are three major elements in the cash flow statement:

- Cash flow from operating activities- It encompasses cash generated from a company's day-to-day operations.
- Cash flow from investing activities- It pertains to the purchasing and selling of investments which include property, plant, and equipment.
- Cash flow from financing activities- This includes obtaining or repaying capital. This
 includes the sale of stock; stock repurchase and issuance of dividends.

Financial Market

Financial Market refers to a marketplace, where the creation and trading of financial assets, such as shares, debentures, bonds, derivatives, currencies, etc. take place. It plays a crucial role in allocating limited resources, in the country's economy. It acts as an intermediary between the savers and investors by mobilizing funds between them.

Classification of Financial Market

It can be segregated into 2 parts:

- Money Market: It deals in financial instruments whose maturity period is less than 1 year. It
 helps in raising short-term funds and temporary deployments of excess funds for earning a
 return.
- Capital Market: It allows long-term trading of debt and equity. It consists of financial institutions, banks, corporate entities, foreign investors. Instruments involved are Debt, Equity, Bonds, etc.

It is further divided into 2 parts:

1. **Primary Market:** The primary market is the market where a new stock or bond is sold the first time it comes to market.



2. **Secondary Market:** The secondary market is where the security will trade after its initial public offering (BSE, NSE, Nasdaq).

Some basic terms of finance:

- **Asset** A resource with a value that an individual, corporation, or country owns or controls with the expectation that it will provide a future benefit.
- **Real assets** assets used by the company in its normal business to generate profits. For example, land, building, raw materials, finished products, etc. They may be tangible (assets that physically exist e.g., machinery and buildings) or intangible (assets that do not physically exist e.g., goodwill, trademarks, brand names, etc.)
- **Financial assets** assets issued by the company to generate money to buy real assets. There are basically of 2 types i.e., shares and bonds. Share/Stocks/Equities give ownership to the business which is not the case with bonds (they are debt instruments)
- **Liability** This is a company's legal debts or obligations that arise during business operations. Liabilities are settled over time through the transfer of economic benefits including money, goods, or services.
- **Debt** It is the money borrowed by one party from another. Many corporations/individuals use debt as a method for making large purchases that they could not afford under normal circumstances. A debt arrangement gives the borrowing party permission to borrow money under the condition that it is to be paid back later, usually with interest.
- **Credit** A contractual agreement in which a borrower receives something of value now and agrees to repay the lender at some future date, generally with interest.
- **Debit** An accounting entry that results in either an increase in assets or a decrease in liabilities on a company's balance sheet or in your bank account.
- **Depreciation** Depreciation is defined as the measure of the wearing out, consumption, or other reduction in the useful economic life of a fixed asset, whether arising from Efflux (passage) of time, or Obsolescence through technological or market changes.

Debits and credits system							
DEBIT	CREDIT						
ASSETS	ASSETS	Accounts are					
LIABILITY	↑ LIABILITY	increased and decreased					
EQUITY	♠ EQUITY	with a debit					
EXPENSES	REVENUE	or credit					
	_						



Sample Questions

- 1. What are the various capital budgeting methods?
- 2. Explain NPV and IRR.
- 3. Which method is better to make an investment decision NPV or IRR?
- 4. What do you mean by the financial statements? What are its types? How are they interlinked with each other? State the treatment of prepaid expenses in each of the financial statements?
- 5. What is the market cap of a company? Is it the same as the net worth of the company?
- 6. What is depreciation? Why do we calculate it? What is the rate of depreciation on furniture? Compute the depreciation on the chair you are sitting by both methods?
- 7. If you are to invest in a company's share, what are the three things you will check in their books of accounts?
- 8. What is the importance of the different financial statements? Which, according to you, is the most important and why?
- 9. How is Corporate Income double taxed?
- 10. How will you decide which project to Finance?
- 11. What is GDP (Purchasing Power Parity)?
- 12. Difference between cost, financial, and management accounting.
- 13. What is the difference between operating leverage and financial leverage?
- 14. What is the difference between the balance sheet of the company and a bank?
- 15. What is the difference between Depreciation and Amortization?





CONSULTING AND STRATEGY

Consulting and strategic management is the continuous planning, monitoring, analysis, and assessment of all that is necessary for an organization to meet its goals and objectives. Fast-paced innovation, emerging technologies, and customer expectations force organizations to think and make decisions strategically to remain successful. The strategic management process helps company leaders assess their company's present situation, chalk out strategies, deploy them and analyze the effectiveness of the implemented strategies. The strategic management process involves analyzing cross-functional business decisions before implementing them. Strategic management typically involves:

- 1. Analyzing internal and external strengths and weaknesses.
- 2. Formulating action plans.
- 3. Executing action plans.
- 4. Evaluating to what degree action plans have been successful and making changes when desired results are not being produced.

Strategy Tools

Business experts and consultants around the world have several tools and frameworks that they rely on to analyze a company's performance. Here are a few of them that might come in handy during your selection process:

SWOT Analysis:

A SWOT (strengths, weaknesses, opportunities, and threats) analysis is a planning process that helps your company overcome challenges and determine what new leads to pursue. A SWOT analysis is a compilation of your company's strengths, weaknesses, opportunities, and threats. The primary objective of a SWOT analysis is to help organizations develop a full awareness of all the factors involved in making a business decision.

