

**SELF-LEARNING
MATERIAL**



MASTER OF BUSINESS ADMINISTRATION (HRM)

MBAH 203 : IT AND HUMAN RESOURCE INFORMATION SYSTEM

w.e.f Academic Session: 2023-24



**CENTRE FOR DISTANCE AND ONLINE EDUCATION
UNIVERSITY OF SCIENCE & TECHNOLOGY MEGHALAYA**

nirf India Ranking-2023 (151-200)

Accredited 'A' Grade by NAAC

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Self Learning Material
Center for Distance and Online Education
University of Science and Technology Meghalaya

First Edition

Print Jan 2024

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Edited by: Prof. G Buhril

This book is a distance education module comprising of collection of learning material for students of Center for Distance and Online Education, University of Science and Technology Meghalaya, 9th Mile G S Rd, Ri Bhoi, Meghalaya 793101.

Printed and Published on behalf of Center for Distance and Online Education, University of Science and Technology Meghalaya by Publication Cell, University of Science and Technology Meghalaya – 793101

MBAD 203

IT AND HUMAN RESOURCE INFORMATION SYSTEM

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UNIT 1: UNDERSTANDING HUMAN RESOURCES MANAGEMENT:

1.1 Concept and application of Talent Acquisition

Talent acquisition is a strategic approach. Mostly used to identify, assess and acquire new employees for a business Organization. General recruitment, mostly values quantity over quality, talent acquisition is a carefully designed process that businesses rely on in order to find the very best fit for their team. There are often talent acquisition specialists within the Organization whose primary role is to source candidates who have the exact skill set that is needed to help the business grow and flourish progressively.

Recruiting and Selection (now called Talent Acquisition) means filling current vacancies in a business Organization.

Talent Acquisition means processing recruitment and selection of new talents.

Huge demand for Talent Acquisition arises -

- One, due to competition in the market on the labour front.
- Two, changing nature of the way businesses are conducted.
- Three, influence of technology on people and business.

Talent Acquisition is mostly a process based on a long horizon vision to staffing. A process of seeking the most talented employees who can have the drive, initiative to contribute to the Organization's competitiveness and long-term future.

Talent Acquisition uses methods such as Branding and Marketing to attract the best and brightest talents in the market. Talent Acquisition uses five stages:

- (a) Developing a specific talent acquisition strategy
- (b) Build talent pipelines
- (c) Build strong Employer branding
- (d) Talent Relationship management
- (e) Conducting the Recruitment process differently

Frequently Asked Questions relating to the Concept and Application of Talent Acquisition

Define the Term 'Talent Acquisition' ?

Talent Acquisition is the process of identifying and acquiring skilled employees to meet the business Organization needs.

What does Talent Acquisition Team do ?

The Talent Acquisition Team does the identifying, acquiring, assessing and hiring candidates to fill open positions within the business Organization.

What is the primary objective of Talent Acquisition ?

The primary objective of Talent Acquisition is to identify, hire and retain the best candidates for specific roles in the business Organization.

What could be improved within the Talent Acquisition Process ?

Areas for improvements could be-

- (a) Leveraging Integrated HR Technology
- (b) Strengthening Employer Brand Management
- (c) Focusing on Candidate experience and exposure
- (d) Developing a Talent pipeline
- (e) Offering Competitive Compensation packages
- (f) Implementing the Employee Referral program
- (g) Considering Recruitment Marketing

It may be noted that the term 'Talent Acquisition' is the modern contemporary term used for the previously used 'Recruitment and Selection'.

How does Talent Acquisition Process works ?

- (a) Implementing Candidate sourcing strategy
- (b) Attracting potential Talent

- (c) Skill assessment and Reference checking
- (d) Practical and prompt time-bound final selection
- (e) Hiring and on-boarding
- (f) Aligning with Organization Business goals

What are the Recommended Steps in Talent Acquisition Process ?

- (a) Create effective Job descriptions
- (b) Find qualified members for searching
- (c) Review and screen Talent
- (d) Conduct effective Interviews
- (e) Extend offers and bring the selected person onboard

What could be the role of Human Resources in Talent Acquisition ?

- (a) Assess and review Employees regularly
- (b) Align Talent Acquisition goals with larger business goals
- (c) Create and implement a Performance Management Plan
- (d) Develop techniques to nurture and guide them

What skills are required for Talent Acquisition ?

- (a) Human Resources Planning and Implementation
- (b) Forecasting the future Labour needs
- (c) Forecast present supply
- (d) Balance needs and supply

The challenges for Talent Acquisition are ever increasing on a continuous basis.

How can we best improve Talent Acquisition ?

- (a) Recruiting Marketing
- (b) Networking
- (c) Practice flexibility
- (d) Manage your reputation

How does Talent Acquisition future holds in its operational areas ?

The future for Talent Acquisition will unfold exciting time if the following listed practices are observed and implemented.

1. Carefully identify leads (available and emerging from all sources)
Leads that are potentially strong and sound. Preferably able Job candidates.
This can be done by crafting a Job description by communicating with other people in the Organization and researching comparable positions. Attending networking events and Job fairs could immensely help.
2. Recruiting candidates with specific talents.
Evaluate leads and pinpoint the ones that best match the Job description.
3. Interviewing and screening Candidates by -
 - (a) Contacting references
 - (b) Completing background checks
 - (c) Searching the market
 - (d) Giving skill tests
 - (e) Using Personality Tests
4. Selecting the Top Candidates by focusing on their Education, Skills, personal qualities and making use of their past experiences.
5. On-boarding the new Team Members through-
 - (a) OTT (On-the-Job Training)
 - (b) Team building exercises

1.2 Concept and application of Performance Management

What Application Performance Management Is:

Famously known as APM helps business Organization ensure that-

- (a) Its critical application meet established expectations for performance.
- (b) Availability of customer end-user experiences
- (c) Measurement of Performance application
- (d) Alerting administrators when Performance baselines are not met.
- (e) Provides visibility into root causes of Performance issues.
- (f) Resolving many performance issues before they impact users and the business.

How Application Performance Works:

Application Performance Management -

- (a) gathers software application performance data
- (b) analyze data to detect potential performance problems
- (c) provides relevant information
- (d) takes action to accelerate resolution of performance problems
- (e) monitors and observe performance

Practices of Application Performance Monitoring:

In Application Performance monitoring In-house facilitators or Agents are deployed throughout the application environment.

Supporting infrastructure are made to monitor performance by sampling performance.

Performance related metrics or telemetry are put into practice.

Types of monitoring these Agents include-

- (a) Digital monitoring to gather performance metrics
- (b) Attention to load time, response time, uptime and downtime.
- (c) Improving end-user experience monitoring
- (d) Synthetic monitoring for performance testing
- (e) Performance testing in production environment
- (f) Performance testing in non-production environment
- (g) Conducting the Recruitment process differently

Frequently Asked Questions relating to the Concept and Application of Performance Management

Define the Concept and Application of Performance Management ?

Performance Management is an ongoing process of communication between a Supervisor and an Employee that occurs throughout the year, in support of accomplishing the strategic objectives of the business Organization through performances.

What could be the Purposes and Objectives of Performance Management Process ?

- (a) Planning work and setting expectations
- (b) Continually monitoring performance
- (c) Developing the capacity to perform
- (d) Periodically rating performances in summary fashion
- (e) Rewarding good performance

What are the different types of Performance Management Process ?

- (a) The Balanced Scorecard
- (b) Management By Objective (MBO)
- (c) Budget-driven Business Plan

What are the Core Objectives of Performance Management ?

- (a) Continuous process of improving performance by setting individual goals and team goals
- (b) Aligning performance to the strategic goals of the business Organization
- (c) Planning performance to achieve the goals
- (d) Reviewing and assessing individual and teams progress
- (e) Developing the knowledge, skills and attitude of employees

What is the PMS Policy ?

PMS in Salary means Payroll and Personnel Management System. PMS is a

Performance Management Policy framed as a structure for all the people working under a Business Organization to agree and review the goals and objectives within the context of the business Organization overall development plan and their core individual development needs.

Define the Annual PMS Policy ?

More than just an annual performance reward, Performance Management is the continuous process of setting objectives, assessing progress and providing the required ongoing Coaching and feedback to ensure that the employees are always meeting their objectives and Career goals.

How is PMS calculated ?

- (a) PMS starts with Creation of a continuous evaluation process
- (b) PMS has to be based on individual goals
- (c) PMS has to be set up by the business Organization
- (d) PMS means development of a Performance Plan to achieve the goals within the specified time frame.

What are the Benefits of Application of Performance Management ?

- (a) Bridge the strategy to execution gap
- (b) Quicker, more effective alignment between goals and what is achieved
- (c) High performance culture
- (d) Outcome driven business Organization
- (e) View the entire Organization performance in real time
- (f) Flexible and adaptive system that suits changing business needs
- (g) Increase discretionary efforts from employees

What are the Benefits for the Business Organization ?

(Application of Performance Management)

- (a) Making PMS a more proactive exercise
- (b) Improved people attrition, absenteeism and purposeless engagements

- (c) Identify, develop, retain and promote High-potential employees
- (d) Differential and dynamic reward systems
- (e) Empower line Managers as custodians of Performance
- (f) People analytics on Digitech platforms

What are the Benefits for Line Managers ?

(Application of Performance Management)

- (a) Real time view of Team performance
- (b) Better productivity from Teams
- (c) Reduction in Annual Review burdens
- (d) Better alignment and ownership from Team members
- (e) Clear expectations from Team members using OKPs
- (f) Become an enabler, not evaluator of performance
- (g) Increase in escalation to higher management

What are the Benefits for Employees ?

(Application of Performance Management)

- (a) Real time inputs to improve performance
- (b) Clarity of goals and Job significance
- (c) High levels of transparency
- (d) Reduced bias noticeable
- (e) Frequent reviews
- (f) Coaching conversations
- (g) Reduced angst and time in completing reviews
- (h) Evaluation against a standard
- (i) More collaboration with other Team members
- (j) Minimize unnecessary competition

What could be the Core Principles of Agile Performance Management ?

- (a) Clear and measurable goals through Transparency
- (b) Flexibility and adaptability with regularity

- (c) Collaborative goal-setting
- (d) Feedback and Feedforward Mindset
- (e) Psychological safety with Inclusive culture
- (f) Differential rewards based on skills and contribution to the Organization
- (g) Clear alignment with goals using OKRs
- (h) Shortened Performance Cycles
- (i) Multi-directional alignments
- (j) Digi-Tech Enabled PMS with real time Analytics on Performance metrics and outcomes
- (k) Robust learning cycles and capabilities
- (l) Contextual people development that is contextual to business needs
- (m) Departure from Bell curves.
- (n) Better alternatives to forced ranking and differentiation in performance

1.3 Concept and application of Compensation Management

Compensation is what employees receive in exchange for the services rendered in a business Organization. Naturally, the term “Compensation” refers to all forms of financial returns and tangible benefits that employees receive as part of the employment relationship.

In the era of globalization that we are in where the business environment has become increasingly complex and challenging, structuring an effective compensation package is to attract and retain talents.

Beyond attracting and retaining employees, the application of Compensation Management serve the purpose of -

- (a) motivates employee performance by fostering a feeling of equity
- (b) supports communication and reinforces the Organizational culture
- (c) improves the Organization ability to pay while controlling the costs

Perhaps the eternal challenges in Compensation Management will continue to be on-

- (a) Assessing Job worth
- (b) Developing Pay structures
- (c) Broad-banding
- (d) Pay for Competence

- (e) Rewards for Teams
- (f) Pay for skills and expertise

The challenges facing National Compensation and International Compensation are matters best aligned, to benefit the business Organizations and the employee.

Benefits accruing from a well-oiled Compensation Management practices are far too much to be ignored.

An insightful glance at the Employee benefits open more rooms for further actions. Allowances for Housing, electricity, gas, transportation costs, Children education costs are a few that need not be ignored.

Frequently Asked Questions relating to application of Compensation Management

Define the Concept and Application of Compensation Management ?

Compensation is the money received by an employee from an employer as a salary or wages. Compensation Management is the remuneration awarded to an employee in exchange for their services or individual contributions to your business. The said contributions can be their time, knowledge, skills, abilities and commitment to the business Organization or a Project.

What are the Types of Compensation in whatever forms possible ?

- (a) Base pay (hourly or salary wages)
- (b) Commissions
- (c) Overtime pay, shifts, differentials, longevity pay
- (d) Bonus
- (e) Profit sharing distributions
- (f) Merit pay or recognition
- (g) Workers compensation
- (h) Incentive plan or achievement award
- (i) Tip income

- (j) Benefits include Dental, Insurance, Medical, Vacation, Leave, Retirements
- (k) Stock options
- (l) Travel, Meal, Housing Allowance
- (m) Child Care, Tuition allowance and assistance thereof
- (n) Gymn memberships and free lunch
- (o) Employee assistance program including Consulting legal advices
- (p) Health and Wellness benefits
- (q) Non-cash benefits

What are the Core Benefits of Compensation ?

- (a) Attracts top talents
- (b) Increase employee motivation at the workplace
- (c) Boost employee loyalty
- (d) Increases productivity
- (e) Increases profitability
- (f) Improves Job satisfaction
- (g) Improves Employee Engagements
- (h) Helps in retaining employees
- (i) Helps stay in the competition
- (j) Helps stay in compliance with the laws of the land

What are the preferred Company choices of Salary data source ?

- (a) Mercer
- (b) Willis Towers
- (c) Watson
- (d) Kenexa
- (e) Comp Analyst
- (f) ERI
- (g) Aon Hewitt

What are the Benefits that are fast on the way out ?

- (a) Vacation Purchase Plan
- (b) Outside Health Screening Programs
- (c) Unpaid Sabbatical Programs
- (d) Mortgage assistance
- (e) Spouse relocation employment assistance
- (f) Temporary relocation benefits
- (g) Job sharing
- (h) Health cars premium
- (i) Parking subsidy
- (j) Loans to employees
- (k) Employee Stock purchase plan
- (l) Employee discount on Company services
- (m) Subsidized Child Care Center
- (n) Matching Employee discounts on Company Schemes

What are the Soft Skills Interview Questions ?

- (a) How do you prioritize and manage Competing demands and multiple projects as a Compensation and Benefits specialist ?
- (b) Describe a time when you had to communicate a different or complex message to a Stakeholder ?
- (c) Relate about a time when you had a problem solved on complex issues ?

Define Paid Time Off (PTO) ?

A period of time such as days or weeks an employee is legally entitled to take off from work while still remaining pay from the employer.

Define Out of Office (OOO) ?

Vacation days are a type of PTO where an employee takes personal life off.

Lumpsum PTO is granted all at once.

What are Base Pay ?

Base Pay is the initial Pay accrued by the employee before Tax.

How do we create a Compensation Plan for one's Business ?

- (a) Document a Compensation Philosophy and a Payroll
- (b) Conduct a Competitors Research
- (c) Set up a Salary or Wage
- (d) Annual Pay Raise
- (e) Performance-based Pay
- (f) Payroll Software
- (g) Document a Compensation Plan

How frequently should we be formally reviewing Compensation ?

Every two years. Still better, as frequently as we can afford.

What does ERC do ?

ERC offers Compensation and benefits consulting services including market pricing and total rewards strategy.

What is the future outlook for Compensation ?

There is a real need to watch for Market related changes in Pay as rate of Pay accelerations in the market has increased dramatically.

1.4 Concept and application of Employee Engagement

Employee engagement is critical to a business organization success.

Employee engagement is linked to job satisfaction and employee morale.

Employee engagement are productive and higher in performance when communication barriers are removed. Communication is the key to performance.

Employees committed to sound value systems are known to be engaged in works.

Employee engagement means –

One, the employee level of enthusiasm

Two, the employee dedication to his assignment

Three, the employee feelings of his job

Employers can encourage Employees engagement by -

- (a) Communicating their expectations clearly
- (b) Offering rewards and promotions
- (c) Informing employees about Organization performance
- (d) Clearly giving feedbacks
- (e) Making the employees feel valued
- (f) Listening to employees
- (g) Support employees in their decisions
- (h) Support employees in matters relating to children
- (i) Appreciating employees in their ideas and suggestions
- (j) Constantly interacting with them as a retention strategy
- (e) Conducting the Recruitment process differently

Frequently Asked Questions relating to the Concept and Application of Employee Engagement

Define the Concept and Application of Employee Engagement ?

Employee Engagement is the strengths of the Mental and Emotional connection

Employees feel toward the business Organizations that they work for, their teams and their work. Employee Engagements is always about how emotional interested employees are in their work and the Organizational goals.

What could be the 5Cs of Employee Engagement ?

- (a) Care
- (b) Connect
- (c) Coach
- (d) Contribute
- (e) Congratulate

What could be the Questions to monitor Employee Engagement ?

Questions that could possibly monitor Employee Engagement could be-

- (a) Do you feel that your work is appreciated ?
- (b) What motivates you to come to work every day ?
- (c) What is your favorite part of your Job ?
- (d) Is there anything about your Job that you really don't like ?
- (e) After 1 year of experience how do you feel overall ?
- (f) What are the things you have done at this Organization that you are proudest about ?
- (g) What is one thing you like to work on or do differently ?
- (h) What are you working on that you don't want to work on ?
- (i) On a scale of 1 -5, how happy are you at work ?
- (j) What is that one thing that I could do to get you to a 5 ?

What are the factors affecting Employee Engagement ?

- (a) A caring culture
- (b) Meaningful work
- (c) Regular feedback and recognition
- (d) Professional work growth opportunities

- (e) Autonomous at work independently
- (f) An inclusive work environment
- (g) Being their authentic selves

What are the factors based on the desired End-result Employee Engagement are ?

- (a) Physical engagement
- (b) Emotional engagement
- (c) Cognitive engagement which takes place when the Employee is fully and keenly aware of the business Organization's values, goals and mission.

Possibly what could be the best ideas to Employee Engagements ?