Strengths

Characteristics of a business which give it advantages over its competitors

Opportunities

Elements in a company's external environment that allow it to formulate and implement strategies to increase profitability

Weaknesses

Characteristics of a business which make it disadvantageous relative to competitors

Threats

Elements in the external environment that could endanger the integrity and profitability of the business



PESTEL Analysis:

PESTEL Analysis is a strategic framework used to evaluate the external environment of a business by breaking down the opportunities and risks into Political, Economic, Social, Technological, Environmental, and Legal factors.

P - Political; E - Economic; S - Social; T - Technological; E - Environmental; L - Legal

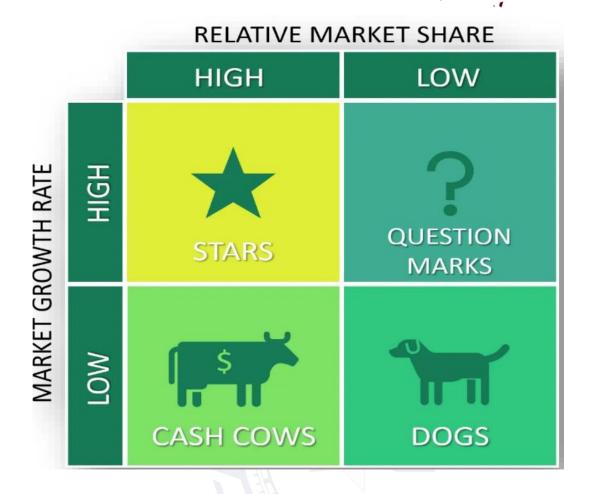
Р	Ε	S	Т	Ε	L
 Government policy Political stability Corruption Foreign trade policy Tax policy Labour law Trade restrictions 	 Economic growth Exchange rates Interest rates Inflation rates Disposable income Unemployment rates 	 Population growth rate Age distribution Career attitudes Safety emphasis Health consciousness Lifestyle attitudes Cultural barriers 	 Technology incentives Level of innovation Automation R&D activity Technological change Technological awareness 	 Weather Climate Environmental policies Climate change Pressures from NGO's 	 Discrimination laws Antitrust laws Employment laws Consumer protection laws Copyright and patent laws Health and safety laws

BCG Matrix:

Created by the Boston Consulting Group, the BCG matrix – also known as the Boston or growth-share matrix – provides a strategy for analyzing products according to growth and relative market share. The BCG model has been used since 1968 to help companies gain insights on what products best help them capitalize on market share growth opportunities and give them a competitive advantage.

- Cash Cows: Large Market Share in a mature industry. Requires little investment.
- Star: Larger Market Share in a growing industry. May require investment to maintain the lead.
- Question Marks: Small Market Share in a growing market. Requires focus and resources.
- Dog: Small Market Share in a mature industry. Little prospect for gain





Porter's Five Forces

Porter's Five Forces is a model that identifies and analyzes five competitive forces that shape every industry and helps determine an industry's weaknesses and strengths. Five Forces analysis is frequently used to identify an industry's structure to determine corporate strategy. Porter's model can be applied to any segment of the economy to understand the level of competition within the industry and enhance a company's long-term profitability. The Five Forces model is named after Harvard Business School professor, Michael E. Porter.

- 1. **Competitors**: Existing rivalry between firms can take a firm's profits to zero and may lead to shut down. In a competitive environment, a firm's decision is highly influenced by what the competitors do.
- 2. **Barriers to Entry:** The threat of new entrants to the market determines the sustainability of the estimated market share. It is evaluated in terms of market entry barriers which may be in the form of high fixed cost, product differentiation, etc.



- 3. Substitutes: There is always a threat of substitute products replacing the existing product(s) of a firm.
- 4. Suppliers: A competitive market with limited suppliers brings with it a high level of bargaining power of suppliers.
- 5. Buyers: Multiple products of the same category give the buyers an advantage in bargaining, thus the high bargaining power of buyers exists in multi-brand products.



Sample Questions

- 2. What are the qualities of a good consultant?
- 3. What is SWOT analysis?
- 4. How many lightbulbs are there in Mumbai?
- 5. How do you measure the effectiveness of any business solutions you recommend?
- 6. Explain the importance of the strategic management approach as compared to the general management approach.
- 7. What is Decentralization?
- 8. Do outsiders bring a fresh strategic perspective?
- 9. What is Value Proposition
- 10. What is the blue ocean strategy?
- 11. If you want to start a new CCD outlet on campus, what are the factors you should consider?

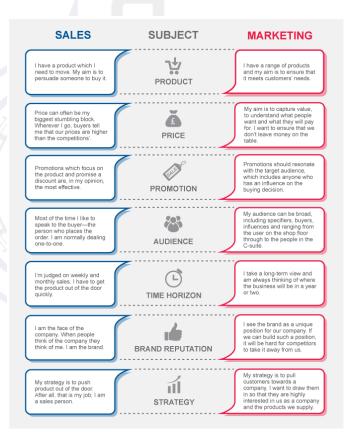


MARKETING

Marketing is about identifying and meeting human and social needs. In simple terms, it is meeting needs profitably. Marketing and selling are very generically; sometimes interchangeably used, however, veteran marketers find them to be two different aspects when looked at a finer level. Before we look at the differences, the general definition of marketing is: Marketing is the study and management of exchange relationships. It is the business process of creating relationships with and satisfying customers. As Peter Drucker said, "Marketing aims to make Selling superfluous". The main idea behind marketing is to create interest in any given product/service, which in turn creates leads or prospects.