- (a) Respect your Employees
- (b) Recognize accomplishments
- (c) Improving Employee Engagements with mentoring
- (d) Improving Employee Engagements with Performance Management
- (e) Improving Employee Engagements with Training and Development
- (f) Provide opportunities for development
- (g) Establish a clear vision
- (h) Timely communication
- (i) Improve the workplace environment
- (j) Promote flexible work hours
- (k) Give employees more responsibilities beyond tasks
- (l) Hold regular Business sessions
- (m) Give your people inside information
- (n) Implement continuous feedback
- (o) Build relationship at work
- (p) Make work fun
- (q) Help with personal growth
- (r) Promote Wellness
- (s) Let your employees focus on what they do best
- (t) Focus on collaboration and working together

- (u) Encourage Experimentation
- (v) Listen to Employees

How do you Measure Employee Engagement ?

- (a) Pulse Surveys
- (b) One-on-Ones
- (c) Conduct existing Employees Interviews
Ask them what made them stay ?

What could be the Employee Engagement Software ?

- (a) CRM System
- (b) CRM shows the total amount of closed deals and revenue
- (c) CRM allows sales reps to plan and manage time
- (d) CRM monitors performances
- (e) CRM ensures complete Transparency in daily routine works
- (f) CRM decreases routine time by at least 20 per cent

UNIT 2 : UNDERSTANDING INFORMATION TECHNOLOGY

2.1 Utilization of IT in Administrative Systems, Networks and Applications

The challenge of utilizing Information Technology are huge in areas of -

- (a) Administrative systems
- (b) Networks
- (c) Applications

Information Technology improve -

- (a) Automation
- (b) Data Management
- (c) Communication
- (d) Collaboration
- (e) Security
- (f) Integration
- (g) Interoperability
- (h) Scalability
- (i) Performance Organization
- (j) Fault tolerance

Information Technology surely evolve technological landscape

Information Technology streamline routine tasks and reduce manual tasks.

One, IT minimize errors

Two, IT support decision making process

Three, IT provide shared platforms for sharing information

Information Technology safeguards sensitive information

The 21st Century we are in is an era wherein all aspects of our existence revolve and evolve around utilization of Information Technology.

Frequently Asked Questions relating to the Utilization of Information Technology in Administrative Systems, Networks and Application

How is Information Technology best utilized in Administrative Systems ?

- (a) To maintain and improve productivity
- (b) To sustain and enhance performance of Employees
- (c) To prevents Employees from underperforming
- (d) To prevent Employees from being overburdened by workloads
- (e) To get a better Return on Investment (ROI) from Employees

How best do we track utilization of Information Technology in Administrative Systems ?

- (a) To have Team members report `back to keep structured processes in place
- (b) To have prompt reporting of billable and non-billable tasks in real time
- (c) To have better control of resources
- (d) To have clearer perspective on real time

How are calculations done ?

- (a) Use Utilization rate
- (b) Use Utilization rate to measure workload and productivity
- (c) Divide billable hours marked by the number of hours worked in a day

For example, if an Employee has been allocated to a Project for 45 hours and that Project has a total of 60 workable hours, then that resource has a utilization of 75 per cent as per the Resource Utilization formula.

A rate of 80 per cent is acceptable. Anything above this risks Employee burn out, and anything less will not utilize resourcefully.

What are the benefits of Information Technology Utilization in Administrative Systems ?

- (a) Maintains productivity and prevents from burnout
- (b) Projects are managed with better visibility by reducing the risks of oversights

- (c) Maximum utilization of resources gives a better Return on Investment (ROI)
- (d) Leverage visibility
- (e) Avoiding Scope Creep
- (f) Visualize and run scenario that will help prepare for a change of circumstances

Explain the Resource Utilization Formula ?

Resource Utilization = Total billable hours/ Total available working hours x100

What are the other advantages of Resource Utilization ?

- (a) Leads to happier Team members
- (b) Increase profitability
- (c) Helps manage Scope Creep – which is as a phenomenon in Client-based work when the Project goals and initiatives began to expand over what initially agreed upon
- (d) Encourage Team training and growth
- (e) Encourage Members learning and cultivating new ideas

What are the Techniques to improve Resource Utilization ?

- (a) Put the right tools in place to properly manage tasks
- (b) Roll out an in-depth Resource Planning schedule
- (c) Track Team Member time – temporary or ongoing
- (d) Forecast future projects
- (e) Minimize non-billable activities
- (f) Analyze actual hours vs planned booked hours

In which ways does Information Technology Team Utilization helps the Administrative Systems ?

- (a) Human Resource Areas
Skills expertise areas and efforts contributed by individuals and projects
- (b) Financial Resource Areas
Allocation of funds to various projects, prudent budgeting, investment

decisions and financial planning to drive sustainable results.

(c) Material Resource Areas

Tangible assets including materials and equipment's, minimizing waste, optimizing production processes.

(d) Time Resource Areas

Setting priorities, scheduling tasks, meeting deadlines without compromising quality.

(e) Technological Resource Areas

Software, Hardware, Data Analytics tools, Automation technologies.

What are the Intricacies of Information Technology Utilization in Administrative Systems ?

(a) Involves balanced moves to address the demands of a rapidly evolving environment

(b) Balance Supply and Demand effectively

Blending of the five elements such as -

- Human Capital
- Financial assets
- Materials integration
- Time and Technology
- Construction of a productive environment

(c) Reliance on real time data and insights

These insights ensure proper resource utilization

(d) Timely adjustments in allocation to steer Organization through evolving landscapes, ensuring alignment with overarching objectives.

What could be the Challenges facing us in Optimal Resource Utilization ?

(a) Competition for limited resources

(b) Changing priorities of the business

(c) Uncertainty and Risks

(d) Balancing short term and long term goals

- (e) Data complexity and Analytics
- (f) Organizational Silos
- (g) Resistance to change
- (h) Substantial Allocation
- (i) Technological Integration
- (j) Regulatory and Ethical consideration

How do we break down the Resource Utilization Metrics ?

- (a) Utilization Rate

$$\text{Utilization} = (\text{Actual Usage Time} / \text{Total Available Time}) \times 100$$

- (b) Efficiency Rate

$$\text{Efficiency Rate} = (\text{Actual Output} / \text{Expected Output}) \times 100$$

- (c) Capacity Utilization

$$\text{Capacity Utilization} = (\text{Actual Output} / \text{Potential Output}) \times 100$$

- (d) Resource Allocation Index

To calculate the Resource Allocation Index we need to list out-

- (i) Utilization rate of workers/employees
- (ii) Utilization rate of machines
- (iii) Efficiency Rate
- (iv) Resource availability

- (e) Workload Distribution

To calculate the Workload distribution we must assess

- (i) Number of tasks
- (ii) Number of resources

- (f) Resource Turnover

To calculate Resource Turnover we must assess

- (i) Number of users
- (ii) Total Available Machines

- (g) Opportunity Costs

Opportunity Costs guides, Decision-making regarding resource allocation,

prompting us to consider what we might missed out and when we choose one option over another

How do we wrap up Resource Utilization ?

Resource Utilization is the compass guiding Industries toward efficiency and success. It involves managing a wide spectrum of assets, from Human Capital to intangible dimensions like Time and Expertise.

As Technology reshapes the landscapes strategic resource allocation becomes paramount. Resource utilization is transformative shaping productivity, innovation and resilience. By mastering the Resource Utilization dynamics, business can navigate challenges toward sustainable growth and progress including unexpected accomplishments.

In the areas of Cyber security and Computer networking as well as on broadening Employment outlook and finished Projects the contribution of IT is huge.

2.2 Utilization of IT for Support in Hardware and Software, in monitoring and Analysis

Information Technology support Hardware and Software forms.

Information Technology supports business environments

Information Technology facilitate seamless operations

Information Technology facilitates servers, computers, networking devices.

One, IT support cyber-security

Two, IT tracks performance indicators

Three, IT helps a healthy digital environment

Information Technology helps in -

- (a) resolving immediate issues
- (b) enables proactive measures
- (c) Encourage long-term strategic planning
- (d) Aim for industry best practices
- (e) Analyze multi-dimension of support system

Whilst we struggled to make use of Information Technology for constructive and productive purposes it remains to be seen how the coming challenges emerges.

Information Technology usage must help increase the revenue generation. This very objective necessarily means improving the condition of the existing employees, aligning our goals with theirs and providing the support they need.

Needs could be on matters relating to the personal and professional areas.

Needs could be relating to economic, social, emotional and image they have of themselves. If employees condition are taken care of, they in turn will help us in our dealing with our valued customers.

Frequently Asked Questions relating to Utilization of Information Technology for support in Hardware and Software, in Monitoring and Analysis.

What are the stages of Software Development Life Cycle (SDLC) Process ?

- (a) Planning
- (b) Analysis
- (c) Design

- (d) Development
- (e) Testing
- (f) Implementation
- (g) Maintenance

What are the common SDLC phases ?

- (a) Inception
- (b) Design
- (c) Implementation
- (d) Maintenance
- (e) Audit or Disposal

What is Software Testing Life Cycle ?

A process used to test Software and ensure that quality standards are met.

The Software Testing Life Cycle is a sequence of specific actions performed during the testing process to ensure that the Software quality objectives are met.

The STLC includes both verification and validation.

What is bug Life Cycle ?

A cycle of defects in which it goes through different states throughout its life- starts with a new defect discovered by a Tester and continues a solution comes.

What are the Software Development Process sequence of contribution leading to Production ?