Marketing Vs Sales

Sales is about aggressively making the deal. Salespeople typically focus on short-term actions to close deals and meet revenue goals. For B2B, service-centric businesses, salespeople are particularly indispensable because customers are relationship-driven and want the comfort of working with a understands salesperson who company and unique needs, The sales cycle can be very long and needs a dedicated person to doggedly hunt the deal down until it's closed. The average transaction size can be very large, which means that it's essential to have multiple face-to-face meetings to close sales.



Marketing is about strategically closing the gap

On the other hand, marketers are focused on understanding the marketplace, the competition, and the customers' desires and pain points. Typically, they think about the future and decide where to go next - concentrating on differentiation and offerings that are unique enough to offer your business a long-term competitive advantage. Marketing works to grow brand awareness, attract prospects, and move people into the sales funnel. Marketing requires research, mapping



strategy, analyzing data, developing measurement metrics, setting up systems, watching trends changing tactics as needed, and thinking about long-term objectives.

STP - Segmentation, Targeting, and Positioning

Segmentation

It is the process of defining and subdividing a large market into clearly identifiable segments having similar needs, wants, or demand characteristics i.e., dividing a whole into parts based on various criteria like geography, demography, behaviour, gender, personality, etc. Why do we need segmentation? Not all individuals have similar needs. A male and a female would have varied interests and liking towards different products. A kid would not require something which an adult needs. A school kid would have a different requirement than an office goer. Market segmentation helps marketers to bring together individuals with similar choices and interests on a common platform. The basis of segmentation can be:

- Geography
- Demographics
- Behaviours
- Psychographics

Targeting

It is the act of choosing whether to consider or not to consider from the above-segmented groups to cater to them with the intended product/service. Bases for Targeting are:

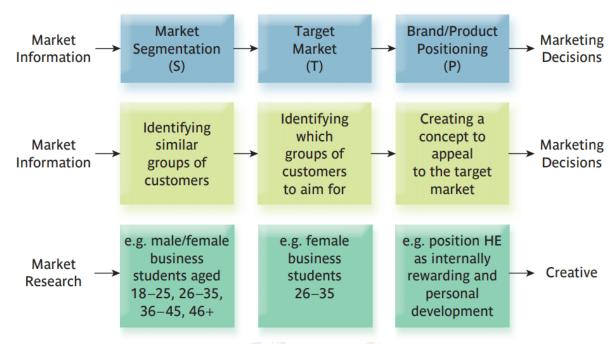
- 1. Market size Sustainability
- 2. Expected growth Future potential
- 3. Competitive position Attractiveness
- 4. Cost of reaching the segment Accessibility
- 5. Compatibility with the organization's objectives & resources

Positioning

Positioning defines where your product (item or service) stands in relation to others offering similar products and services in the marketplace as well as the mind of the consumer. A good positioning makes a product unique and makes the users consider using it as a distinct benefit to them. A good position gives the product a USP (Unique selling proposition). In a marketplace cluttered with lots of products and brands offering similar benefits, a good positioning makes a



brand or product stand out from the rest, confers it the ability to charge a higher price, and stave off competition from the others.



Marketing Mix

The marketing mix refers to the set of actions, or tactics, that a company uses to promote its brand or product in the market. The **7Ps** that make up a typical marketing mix are - Price, Product, Promotion, Place, People, Process, and Physical Evidence.

- Product: A product is an item that is built or produced to satisfy the needs of a certain group
 of people. The product can be intangible or tangible as it can be in the form of services or
 goods. You must ensure to have the right type of product that is in demand for your market.
 Therefore, during the product development phase, the marketer must do extensive research
 on the life cycle of the product that they are creating.
- **Price:** It talks about the pricing model that you must go with to reach customer expectations. The right pricing ensures the proper extraction of consumer surplus (extra spending capacity that consumers have) while driving profits to the company.
- **Place:** The product that has been decided above should be available from where your target consumer finds it easiest to shop. This may be High Street, Mail Order, or the more current option via e-commerce or an e-tail.
- **Promotion:** Advertising, PR, Sales Promotion, Personal Selling, and, in more recent times, Social Media are all key communication tools for an organization. These tools should be used to put across the organization's message to the correct audience.



- People: This aspect looks into the people that are required to perform and deliver value to
 the customers. It can be used to identify skill gaps and develop knowledge development
 programs.
- **Process:** The delivery of your service is usually done with the customer present, so how the service is delivered is once again part of what the consumer is paying for.
- **Physical Evidence:** Almost all services include some physical elements even if the bulk of what the consumer is paying for is intangible. Even if the material is not physically printed; they are still receiving a "physical product" by this definition.

Consumer v/s Customer

The terms "consumer" and "customer" are often used interchangeably, but a consumer and customer are not always the same entity. In essence, consumers use products while customers buy them. In general, your marketing efforts should be geared toward the customer, rather than the consumer. For example, suppose you own a small business that manufactures and distributes children's games or toys. While the children are the actual users, or consumers, of your product, they are not your customers. Instead, the customers are the parents of the children who purchase your products for them. Consumers are just one subgroup of customers. Consider this example with a Philips mixer. If a restaurant buys a Philips mixer grinder (blender) for making juice to serve its patrons, then the restaurant is just a customer and NOT a consumer. But if you go and buy a Philips mixer grinder to make juice for your children at home, you are a consumer.

Brand Personality

The specific mix of human traits that we can attribute to a brand. The theory is that consumers are more likely to choose brands with which they can associate their personalities.

Some marketers carefully orchestrate brand experiences to express brand personalities. For example, Axe, the popular deodorant, caters to consumers who want others to view them as attractive and appealing. These traits may vary depending on the socio-economic factors in different geographies with different people. E.g., Japan lacks 'Ruggedness' and has Peacefulness instead China lacks 'Ruggedness' and 'Sincerity' and has 'Joyfulness', 'Traditionalism' and 'Trendiness' instead.

Brand Equity

Brand Equity is the value premium that a company realizes from a product with a recognizable name as compared to its generic equivalent. Companies can create brand equity for their



products by making them memorable, easily recognizable, and superior in quality and reliability. Mass marketing campaigns can also help to create brand equity. The additional money that consumers are willing to spend to buy Coca-Cola rather than the store brand of the drink is an example of brand equity. Brand equity is the set of assets and liabilities associated with a brand such as the positive image of Coca-Cola in terms of a recreational beverage, or its negative image in terms of health and the consumption of sugar.

Brand Personality





Sample Questions:

- 1. What do you think are the three essential skills for a career in marketing?
- 2. What is the difference between customer and consumer?
- 3. What do you mean by a target market?
- 4. How do you stay up to date with the general marketing knowledge and trends?
- 5. Which company's marketing strategy do you like?
- 6. Which is the recent marketing failure recently?
- 7. Name 5 essential elements of a marketing campaign.
- 8. What are the limitations of online marketing?
- 9. What do you mean by inbound marketing?
- 10. Why is it important to do Market Research?
- 11. How would you approach a short sales cycle differently than a long sales cycle?
- 12. Can you describe a situation when you had to implement a new process or system?
- 13. How will you explain a new piece of technology to someone? Give example.
- 14. How is Social Media Marketing shaping businesses?
- 15. Which is your favourite advertisement, why?
- 16. What is branding and brand management according to you?
- 17. What does AIDA mean in marketing?
- 18. Explain what moment marketing is? Any recent example.
- 19. What is buying behaviour?
- 20. What is Customer Perceived Value?
- 21. What are your thoughts about CRM?
- 22. There is a window cleaning company, how will you decide the pricing?



OPERATIONS

Operations Management

Operations Management deals with the design and management of products, processes, services, and supply chains. It considers the acquisition, development, and utilization of resources that firms need to deliver the goods and services their clients want. The purview of OM ranges from strategic to tactical and operational levels strategic issues include determining the size and location of manufacturing plants, deciding the structure of service or telecommunications networks, and designing technology supply chains.

Tactical issues include plant layout and structure, project management methods, and equipment selection and replacement.

Operational issues include production scheduling and control, inventory management, quality control, and inspection, traffic and materials handling, and equipment maintenance policies.

- **Cycle Time:** Cycle time is the time gap between two consecutive outputs from a process, as defined by you and your customer.
- **Lead Time:** Lead time represents the time between the moment the customer places the order and the moment he receives it.
- **Bottleneck:** Bottleneck is the resource/activity which has the highest utilization in a process.
- Lean Manufacturing/Production: Integrated activities designed to achieve high volume production using a minimal level of inventory.

Planning & Forecasting

Planning: The establishment of objectives, and the formulation, evaluation, and selection of the policies, strategies, tactics, and action required to achieve them. Planning comprises long-term/strategic planning and short-term/operational planning. The latter is usually for a period of up to one year.

Forecasting: An attempt to estimate the future. It is based on available past data, the extrapolation of trends, and the application of judgement.

There are 3 basic models of forecasting:

- 1. Time series analysis and projection
- 2. Qualitative Techniques
- 3. Casual Methods



As an operations manager, material requirement planning, or demand estimation needs to be done regularly. This is to ensure that the company meets the customer's requirements within time. The plans may be short-range plans (less than 3 months) or long-range plans (over 1 year). Efficient planning will lead to a reduction in costs due to sudden variations in demand. Planning and scheduling are popular exercises undertaken by companies that manufacture seasonal products.

Supply Chain Management

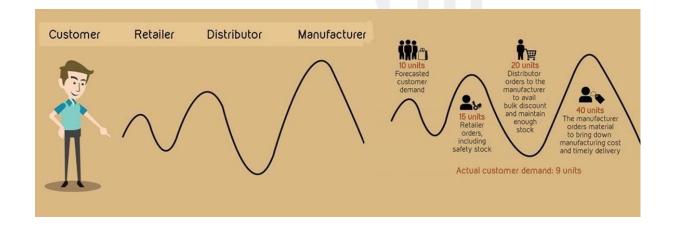
Supply chain management is the streamlining of a business's supply-side activities to maximize customer value and to gain a competitive advantage in the marketplace. A supply chain is a multifirm approach, and it covers everything from production to product development, to the information systems needed to direct these undertakings.