- (a) Communication
- (b) Required Gathering
- (c) Feasibility Study
- (d) System Analysis
- (e) Software design
- (f) Coding
- (g) Testing
- (h) Integration

- (i) Implementation
- (j) Operation and Maintenance

What are the Recommended Steps in Talent Acquisition Process ?

- (a) Create effective Job descriptions
- (b) Find qualified members for searching
- (c) Review and screen Talent
- (d) Conduct effective Interviews
- (e) Extend offers and bring the selected person onboard

Why do we need a Software Development Process ?

- (a) Meeting Requirements
- (b) Timely delivery
- (c) Budget control
- (d) Quality Assurance

Software Development Process is a set of programs having specific functions that are designed to work according to human needs.

What could be the purpose of Software Development Process ?

- (a) Organization and Structure
- (b) Quality Assurance
- (c) Risk Management
- (d) Efficiency and Productivity
- (e) Communication and Collaboration

What are the Metrics of Software Development Process ?

1. Productivity Metrics
 - (a) Lines of Code (Loc)
 - (b) Function Points
 - (c) Velocity

2. Quality Metrics
 - (a) Defect Density
 - (b) Code Review Feedback Time
 - (c) Code Churn
3. Efficiency Metrics
 - (a) Lead Time
 - (b) Cycle Time
 - (c) Throughput
4. Customer Satisfaction Metrics
 - (a) Net Promoter Score (NPS)
 - (b) Customer Support Response Time
5. Code Base Metrics
 - (a) Code Complexity
 - (b) Code Coverage
 - (c) Technical Debt
6. Team Metrics
 - (a) Team Velocity
 - (b) Team Satisfaction

What are the Approaches of Software Development ?

- (a) Waterfall Approach
- (b) Spiral Approach
- (c) Incremental Approach
- (d) Agile Approach

On reviewing the definition of Software Development Process it must be noted that in this process the Software Developer is required to perform some steps to design Software.

On reviewing why we need the Software Development Process it must be noted that Software Development Process must be created in an organized manner.

On reviewing the purpose of requirements gathering in Software Development it is a process of gathering the functional and non-functional requirements of a Software projects. The main motive of this step is to collect all the requirements from the User.

On reviewing the steps included in the Software Development Process they are conclusively a collection of Communication, Requirement gathering, Flexibility study, System Analysis, Software design, Coding Testing, Integration, Implementation, Operation and Maintenance.

2.3 Utilization of IT in providing means to develop process, Analyze and save Information

Information Technology is known to provide -

- (a) Analyze exchanges
- (b) Save information
- (c) Develop processes
- (d) Exchange, store and save information

Information Technology automates the picking and packing of information.

One, Analyzing information to identify trends, patterns and relationships

Two, Exchanging information in a variety of formats such as emails, text messages, social media and file sharing

Three, Storing information in a variety of formats such as databases, files and cloud storage.

Four, Safeguarding information from unauthorized access, use, disclosures, disruption, modification or destruction.

Information Technology does provide means to develop processes, analyze, exchange, store and save sensitive information.

Information Technology provides solution to -

- (a) Use of Computers
- (b) Facilitates Networking
- (c) Strengthen Infrastructure
- (d) Creates productive processes
- (e) Secure exchanges, store and safeguard information

With more Research and Development the future relating to Information Technology will be huge and mounting.

Frequently Asked Questions relating to the Utilization of Information Technology in providing means to develop Process, Analyze, Exchange, Store and Save Information

In many ways the Information Technology support Business is built on specific

- Questions:
- (a) How do I change my Password ?
 - (b) What exactly is an SSD ?

Is it safe to store work-related files in the Cloud ?

Contrary to popular belief, the files you save in Cloud-based services like Microsoft One-Drive may actually be safer on those remote servers than on your On-premises hardware.

Large-scale enterprises such as Microsoft use best-in-Class encryption and Cyber Security measures to protect the data they hold for their clients.

Microsoft uses Advanced Encryption Standard (AES) with 256 bit keys for Data in transit is protected via SSL/TLS connections using 2048 bit keys.

Should we instill a Solid State Drive (SSD) ?

In Today's fast moving business World, we need the Computer Hardware to match. Installing a solid state Drive (SSD) to Desktop or Laptop Computer means improving almost every aspect of the device's performance, boot-up

speed, apply loading time and file copying times.

SSD use a system of flash memory with no moving parts, SSD read data is 10 times faster, writes data 20 times faster than a Conventional HD or a Traditional mechanical Hard Drive.

Do we really need to eject USB devices before removing them ?

Prior to 2019 Windows 10 used a technique called “Write Catching.”

After 2019 using Window 10 or Window 11 we can simply yank a USB drive without fear of losing any data.

Can we use Microsoft Office or No Windows devices like ios and Android ?

Microsoft 365 and Microsoft apps available on ios, Android, Mac, Chrome, Os are taking us off to the races.

What could be the most secure format for Passwords ?

The advice of the National Cyber Security Centres (NCSC) says:

“ three random words approach is one of the most secure options for Password generation.”

Example: three random words stuck together (fishdoorcelery) can be much harder for an attacker to brute force.

What is Virus Signatures ?

Virus Signatures ensure security for modern tools such as Endpoint Detection and Response (EDR) platforms.

Define Ethical Hacking ?

Refers to unauthorized access to a device. Known as Penetration Testing is a practice in which a business or network owner will ask an IT support team or similar to actively try to breach their systems.

Define Web Scraping ?

Web Scraping is a type of Cyber attack which is difficult to prevent because it relies on data which is openly available.

Web Scraping uses bots to access websites on the Internet and download all of the Code which is used to create them.

What is Jail breaking in Information Technology ?

Can we Jailbroken our mobile phone ?

Jailbreaking means unlocking a device so that a User can run apps and program, not officially supported by the Developer or Manufacturer.

Jailbreaking is a deliberate attempt to circumvent Security on a device so that the User can install any apps they wish to.

What could be a Zero-day Exploit ?

A Zero-day exploit is one of the most potentially damaging Cyber attacks, because it refers to a security issue which has only just been discovered.

Most Zero-day exploits are found in either new or recently updated Software.

Are we worried about Cyber Security protection for our Business ?

Cyber threats are always present and always growing.

Business should be confident in the measures that are deployed to keep their business Organization Cyber Safe as have the required Information Technology support behind it.

2.4 Utilization of IT in Compliances to meet Regulatory Requirements, Business obligated Government policies and delivering Critical Business Capabilities and Services

Information Technology are played in compliance to meet Regulatory requirements.

Information Technology are used to help fulfill business obligated Government policies

Information Technology are used to help deliver critical business capabilities and services

Information Technology compliance are a set of rules and regulations that core businesses must follow to ensure their systems and processes are secure.

Information Technology help minimize the threat of a cyber attack.

Information Technology compliance is a priority for businesses that use Technology to provide services to their clients and customers. Failure to meet Compliance and requirements can cost the Organization huge losses.

Information Technology compliance help the business Organization understands gaps or weaknesses in their existing security plans that cannot be easily fixed.

Information Technology is the foundation of modern business Organizations.;

Information Technology is universally known to refer to Computer systems, Software, Internet and other infrastructure that enables an Organization to thrive, progress and flourish.

Frequently Asked Questions relating to the Utilization of Information Technology in Compliances :

- In Regulatory Requirements**
- In Business Obligated Government Policies**
- Delivering Critical Business Capabilities and Services**

In which manner can Information Technology be utilized for compliance in and for Regulatory Requirements ?

(a) Artificial Intelligence tools can be applied to automate Regulatory processes

- Administrative works
 - Dossier filing
 - Data extraction
 - Auditing
 - Implementation of regulations
- (b) Artificial Intelligence creates process links and reduces complexity, resulting in a more efficient Management System.

What are the main objective of Regulatory Affairs ?

Provide the basis for the assurance of high quality to increase Consumer interest for ensuring the efficacy, quality and safety.

What are the Industry trends in Regulatory Affairs ?

- (a) Leveraging big data
- (b) Artificial Intelligence (AI)
- (c) Machine Learning (ML) in Regulatory Processes
- (d) Facilitating real-time regulation
- (e) Utilization of real world evidence
- (f) Increasing role of customers in business-related activities

What is the basic Concept of Regulatory Affairs ?

- (a) Regulatory Affairs is a profession developed from the desire of Government to protect Public Health by controlling the safety and efficacy of products.
- (b) Regulatory Areas include Pharmaceuticals, Veterinary medicines, medical devices, pesticides, agrochemicals, cosmetics and complementary medicines.

What is the Scope of Regulatory Affairs in India ?

The Regulatory Affairs domain is incorporated in almost every field of production and manufacturing be it in the Food, Medicines, Medicinal equipments, Technical devices, Agrochemical and Veterinary.

How do we ensure that Regulatory Affairs are digitally transformed ?

Digital Transformation creates the opportunity for any authorized teams or the individuals to connect. The fuller insights they need, on demand. This in turn improve Productivity and boost process accuracy and efficiency.

Regulatory Affairs Department must collate, curate, quick check and keep products on the market.

Transforming Regulatory Affairs can be done through -

- (a) A richer and more rewarding Regulatory Data Exchange
- (b) Creating a definitive Products data reference resource
- (c) Supporting the Strategic business agenda.

What are the best ways to transform the Regulatory Affairs ?