Supply chain management is an integrating function with primary responsibility for linking major business functions and business processes within and across companies into a cohesive and high-performing business model.

It includes all the logistics management activities noted above, as well as manufacturing operations, and it drives coordination of processes and activities with and across marketing, sales, product design, finance, and information technology.

Bullwhip Effect

The Bullwhip Effect occurs as orders are relayed from retailers to distributors, to wholesalers, to manufacturers, with fluctuations increasing at each step in the sequence. i.e., the variability in demand is magnified as one moves from the customer to the producer in the supply chain.





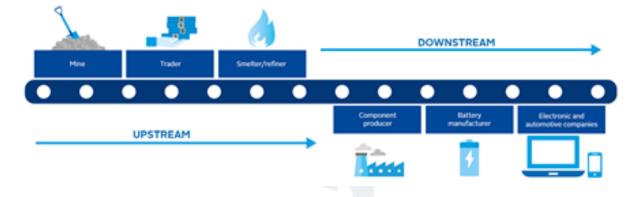
Logistics

It is the science of obtaining from, producing, and distributing material and product in the proper place and the proper quantity. Logistics management activities typically include inbound and outbound transportation management, fleet management, warehousing, materials handling, order fulfillment, logistics network design, inventory management, supply/demand planning, and management of third-party logistics services providers. To varying degrees, the logistics function also includes sourcing and procurement, production planning and scheduling, packaging and assembly, and customer service.

Logistics management is an integrating function, which coordinates and optimizes all logistics activities, as well as integrates logistics activities with other functions including marketing, sales manufacturing, finance, and information technology.

Supply Chain-Upstream & Downstream

Upstream in the supply chain indicates the supplier side while **downstream** indicates goods movement to the customer side.



Reverse Supply Chain

Also known as Reverse Logistics, encompasses all operations involved in the reuse of products and materials from the consumer to the vendor. This is done to retain the use of a defective product.

Inventory Management

Inventory management is the process of ensuring that a company always has the products it needs on hand and that it keeps costs as low as possible.

Three types of inventories are Raw materials, Work-in-progress, and Finished goods.

• Raw material Inventory: Materials that are usually purchased but have yet to enter the manufacturing process.



- Work-in-progress (WIP): Products or components that are no longer raw materials but have yet to become finished products.
- **Finished-goods inventory:** An end item ready to be sold, but still an asset on the company's book.

Economic Order Quantity (EOQ)

A type of fixed-order-quantity model that determines the amount of an item to be purchased or manufactured at one time. It is an inventory-control technique that minimizes the total ordering and holding costs.

MTS, ATO, MTO, ETO:

Make to Stock (MTS): This is a traditional production strategy that is used by businesses to match production and inventory with consumer demand forecasts. Manufacture products for stock based on demand forecasts, which can be regarded as push-type production. MTS has been required to prevent opportunity loss due to stock out and minimize excess inventory using accurate forecasts. Build to stock is frequently considered as an appropriate solution for products where there are few product lines and long changeover times between costly products. The main drawback to the make-to-stock (MTS) method is that it relies heavily on the accuracy of demand forecasts. Inaccurate forecasts will lead to losses stemming from excessive inventory or stockouts.

Assemble to Order (ATO): Companies typically use assemble to order, for items they do not want to stock because they expect to customize them to customer requests or because they want to minimize the inventory carrying cost.

Make to order (MTO): This is a manufacturing process in which manufacturing starts only after a customer's order is received. Manufacturing after receiving customer's orders means starting a pull-type supply chain operation because manufacturing is performed when demand is confirmed, i.e., being pulled by demand. MTO or Built to Order (BTO) is the oldest style of order fulfillment and is the most appropriate approach used for highly customized or low volume products.

Engineer to order (ETO): This is a manufacturing process defined by demand-driven practices in which the component is designed, engineered, and built to specifications only after the order has been received. It is a more dramatic evolution of a Build-To-Order supply chain. This approach is only appropriate for specific and rare items, such as large construction projects or Formula 1 cars. Moving forward with an engineered-to-order approach means that there will be a high level of customer participation in the design and manufacturing process of the product. Typically, with



the engineered-to-order approach, production information and specifications are constantly moving between the ETO Company and the customer.

Lead Time: A lead time is a period between the initiation of any process of production and the completion of that process. A more conventional definition of Lead Time in the Supply Chain Management realms is the time from the moment the supplier receives an order to the moment it ships it in the absence of finished goods or intermediate (Work in Progress) inventory-it is the time it takes to manufacture the order without any inventory other than raw materials or supply parts.

Bottleneck: A point of congestion in a system that occurs when workloads arrive at a given point more quickly than that point can handle them. The inefficiencies brought about by the bottleneck often create a queue and a longer overall cycle time. The primary objective of a manager in the operations department is to eliminate the bottleneck that exists in the process. By removing this inefficiency, the manager can increase profits by reducing time to produce.

Quality

Quality is the ability of a product or service to meet customer needs.

- **Total Quality Management (TQM):** It refers to a quality emphasis that encompasses the entire organization, from supplier to customers. It is a continuous process that seeks to improve the quality of products and services.
- **Benchmarking:** It is the process of comparing one's business processes and performance metrics to industry bests and best practices from other companies.
- **Just-in-time (JIT):** It is one of continuous improvement and enforced problem-solving. JIT systems are designed to produce or deliver goods just as they are needed. i.e., It is an inventory control system in which the materials are delivered just in time before manufacturing, not before, not after.
- **Poka-yoke:** It is a foolproof device or technique that ensures the production of good units every time. It avoids errors and provides quick feedback on problems.
- **Quality assurance** is a set of activities for ensuring quality in the processes by which products are developed.
- **Quality Control** is a set of activities for ensuring quality in products. The activities focus on identifying defects in the actual products produced.
- **Preventive QC:** Addresses the potential for a non-conformity or error to occur even before the product is manufactured.



Six Sigma

Six Sigma is one of the most important concepts of Operations management. It is a process-driven approach that emphasizes continuous improvement and focuses on customer needs. It is an approach to achieve less than 3.4 PPM defects by continuous improvement.

There are two types of Six Sigma Processes:

- 1. **DMAIC:** It stands for Define, Measure, Analyze, Improve, and Control. This is used for existing processes.
- 2. **DMADV:** It stands for Define, Measure Analyze, Design, and Verify. This is used for new processes.

Lean Operations

Lean operations eliminate waste through continuous improvement and focus on exactly what the customer wants.

- **Seven wastes:** Overproduction, Queues, Transportation, Inventory, Motion, Over processing and Defective product.
- **5S:** Sort, Simplify, Shine, Standardize and Sustain. It is a checklist for lean operations and provides an easy vehicle with which to assist the culture change that is often necessary to bring about lean operations.
- **Kanban:** It is the Japanese word for a card, which means "Signal." A Kanban system moves part through production via a "pull" from a signal.
- **Kaizen:** It is the Japanese word for change for the good. Continuous improvement in manufacturing, engineering, and business improvement processes.

2021 Trends in Logistics and Supply Chain:

The logistics and supply chain sector, formerly a support sector, has now evolved into a high-impact sector that is growing at a CAGR of 10.7%. Here are a few trends in this industry that are worth exploring:

- Digitization and large-scale adoption of technology in applications like warehousing, order
 placing, tracking and fulfilment, routing, scheduling, and many more. Artificial Intelligence,
 the Internet of Things and Machine Learning and third-party logistics are aiding in increasing
 the efficiency of these processes.
- Organized Players are emerging with the support of cashless transactions and contactless
 deliveries and a massive surge in E-commerce. Integrated supply chain services are now in
 great demand.



- External Investors are providing major capital influx because the government decided to allow FDI. Hence this sector is showing significant growth potential.
- Environmental concerns are pushing for greener operations as more and more people look
 for eco-friendly and sustainable solutions while closing measuring the impact of different
 sectors on the environment. Green energy, reduced wastage, reusability, etc. need to go
 hand in hand with the advancements in the sector.

Sample Questions:

- 1. How does applying JIT help an organization?
- 2. What is the consequence of the Bull Whip effect?
- 3. What are the different methods to measure quality?
- 4. Can you tell us what you understand by Poka-yoke? Where can it be used?
- 5. What is the difference between logistics and Supply Chain Management?
- 6. What is a bottleneck?
- 7. What is Quality Control? What are the types of quality control?
- 8. What are lean operations?
- 9. Can you tell us what you know about Six Sigma?
- 10. Where can Six Sigma be applied?
- 11. What is BOQ?
- 12. What are the different production strategies?
- 13. Can you give real-life examples of the different types of production strategies?
- 14. What is Inventory?
- 15. Why do firms need to hold inventory?
- 16. Can you describe what you know about Kaizen?
- 17. Define Throughput time.
- 18. What is the role of reverse logistics?
- 19. How did the pandemic affect Supply Chains across the globe?
- 20. In what ways can Analytics help Operations Management?
- 21. What are the latest advances in the field of Supply Chain Management?
- 22. What do you know about Sustainability in the field of Operations?
- 23. In what ways will SCM aid the transition into Electric vehicles?
- 24. What does the Supply Chain of an E-commerce company look like?
- 25. What is the latest news you came across in the Supply Chain domain?





CURRENT AFFAIRS

Business News

- The Year of The Unicorn (Article: Economic Times)
- How Budget 2022 can be used to revive consumption for economic growth (Article: Economic Times)
- Attrition spikes for TCS, Wipro, Infosys amid plans to hire more in Q4 FY22 (Article: Economic Times)
- Elon Musk flags 'lot of challenges' for Tesla's drive into India (Article: Economic Times)
- Walmart and its subsidiary Flipkart have signed an MoU with the Department of Micro, Small, and Medium Enterprises, Government of Madhya Pradesh to create an ecosystem of capacity building for MSMEs in Madhya Pradesh.