1. A richer and more rewarding Regulatory Data Exchange

- (a) Whatever the benefits of Standard Electronic data Exchange in a regulatory context, unless contributing data is easy to extract and verify as the definitive, correct information by the sender to the receiver, any efficiency and productivity gains will be limited.
- (b) Increasingly business Organizations are recognizing the broader potential if information compilation and extraction can be automated. This is what smart digitization does.
- (c) Regulatory data requirements are extended to Medical products devices as against traditional products.

2. Creating a definitive Product data Reference Resource.

- (a) As source data becomes emphasis of Regulatory Information Management business Organizations must be able to manage and maintain its Quality and Currency.
- (b) As Regulatory demands increase, so will the range and scope of the Data Firms will need to manage, spanning diverse data bases from Clinical to Toxicology.
- (c) Regulatory Agencies need to keep track of everything. Regulatory data

Information is coming to increase almost all data about a marketed products.

- (d) To ensure that related information can be connected and extracted easily, data must be linked and managed through meta-data.

All likely Data storage and Regulatory Affairs Department have an important facilitating role to play in all of them.

3. Supporting the Strategic Business Agenda.

- (a) Regulators are demanding greater data consistency
- (b) Pressure to optimize complex portfolios across global markets
- (c) All of which requires coordinating based on greater intelligence and automation so that each requirement is accurately and efficiently met.

This Coordination effort presents an opportunity for Regulatory Affairs Teams to add value for their business by building a strong knowledge base of global regulations timelines and opportunities for the portfolio.

A comprehensive resource of the latest Regulatory Intelligence, built and harnessed using progressive technologies including data mining to extract data from websites, natural language processing artificial intelligence and machine learning and rules-driven process automation to expand the main capacity and accuracy of Regulatory Intelligence.

Expanding Regulatory Intelligence will enable Companies not only to better respond to international demands but to position their products optimally for market access, by quickly leveraging data that demonstrates the safety and efficacy of their products.

By providing the business with pivotal intelligence, Regulatory Intelligence has an opportunity to raise its profile and in the process add a new and appealing dimension to the function and for the people who deliver it.

What role can Artificial Intelligence play in Regulatory Affairs ?

- (a) Artificial Intelligence in Regulatory Affairs means Artificial Intelligence encompasses. AI is a technology that has been around for decades.
- (b) The use of AI in regulatory affairs can be traced back to the early 2000s when the FDA started using Computer-based Systems to help them review and approve new drugs.
- (c) Drug regulatory affairs is a complex field that requires knowledge in many different disciplines.
- (d) AI can automate tasks that are repetitive and error-prone, freeing up time for human experts to focus on more complex work.
- (e) AI can help identify Regulatory risks and opportunities, allowing a Company to plan its development strategy accordingly.

Explain the role of Artificial Intelligence (AI) in Revolutionizing Drug Regulatory Affairs Industry ?

- (a) AI is slowly revolutionizing the Drug regulatory affairs industry.
- (b) FDA is integrated with AI technologies for faster and more accurate reviews of new drugs.
- (c) The use of AI in regulatory affairs has many benefits for the Pharmaceutical Industry.
 - It can be used for quicker and more accurate reviews of new drugs.
 - It can identify adverse events at an early stage
 - It can provide early warning signals
 - It can help with data mining
 - It can increase efficiency in general

Explain the role of Artificial Intelligence in Labeling ?

- (a) The Health Agencies will be using more AI based technologies in labeling and other areas of regulatory affairs
- (b) In Drug labeling AI will be using machine Learning algorithms that can read and understand the text on a label identify any potential errors and make the

suggestions for correcting.

- (c) AI can help Companies understand how the Public understands their claims. This will allow them to prepare better marketing materials.

Explain the role of Artificial Intelligence in Regulatory Submissions ?

- (a) AI will be used to automate the process of regulatory submissions, which will help Pharmaceutical Companies save time and money by avoiding Capital Intensive Investments in compliance and regulations.
- (b) AI can automate same tasks that are repetitive and time consuming for humans
- (c) AI can automatically generate regulatory documents from templates or extract data from Critical trials.
- (d) AI can analyze large quantities and qualities of data to identify patterns and relationships.
- (e) AI is the key driver of innovation in Drug development.

In Regulatory Affairs Artificial Intelligence (AI) will help to accelerate the review process of developing new medicines and bringing them faster to the market.

The use of Artificial Intelligence (AI) in Drug regulatory affairs has still a long way to go and will grow as more and more Companies adopt this technology.

In 2023 for the first time in the World, Artificial Intelligence (AI) designed drugs from scratch and entered Phase I Clinical trials.

UNIT 3: UTILIZATION OF INFORMATION TECHNOLOGY IN HUMAN RESOURCE MANAGEMENT

3.1 Connects HR Systems with Business Systems

How Information Technology connects with business systems is crucial.

Information Technology develops interfaces between HR and Business.

Information Technology creates Application Programming interfaces.

One, IT enable smooth data exchange between software applications

Two, IT help configure middleware

Three, IT improve collaboration

Four, IT streamline processes

Five, IT enhance overall Organization efficiency

Information Technology plays a crucial and pivotal role between HR Systems and Business Systems. Specially in the following listed areas.

- (a) System Integration
- (b) API Development
- (c) Middleware Configuration
- (d) Data Security
- (e) Customization
- (f) Monitoring
- (g) Maintenance

In essence, Information Technology is the backbone of a very cohesive and effective connection between HR Systems and Business systems in a flourishing Business Organization.

Frequently Asked Questions relating to the Concept and Application of Talent Acquisition

How do we link HR to a Business System ?

- (a) All strategies should be aligned towards the same outcomes

- (b) Understand the main strategic goals
- (c) Map out a skills matrix
- (d) Formalize Talent strategy
- (e) Measure HR goals and outcomes
- (f) Stay in touch with the key strategists

How does HR connects with other areas of the Business ?

- (a) HR is involved in every areas of the business Organization
- (b) All employees are always connected to HR from the day they were hired
- (c) As long as HR uses manpower HR needs are linked to take care of the Employees

What is the relationship between HR and business functions ?

- (a) By aligning HR initiatives with the Business strategy business Organizations can ensure that they have the right people
- (b) With this alignment HR can ensure that having the right people with the right skills means people are in the right roles, to achieve their goals.

What is a Business Strategy in HR ?

- (a) HR strategy is a roadmap for solving an Organization's biggest challenge with people-centric solutions
- (a) HR inputs happens during Policy creation
- (b) HR inputs elevates the importance of Talent Management
- (c) HR inputs help improve Corporate culture

How important is an HR strategy to a Business ?

- (a) Having an HR strategy determines how HR processes work in the Company
- (b) HR strategy ensures that they are in alignment with the business goals

What are the 7 basic functions of HR ?

- (a) Recruitment and Selection

- (b) Performance Management
- (c) Development and Learning
- (d) Career Planning and Succession Planning
- (e) Compensation and Benefits
- (f) Human Resource Information System (HRIS)
- (g) HR Data Analytics

Why is IT so important for HR to align with Business strategy ?

- (a) Alignment of HR and Organization objectives can yield a variety of benefits
- (b) Result in more efficient allocation of money and other resources
- (c) Enhanced Employee Engagement
- (d) Boost morale and productivity

What are the 4 HR strategies ?

- (a) Compensation planning
- (b) Employee development
- (c) Succession planning
- (d) Recruitment and Selection

Why does HR and Business leaders work together ?

- (a) Teams executes initiatives
- (b) All assignments must be need-based and result-oriented

What are the signs of a good HR Strategy ?

- (a) Seeks and maintains limited turnover
- (b) Encourages and incentivizes its employees
- (c) Enabled working environment
- (d) Regular audits of Compensation and Benefits packages

What could be the 3Cs of Human Resource Development ?

- (a) Career

- (b) Competence
- (c) Care

How helpful are HR Models ?

- (a) Allow business Organizations to be more strategic, efficient, effective in managing their workforce
- (b) Allows HR professionals to tailor their practices to the specific need of their business Organizations.

What is HR Role Model ?

- (a) HR Role Models identifies knowledge, skills and abilities
- (b) Enable HR professionals to exercise HR business leadership

What are HR Product lines ?

- (a) Administrative services
- (b) Business partner services

What are the practiced Strategic HRM Tools ?

- (a) Customized on-boarding for new hires
- (b) Ongoing training opportunities
- (c) Ongoing meetings to review the HR strategy (formal and informal)
- (d) Conducting of surveys for better blending of workforce

What is the HR Product Life Cycles ?

- (a) Business strategy
- (b) HR strategy
- (c) Organizational design
- (d) Job design
- (e) Team design
- (f) HR Planning
- (g) Career Management

- (h) Assessment and Appraisals
- (i) Engagement and Rewards

3.2 Integrates Use of Innovations in IT and HR

In the 21st Century dynamic business environment the integration of Business systems and Human Resource systems is a core necessity.

HR Systems and Business Systems integration is a strategic must.

The implementation of a robust HR Information Systems (HRIS) is a cornerstone of integrating Human Resources and Information Technology.

Data analytics plays a pivotal role in optimizing Human Resource practices. Following are the listed noteworthy alignment noticeable in HR systems.