National

- Size of India's defence, aerospace manufacturing sector will increase to Rs 1 lakh crore in 2022: Rajnath Singh (Article: Economic Times)
- Defence ministry puts restrictions on import of 351 items under staggered timeline (Article: Economic Times)
- India deploys first S-400 air defence system in Punjab sector, to take care of aerial threats from China, Pakistan (Article: Economic Times)
- <u>India, South Korea explore joint development and joint production initiatives in defence</u> sector (*Article: Economic Times*)
- India undertaking such reforms in space sector not thought about earlier: Rajnath Singh (Article: Economic Times)
- The Reserve Bank of India's (RBI) Monetary Policy Committee (MPC), headed by Reserve Bank of India (RBI) Governor, Shaktikanta Das, kept the reporate unchanged at 4 percent for the ninth consecutive time while maintaining an 'accommodative stance' if necessary. The reverse reporate will continue to be 3.35 percent. The central bank had last revised the policy rate on May 22, 2020, in an off-policy cycle to perk up demand by cutting the interest rate to a historic low. The meeting was held between December (6 to 8). The remaining will take place in February (7 to 9, 2022).



• The Marginal Standing Facility (MSF) rate and bank rates remain unchanged

Policy Repo Rate: 4.00%

o Reverse Repo Rate: 3.35%

Marginal Standing Facility Rate: 4.25%

o Bank Rate: 4.25%

o CRR: 4%

o SLR: 18.00%

- The Securities and Exchange Board of India (SEBI) has set up an Advisory Committee for Leveraging Regulatory and Technology Solutions (ALERTS) to enhance technological capabilities and explore suitable technology solutions for the early detection of market anomalies.
- "World Inequality Report 2022", which is authored by Lucas Chancel, states that the top 1% of India's population owns more than one-fifth of the total national income in 2021
- The Centre for Economics and Business Research (CEBR) from the United Kingdom has predicted that the Indian economy will become the world's third largest by the year 2031.
- India has registered the highest ever annual Foreign Direct Investment inflow of \$ 81.97 bn in 2020-21. FDI inflows in the last seven financial years is over \$ 440 bn, which is nearly 58 % of the total FDI inflow in the last 21 financial years.
- The International Institute for Management Development (IMD) World Competitive Centre published its "World Talent Ranking Report". In the report, Europe has dominated the ranking in 2021. Global top 10 countries are from this region. Switzerland has retained its top spot. India has been ranked at 56th position
- According to the 6th edition of the Public Affairs Index (PAI 2021) report by the Public Affairs Centre (PAC), a Bengaluru- based non-profit think tank, the top three slots have been taken by Kerala, Tamil Nadu and Telangana
- Prime Minister Narendra Modi has announced that his government will repeal the three contentious agricultural laws and requested protesting farmers to go back to their fields and homes
- Indore has been awarded as the cleanest city of India for the fifth consecutive year in the Swachh Survekshan Awards 2021
- Gross Goods and service tax (GST) collection for the month of October came in at Rs 1,30,127 crore, the second-highest collection since GST was implemented in July 2017. The



highest-ever GST collection of ₹ 1.41 lakh crore was recorded in April 2021. Revenues for the month are 24% higher year-on-year

- Nirmala Sitharaman, Union Minister, Ministry of Finance & Ministry of Corporate Affairs ranked 1st in the Fortune India's Most Powerful Women in India's ranking.
- Prime Minister Narendra Modi has ranked 8th on the list of the world's top 20 most admired men, in a survey carried out by data analytics company YouGov

International

- Dubai became the world's first government to turn 100% paperless, the announcement was made by the United Arab Emirate (UAE) Crown Prince, Sheikh Hamdan bin Mohammed bin Rashid Al Maktoum
- The 6th edition of the BRICS Film Festival awards was announced at the 52nd International Film Festival of India in Goa
- U.S. discourages India from acquiring Russian S-400 missile defence systems: President Biden's nominee (Article: The Hindu)
- China defends sweeping maritime claims after U.S. criticism (Article: The Hindu)
- WHO warns of virus surge in Europe (Article: The Hindu)

Sports

- As per Google India's 'Year in Search 2021', the Indian Premier League (IPL) has filled the top spot for the trending query overall in 2021
- Reigning world chess champion Magnus Carlsen of Norway defended his title and won the FIDE World Championship in Dubai.
- Red Bull's Max Verstappen won his maiden F1 Drivers' championship title by beating Lewis Hamilton of Mercedes in the season-ending Abu Dhabi GP 2021.
- India won a total of six medals, including two gold and 4 silver medals in the Asian Rowing Championship in Thailand. Senior rower Arvind Singh bagged a gold in the lightweight Men's single sculls event while his compatriots won three silver medals.
- Pankaj Advani has defended his National Billiards Title by winning his 11th tournament, after defeating his PSPB teammate Dhruv Sitwala in a 5- 2 game final that was held in Bhopal, Madhya Pradesh.



- Mohammed Shami became just the 11th Indian bowler to claim 200 wickets in Test cricket in just 55 test matches
- Former world champion PV Sindhu has been appointed as a member of the Badminton World Federation (BWF) Athletes' Commission, along with five other people.