- One, On-boarding
- Two, Attendance tracking
- Three, Tracking performance of employees
- Four, Benefits administration
- Five, Training and development of employees.

By digitizing all Human Resource processes business Organizations can reduce -

- (a) Manual workload
- (b) Minimize errors
- (c) Improve data accuracy
- (d) Improve operational efficiency
- (e) Facilitate informed decision-making

Integration of Human Resource systems and Information Technology in Talent Acquisition are known to be significant and strategic helping the Organization to benefit the maximum. Specially in competitive environments.

Frequently Asked Questions relating to the Integration of Information Technology and Human Resources

What is HR Integration or HR System Integration ?

The use of a Third Party or in-house solution to connect an HR application with another Cloud app or on-premise system.

Once the connection is established, data can flow between the application in or near, or in real time.

Explain the Concept of HR Integration ?

The concept of HR Integration is the process of combining all the systems to do with managing Human Resources in a business so that they work effectively together for the best possible results.

What is the Integrative Approach in HR ?

The Integrative Approach in HR is derived from the combination of rational and Progressive approaches relying on strategic reference points and especially the two main variables:

- (a) the amount of attention to Internal Labour Market
- (b) the external Labour Market

How can HR support in its integration with Information Technology System ?

- (a) By introducing a flexible work culture
- (b) By creating well-defined procedures and policies to implement the Plan
- (c) Procure the necessary technology that will help them monitor the remote Employees
- (d) Blending the sectors in the most productive way
- (e) Encouraging creative ways and means of operating

What is HR Strategic Thinking ?

- (a) Identifying long term goals or aspirations
- (b) Attracting potential Talent

- (c) Skill assessment and Reference checking
- (d) Practical and prompt time-bound final selection
- (e) Crave out plans to achieve it
- (f) Aligning with Organization Business goals
- (g) Ensure that the goals becomes a lot less intimidating

What is Integrative Method ?

Integrative methods or Synthesis method involves combining data or core information from existing sources including from Primary data studies.

These can range from quantitative structured approaches such as meta-analysis or systematic literature reviews to informal, unstructured literature reviews.

How are HR Strategies integrated with Business Strategies ?

- (a) Understand the business goals and objectives (short-term or long-term)
- (b) Develop HR initiatives that support these goals
- (c) Focus on Talent Acquisition, Talent Management and Talent Retention
- (d) Develop techniques to nurture and guide Employees

What is an example of Integrated HR ?

An integrated HR Strategy combines all functions in a workflow, allowing every tasks to update other functions.

For example, an optimized Leave Management process enables the Department to automatically adjust schedules and Payroll to ensure everyone gets equal opportunities for time off.

What is KPA for HR Manager ?

Human Resources Key Performance Indicators (HRKPI) are metrics used to measure how HR is aiding and contributing to the success of a business Organization.

HR KPIs analyze how efficient a Company's HR Team in accomplishing its Human Resource Strategy.

Review the Strategic functions of Human Resources (HR) ?

- (a) Recruitment, hiring and retaining Talent
- (b) Employee engagement
- (c) Performance management
- (d) Compensation management
- (e) Training and development
- (f) Risk management
- (g) Audits and legal compliance

How strategic is the role of Human Resources ?

Strategic HRM or People strategy is about creating a coherent framework for the employees to be hired, managed and developed to support an Organization's long-term goals.

Strategic HRM helps ensure that the various aspects of People Management work together to drive the behavior and climate to meet Performance targets.

What is Critical Thinking HR ?

Critical Thinking is a key skill for HR and all People Professionals- the ability to think well and to reflect objectively on the ideas, opinions and arguments of others.

How does HR play a strategic role ?

HR plays the role of a strategic HR Partner as it-

- (a) Develop and direct an HR Agenda
- (b) Support and drives the overall goals of the business Organization
- (c) Bridges the gap between the work of the HR Team on the ground and the mission of the C-Suite.

What is Integrative Integration ?

Integrated Care system refers to collaborative between Behavioral Health care providers and Medical.

Integration can blends, clinical modalities with complementary approaches such as yoga, meditation and other healing therapy.

What is Integrative Learning ?

Integrated learning is the process of making connections among Concepts and experiences so that information and skills can be applied to novel and complex issues or challenges.

What is HR bundles ?

HR bundles (MacDiffie, 1995) are sets of interrelated and internally consisted HRM practices that are aimed to contribute to more productivity and quality than each HRM practice in itself.

What is HR Analytics ?

HR Analytics is the collection and application of Talent data to improve critical talents and business outcomes.

Data-driven insights are developed to improve workforce processes and promote positive Employee experience.

What is the relevance of Green HRM ?

Green HRM is when the field of HR focuses on expanding its role to support the Business Organization in pursuit of sustainability.

Green HRM aims to preserve the national environment.

Why is HR Critical ?

- (a) Drives performance
- (b) Manage employees
- (c) Motivates employees
- (d) Creates systems and processes

How can HR increase Productivity ?

- (a) Embrace flexible work
- (b) Invoking benefits of Training
- (c) Preserving productive work place conditions
- (d) Ensuring balance in employee happiness

What is HR Dashboard ?

Business Intelligence tool that allows businesses and HR Teams to record, evaluate and report on various HR Performance Matrix.

3.3 Allocates IT to help Resources Utilizations to Tasks, maximizing Performance and closing all Resources allocation Gaps

Information Technology and Human Resource Management blends well in areas of

- (a) Resource utilizations to tasks
- (b) Maximizing performance
- (c) Closing all resources allocation gaps

Steps recommended are listed as follows:

- One, Assessment of all current resources
- Two, Analysis of tasks allocation
- Three, Identifying gaps or inefficiencies in resource allocation
- Four, Implement Resource Management Software
- Five, Resource tracking of available resources and their capacities
- Six, Task allocation
- Seven, Task optimization
- Eight, Real time monitoring
- Nine, Analytics and Reporting
- Ten, Training and support
- Eleven, Interactive improvements

By integrating Information Technology solutions to resource management what could be achieved are as listed below-

- (a) Enhancing efficiency
- (b) Streamlining processes
- (c) Closing resource allocation gaps

Opportunities and challenges are bound to increase and multiply manifold with more blending of Information Technology and Human Resources aspects.

The expected Mix and Match are awaited on a 50:50 model. All that we have seen so far is how much they have complemented each other.

Frequently Asked Questions relating to the Allocates of Information Technology to help Resource Utilization to Tasks, Maximizing Performance and closing all Resource allocation Gaps.

What are the relevance of Information Technology Utilization to Tasks ?

- (a) Information Technology is always a strategic business tool
- (b) Information Technology influence covers social an performance expectancy and satisfaction
- (c) Information Technology role extend beyond social rationality, learning and interpretation of events
- (d) Information Technology Utilization affects social influence
- (e) Information Technology Utilization leads to User satisfaction
- (f) Information Technology Utilization helps Data Analysis and results

What are the duties and responsibilities of Information Technology ?

- (a) Activating Computer-based Information System (hardware and software)
- (b) Identifying technical problems
- (c) Upgrading and developing designs of all systems
- (d) Deploying the appropriate Information Technology solutions to solve problems and issues
- (e) Building communication networks and safeguarding data and information
- (f) Trouble shooting Computer generated problems and issues.

What are the useful utilization of Information Technology in Office ?

- (a) Implement Communication networks and collaborations
- (b) Improve involvement in networks and collaboration
- (c) Careful use of email
- (d) Making Information Technology involve in all aspects of Business

What is the role of Information Technology in Information Management ?

- (a) Usage in all daily operations of all business functions
- (b) Enabled ease in doing business
- (c) Manage overheads
- (d) Regulate Recruitment
- (e) Deals with market uncertainty
- (f) Manage Inventory
- (g) Monitors employee performance
- (h) Deals with employee grievances

What could be the 3 Responsibilities of People who use Information Technology ?

- (a) Making full use of the Hardware and Software used by Business for daily utilization and operations
- (b) Developing, maintaining and managing all Technology related segments

What are the basics of Information Technology ?

- (a) Information Security
- (b) Computer Technical support
- (c) Business Software development, data bases and Network Management

What are the acceptable functions of Information System ?

- (a) Input
- (b) Storage
- (c) Processing
- (d) Output

- (e) Feedback loop
- (f) Streamline processes
- (g) Greater access to information and knowledge

What is the Nature of Information Technology ?

- (a) Information Technology is the designated implementation of Computer Networks for data processing and communication
- (b) Designing the hardware for processing information
- (c) Connecting separate components
- (d) Developing Software that can efficiently and faultlessly analyze and distribute data

What could be the role of Information Technology in various sectors ?

- (a) Information Technology enables the development of data
- (b) Information Technology processes data
- (c) Information Technology analyze and store data
- (d) Information Technology create Products, design, perform Market research and does all marketing

For what purpose is Information Technology in business ?

- (a) Information Technology is used in business for transmitting strong, manipulating and retrieving data
- (b) Information Technology is used in business for storing information
- (c) Information Technology is used in making business calculations such Profit and Loss easily.

What are the basic characteristics for Information Technology that will be required for the future ?

- (a) Digitalization that involves Information Technology usage of digital Technology to process, store and transmit data and information.

- (b) Networking that enables the creation of networks that allow for the required communication and data sharing between demands and supply.

Is Information Technology the backbone for all future business ?

- (a) Information Technology systems are the foundation of modern business.
- (b) Information Technology encompass a wide-range of technologies
- (c) Information strengthens Networks
- (d) Information approves Productivity, decision-making and efficacy within the business Organization.

3.4 Builds Communication Networks to ensure Efficiency and Security of Business Information

In matters relating to utilization of Communication networks the following points are relevant and appropriate.

- (a) Keep on learning
- (b) Listen and engage with others
- (c) Know your customers
- (d) Choose your channel
- (e) Craft your messages
- (f) Build relationships

Networks for communication are best utilized through -

- (a) Searching for connections (Offline or Online)
- (b) Add value to existing relationships
- (c) Strengthen existing by displaying willingness to help

A Communication network is a collection of methods that users employ to connect with valuable clients to pass on valuable information.

Networking skills are improved by -

- (a) Building relationships
- (b) Leveraging on influential connections
- (c) Improving on emailing skills
- (d) Staying positive and keeping in contact
- (e) Working on personal communication skills

Building a high quality network are defined by -

- (a) Nurturing networks over time

- (b) Expanding network through referrals
- (c) Researching prospects
- (d) On the Information Technology front it will be making optimum use of PAN (Personal Area Network), LAN (Local Area Network), MAN (Metropolitan Area Network) and WAN (Wide Area Network)

Frequently Asked Questions relating to the How Information Technology builds Communication Networks to ensure Efficiency and Security of Business Information

How does Communication Networks works ?

Communication networks are always the patterns of information flow and for interaction among team members.

Communication networks can be formal and informal.

Communication network stands centralized, or decentralized and vary in size

Communication network need to learn from frequency and complexity

Communication networks affect how Team members share knowledge

Communication networks coordinate works

Communication networks solve problems

Communication networks build trust

What does Communication help in Networking ?

- (a) Help to secure a Job
- (b) Build relationships with potential collaborators
- (c) Increase profile within a particular field

Method of Networking can vary considerably. However, as its core networking is about Communication.

How does Technology helps in Networking ?

- (a) Improved access to information and the ability to share it with others
- (b) With a network in place, individuals or Organizations can easily access

and retrieve data from various sources such as data bases or Cloud storage systems.

What does Communication and Network help Information Technology ?

- (a) Share data and information
- (b) Networks often links thousands of Users
- (c) Transit audio and video as well as data
- (d) Networks include clients and services

What are the Types of Communication Networks ?

- (a) Vertical Network
- (b) Circuit Network
- (c) Chain Network
- (d) Wheel Network
- (e) Star Network

What is Communication Network in Information System ?

- (a) Collection of receiving and transmitting station that may relay information from one station to another station
- (b) By means of other stations acting as relays

What are the Networks presently used ?

- (a) Personal Area Network
- (b) Local Area Network
- (c) Compass Network
- (d) Vertical Private Network
- (e) Wide Area Network
- (f) Metropolitan Area Network

What is the meaning of Information Technology Efficiency ?

Information Technology Efficiency means doing more with less.

Information Technology Efficiency inspires quality of IT services

Information Technology Efficiency reduces cost

Information Technology Efficiency is a Time saving tool.

What steps could help improve Operational Efficiency ?

- (a) Estimate Expenses or Profits
- (b) Find out all expenditures and Processes
- (c) Analyze the Processes and Optimize
- (d) Implement Software solutions to automate and gain real time insight.

Why is Efficiency important in Technology ?

- (a) Improved Efficiency can lead to significant cost savings for business
- (b) Reduces waste
- (c) Optimize resource usage
- (d) Improve productivity

For example:

Automating tasks can reduce the need for manual labour and lead to faster turnaround times and of reducing overhead costs.

What are the measures of Efficiency ?

- (a) Technical
- (b) Productive
- (c) Allocative

Give an Example of Efficient Technology ?

Example of Clothes and Dryers.

Energy-efficient dryers use less energy than conventional models without sacrificing features or performance. They do this by deploying technologies such as moisture sensors that detect when clothes are dry and automatically shut the Dryers off.

What is Information Technology's Operational Efficiency ?

Operational Efficiency is the ability of a business Organization to-

- (a) Reduce waste in time, effort and materials as much as possible
- (b) Producing a higher quality Service or Product

What are the factors of Operational Efficiency ?

- (a) Measures how a Company can reduce its resource usage to profit efficiently and effectively
- (b) Resource utilization is the most optimum manner
- (c) Manufacturing and Inventory Management

What is the Formula for Operational Efficiency ?

Add operational expenses and COGs together.

Divide that figure by you net sales

(This way we get the Operating ratio)

A lower operating ratio indicates a more efficient business Organization

A higher percentage of sales is being converted into profits.

What could be the key components of Efficiency ?

- (a) Resources
- (b) Time
- (c) Quality and Completeness

What is Time Efficiency ?

Time Efficiency is doing the same task as before, but completing it faster or with fewer resources, while making an effort to get better results.

What is Business Efficiency ?

Business Efficiency is how effectively a Company generates products and services related to the amount of time and money needed to produce them.

The challenge is to transfer resources including-

- (a) Labour
- (b) Materials
- (c) Capital

Convert them into products and services that create profit for the business Organization.

What is Economic Efficiency ?

Economic Efficiency makes use of monetary evaluations.

Economic Efficiency refers to the relationship between the Monetary value of ends and the monetary value of means.

The valuations that count are consequently the valuations of those who are willing and able to support their preferences by offering money.

What is Productivity Efficiency ?

Productivity Efficiency is producing the largest number of products and services based on the resources available.

Utilizing resources while creating the least amount of waste is the most important aspects of Productivity Efficiency.

What is Dynamic Efficiency in the Market ?

The Market is dynamically efficient if consumer needs and wants are met as time goes on.

Dynamic Efficiency is related to the rate of Innovation which might lead to lower costs of production in the futures or the creation of new products.

What is Excel Efficiency ?

Formula is $\text{Output/Input} \times 100$

This will give out the percentage of output to input which is a measure of how efficiently resources are being used to produce a certain output.

What is Social Efficiency ?

Social Efficiency means taking into account all of the private and social costs and benefits of a decision or policy.

Social welfare is optimized when Marginal Social Benefits is equal to Marginal Social Cost.

What is Welfare Efficiency ?

Social welfare is optimized when marginal social benefit is equal to Marginal social cost.

Efficiency as defined by Economists is what is impossible to improve the situation of one party without imposing a cost on another.

What is Negative Externality ?

Negative Externality occurs when a transaction has a cost that neither the buyer nor the seller are forced to pay.

UNIT 4 : UTILIZATION OF HUMAN RESOURCE MANAGEMENT IN INFORMATION TECHNOLOGY

4.1 Connects HR Systems with Business Systems for Higher Productivity and Competitive Advantage

Utilization of Human Resources in Information Technology is about core opportunities and challenges. It goes without saying that Innovation in this digital era has shot up over all vital business exercises.

Envisioning the role of Human Resources is a real time measurement of the core Information Technology capacity.

- (a) Human Resources depicts a procedure of overseeing and using the employees of the business Organization.
- (b) Human Resources involves varied functions of Talent Acquisition, Employee Training post on-boarding, incentive procedures and ends with relieving the exiting employees.
- (c) Human Resources works to accomplish the productive goals of the business Organization. This involves overseeing and sharing information over virtual systems.

Envisioning the role of Information Technology is a real time measurement of the core Human Resources capacity.

- (a) Organizations in the business world are digital in practically every business area.
- (b) E-HR enables data accessibility to the Management anytime and anyplace.
- (c) ERP comes in as an e-HR framework
- (d) e-HR permits us to analyze the data and decide, directly with everyone.

The scope of Information Technology and Human Resources are-

- (a) Human Resource Planning
- (b) Administration
- (c) Talent Acquisition
- (d) Training and Development
- (e) Compensation and Benefits

Competitive Advantage, Accessibility, Rapid and Mistake-free exchanges are all the benefits apart from an Interactive atmosphere.

Frequently Asked Questions for Connecting Human Resources with Business Systems for Higher Productivity and Competitive Advantage

How does Human Resources affect Productivity ?

- (a) By sufficiently empowering Employees to find ways of improving their job functions and their allotted assignments
- (b) HR Staff members grow through the Training Program. Opportunities for growth multiplies; ways are devised to increase Employees interest in their jobs and assignments.
- (c) By reducing turnover

What are the ways to help Human Resources for higher productivity ?

- (a) Conduct surveys at an individual level
- (b) Embrace flexible work
- (c) Keep Technology updated

Can we still improve the role of Human Resources in Employees productivity ?

- (a) Human Resources design Performance Appraisal Systems that accurately evaluate Employees contribution
- (b) Human Resources give constructive feedback and goal setting support and aid in Employees growth and development
- (c) Human Resources address under performance and ensures that the business Organization maintain high standards.

What is the relationship between Human Resources and Production ?

- (a) Human Resources produce and reproduce the objective factors of production
- (b) Human Resources play a decisive role in the process of Transformation of nature into consumer goods
- (c) Human Resources decisively influence the effectiveness of using materials and financial resources.

What are the preferred ways Human Resources can be tasked for greater efficiency in Human Operations ?