GENERAL AWARENESS

Indices

- NITI Aayog has released the fourth edition of the **State Health Index for 2019–20** that provides incremental performance in health outcomes and status
 - Uttar Pradesh, Assam and Telangana stood in top three places among the larger states
 - Mizoram and Meghalaya registered the maximum annual incremental progress among the smaller states
 - Delhi and Jammu showed the best incremental performance among Union Territories
 - On overall ranking based on the composite index score in 2019–20, the top-ranking states were Kerala and Tamil Nadu among the 'Larger States', Mizoram and Tripura among the 'Smaller States', and Dadra and Nagar Haveli and Daman and Diu and Chandigarh among the UTs.
- India's rank has slipped by six places from last year to 90 on the Henley Passport Index 2021, which lists the world's most travel-friendly passports. Japan and Singapore hold the first rank on the passport index. The index covers 227 destinations and 199 passports
- Forbes World's Best Employer 2021 Ranking

Reliance Industries has topped the Indian corporates in the World's Best Employers 2021 rankings published by Forbes. Globally, Reliance is placed at 52nd position among 750 global corporations. Samsung Electronics has topped the overall ranking as World's Best Employers 2021, followed by US giants IBM, Microsoft, Amazon, Apple, Alphabet and Dell Technologies



Global Food Security Index 2021

India has achieved the 71st position in the Global Food Security (GFS) Index 2021 from among a list of 113 countries. The GFS Index is designed and constructed by London-based Economist Impact and is sponsored by Corteva Agriscience. The overall score of India is 57.2 points on the GFS Index 2021

Global Peace Index 2021

- Produced by the Institute for Economics and Peace (IEP)
- Total Countries 163
- o Top Iceland
- o India 135th
- o Bottom Afghanistan

Global Gender Gap Index 2021

- o Released by World Economic Forum
- Total Countries 156
- The rank of India 140th
- Top Iceland

UN World Happiness Report 2021

- Total Countries 149
- o India 139
- Top Finland

Corruption Perception Index (CPI) 2020

- Released by Transparency International
- Total Countries 180
- o India 86th

Global Innovation Index 2021

- Released by World Intellectual Property Organization (WIPO)
- o India 46th
- Top Switzerland



Miscellaneous

TIME Person of the year 2021

The prestigious TIME magazine has named Elon Musk, the CEO of Tesla, as the "2021 Person of the Year. In 2021, US-based electric-vehicle startup Tesla became \$1 trillion company as Musk became the world's richest person with an estimated net worth of around US \$255 billion. Musk is also the founder and CEO of rocket company SpaceX and leads brain-chip start-up Neuralink and infrastructure firm The Boring Company.

US President Joe Biden and Vice President Kamala Harris were named as the Person of the Year for 2020 by Time magazine.

Top 10 companies in Fortune 500 Companies list

- 1. Walmart
- 2. Amazon
- **3.** Apple
- 4. CVS Health
- 5. United Health Group
- 6. Berkshire Hathaway
- 7. McKesson
- **8.** Amerisource Bergen
- **9.** Alphabet
- 10. Exxon Mobil

• Nobel Prize Winners 2021

The Nobel Prize is given to people who "have conferred the greatest benefit to humankind" by a foundation established by Swedish inventor Alfred Nobel in his will, read in Stockholm on 30 December 1896. The prestigious award comes with a gold medal and 10 million Swedish kronor (over \$1.14 million). The prize money comes from a bequest left by the prize's creator, Swedish inventor Alfred Nobel, who died in 1895. The other prizes are for outstanding work in the fields of physics, chemistry, literature, peace and economics.



Nobel Peace Prize 2021

Maria Ressa and Dmitry Muratov for their efforts to safeguard freedom of expression, which is a precondition for democracy and lasting peace.

Nobel Prize in Literature 2021

Abdulrazak Gurnah for his uncompromising and compassionate penetration of the effects of colonialism and the fate of the refugee in the gulf between cultures and continents.

Nobel Prize in Physics 2021

Syukuro Manabe, Klaus Hasselmann, Giorgio Parisi for groundbreaking contributions to our understanding of complex systems.

Nobel Prize in Chemistry 2021

Benjamin List and David MacMillan for the development of asymmetric organocatalytic.

Nobel Prize in Physiology or Medicine 2021

David Julius and Ardem Patapoutian for their discoveries of receptors for temperature and touch.

Sveriges Riksbank Prize in Economic Sciences

David Card for his empirical contributions to labour economics.

Joshua D. Angrist and Guido W. Imbens for their methodological contributions to the analysis of causal relationships.

List of Organizations and their Headquarters

International Organisation	Headquarters	President/ General Secretary
United Nations Organization (UN), 1945	New York, US	António Guterres
World Health Organization (WHO)	Geneva, Switzerland	Tedros Adhanom
World Trade Organisation (WTO)	Geneva, Switzerland	Roberto Azevedo



New Development Bank (BRICS Development Bank)	Shanghai, China	Marcos Prado Troyjo
International Monetary Fund (IMF)	Washington DC, US	Kristalina Georgieva (Managing Director) & Gita Gopinath (Chief Economist)
South Asian Association for Regional Cooperation (SAARC)	Kathmandu, Nepal	Esala Weerakoon (Secretary-General)

Other Topics to Look Into

- The Impact of Artificial Intelligence
- Impact of the pandemic on the Global Economy
- Privatization of the Government Sectors
- Workplace trends Post COVID
- Online education, work from home: Have we arrived in the virtual world
- Has employee work-life balance reached a crisis point?
- Culture in the hybrid workspace
- LGBTQ+ inclusion in the workplace





All The Best!



WE HOPE TO SEE YOU ON THE OTHER SIDE IN THE PANTHER'S DEN