- (a) Human Resource Planning and Development
- (b) Organizational Recruitment and Selection
- (c) Employee Career Assistance and Support
- (d) Legal Compliance
- (e) Advocate for Employees and Employers
- (f) Employees Incentives and Rewards
- (g) Organizational Health and Safety

How can Human Resources help to increase Productivity and Profitability ?

- (a) Human Resources is always keen to identify the best ways to entice High Performers to join Team and Vision
- (b) Human Resources offers Benefits and Policies that show value as a happy workforce, not only attracts and retains talent
- (c) Human Resources increases Productivity and drives Profitability

What are the strategic role of Human Resources relating to Productivity and Performance ?

- (a) Human Resources creates a framework for Employees to be hired, managed and developed to support an Organization's long term goals
- (b) Human Resources ensure that the various aspects of people, management work together to drive the behavior and climate to meet performance targets.

Why is Human Resources a factor of Production ?

- (a) Human Resources brings in economic value
Hence, unemployment is not a factor
- (b) Human Resources is a key consideration for labour to produce services and goods for economic gain
- (c) Human Resources in economics uses skills, knowledge and experience to ensure effective labour

How can Human Resource help improve productivity and performance in the business Organization ?

In an increasingly competitive market, many business have started investing in Training to actively contribute to the Organization's success.

In this context, Human Resource Management has gained strategic importance, becoming an indispensable part of an effective and results-oriented administration.

The work of Human Resources is very focused on employee management and Talent development.

Human Resource Managers must identify their Employees skills and guide them towards the tasks that will make the best use of them

Human Resource Managers need to compromise and promote a good business Organizational environment, ensuring good working condition.

Human Resource discourages Multi-tasking:

Though it may be seen like a good idea, doing everything at once can be counter-productive and the results are not likely to be satisfactory.

The best way to be productive is to concentrate on one task at a time.

Multi-tasking can cause stress, anxiety and can stop us from achieving our goals

Human Resource offer Training and Development Opportunities:

A well-trained Team is more productive, agile and less likely to make mistakes.

It is important to know the Teams needs and to develop Training programs to address both technical and soft skills. It is just as important to encourage continues learning as promoting in the search for new knowledge and solutions.

Human Resource increase Commitment:

Employees are increasingly looking for work that fulfills them. One need to really communicate the importance and meaning of the job and show its impact clearly.

It is very important to appreciate the importance of each employees work and the value that each person adds to the business Organization.

Human Resources improve Transparency:

Honesty and Transparency are key factors that improve commitment. Make it clear to your employees they can always be honest, without fear of retaliation. A good way to know what your employees are really thinking is to conduct anonymous periodic surveys to assess the mood of the business Organization.

Human Resources can invest in Technology:

If we want to increase productivity, we must talk about the fact that Human Resource Departments tend to be bogged down with all sorts of administrative activities. To be strategic and let them focus on the truly important actions, we need to automate as many of these tasks as possible. To do so, it pays to invest in Technology. This area needs the support of software to face all the daily tasks that can prevent the really meaningful work from getting done.

Human Resources feedbacks are strategically given:

Ask employees about the progress of this assigned tasks. This will allow us to guide their progress and improve their productivity. When you do so, give your opinion on the actions they are taken and suggest strategies to improve their work.

Employees like hearing their Managers give feedbacks. It is a good way of knowing which functions need to be adjusted, what is missing, and what aspects can be improved in the future.

When we give feedback, we can identify and take actions that really reflect performance and focus efforts on what really works. In this way we can increase our Team productivity.

Human Resources makes sure Tasks are realistic:

Realistic and doable is what Human Resources make sure Tasks are. Overloading employees with a huge workload and unattainable deadlines make them extremely unproductive. Managers must set achievable goals to draw out their abilities.

In this way, employees will be more motivated to perform the tasks assigned to them. Having realistic goals will increase employees effectiveness understanding and also their role in the business Organization. Encourage employees to take breaks and participate in recreational activities.

Human Resources encourage Productive Communication:

Communication is a crucial point in Organization that often doesn't receive enough attention. It is a Manager's duty to supervise their Team and ensure that all active employees meet expectations, objectives and priorities.

Human Resource Directors jobs are aided by easy access to information, but so are employers. It is essential for employees to have access to their own data in a formal manner, avoiding the spread of false or incorrect information.

When employees feel insecure about this situation, they might fill in the gaps in the information themselves and this doesn't always correspond to reality.

If misinformation spreads, it can undermine other Teams motivation.

To avoid this, develop internal communication channels and keep this updated.

How are Human Resources and Productivity related ?

Human Resources must understand the role of Productivity.

The economic performance of an Enterprise is a prerequisite for the growth and security for the growth and security of its employees.

The role of productivity and Human Resources, therefore, assumes great importance.

Improving productivity has always been a live issue for the Management. The profitability of an Organization mostly depends on improvement in productivity. Therefore, Managers are constantly striving to find ways of achieving the target of improved productivity.

In the modern age, tools that enhanced productivity are inevitable.

The clock-in and clock-out apps are highly valuable for employees, especially those in small businesses. It simplifies workforce management, ensuring every minute is tracked.

These technological advancements not only increase efficiency but also reflect a Company's dedication to maximizing its Human Resources.

Productivity is usually defined mechanically as the ratio between input and output. But, it is an Organizational challenge encompassing the human, cultural, moral and technological aspects.

Productivity is an all out effort in every sphere of activity of the Organization.

A step towards achieving the target of the most efficient management of all the available resources.

Man dominates the Show:

Money, Machine, Material and Method all have their share of importance for increasing productivity but is Man the Human Resources which dominates the show.

No amount of Money, Technological ingenuity or work motivation will do the trick. Unless the most vital resources – Human Resources, is ready to rise to the occasion.

Undue emphasis on engineering aspects may appeal the esprit de Corps and culture of the Organization. Thus the Human Resources of the Organization should form the focal point for any movement towards increasing productivity.

Productivity is an attitude. It cannot be translated into the body of the Organization. It could be cultivated by a systematic process involving much initial spadework in the form of a sound Organizational structure, maintenance of equilibrium vis-à-vis various activities within the Organization, and clear-cut Organizational goals.

Human Resources maintenance of Credibility:

The Philosophy and the basic principle underlying the Spirit of the Organization play an essential role in the quest for improved productivity. A high degree of morality, integrity, faith play and justice finding manifestation in its practices could go a long way in preparing the right kind of soil for nurturing productivity. Any discrepancy between what you say and what you do will erode the core Management's credibility.

Right leadership can inspire employees towards peak performance.

We are passing through a time of change. Autocracy is giving way to Democracy.

There is a growing hatred for any form of force or authority.

Managers cannot remain oblivious to the happenings around them. They must change their style to suit those qualities of the time. It is time for leadership through example.

Excellence replaces administration through Status and Authority.

Human Resources manage Performance Standards:

Management must set very high performance standards for its work if it warns its workforce to follow suit. Inefficiency is another form of ill planning, inadequate safety arrangements, worn-out equipment, irregular supply of raw materials, and

inability to decide at the right time result in the Management becoming a target of ridicule and affecting employees morale.

The top Team should ensure, smooth and hazard free operations if it wants to prove its credentials are before the employees.

Once the Management can convince its workforce about its integrity, credibility and efficiency, the next step is for the Managers to inspire, guide and improve the quality of their work. The foremost step in this connection would be the very concept of work.

Work should not remain only a mode of earning a livelihood but a source of self satisfaction and self realization. Thus, thorough Job design and placement taking into account a worker's ability, skills, mental orientation and versatility is paramount.

It could be necessary to follow the Principle of the right person in the right Job at the right time.

Employees should have complete knowledge of the Job. They are doing not only in the sense of its immediate implications but also its wholesome effect and effective Contribution towards the Company's objectives.

Human Resources relates to Productivity through Planning:

Productivity is often confused merely with more work by the workforce.

Productivity relates more to better Planning than the squeezing of the workforce to the best limit. It represents an improvement in the working qualities of employees by innovations in planning and organizing the available resources.

Improving performance is more a result of intelligent Planning and effective implementation than the extra sweating of the employees.

The efficiency of the employees cannot be increased by overburdening them with work but by reorganizing their jobs so that they can apply their skills most effectively.

The first step is in efficient maintenance. Retaining employees as opposed to turning over relates the work conditions, intersex relationships vertical and horizontal and supervision.

Good working conditions and a good relationship between Supervisors and Subordinates and among employees may not motivate. Still, their absence

certainly hurts their efforts towards the cause of employees.

Satisfaction is key. The next step in Motivation is Satisfaction.

If delegation is experimented and working still the better. Responsibilities are to be delegated if the workforce are expected to be performing and productive.

4.2 Shares and Oversees Information Sharing over Virtual Systems

Information Technology affects work by reducing the importance of distance. Geographic distribution of work are now accomplished through Virtual mode. Time distance are bridged productively.

Information Technology blend the Marketing, R & D and Distribution and the Manufacturing groups.

Information Technology facilitates the evolution of enhanced mail order retailing. Goods are quickly ordered and promptly received. Payments are easily done.

Disintermediation throughout the distribution channel produced cost reduction, lower end-consumer prices and higher profit margins.

Presently we are observing use of social media for sharing information.

Information Technology is the real pillar in the knowledge architecture that enables and drives knowledge sharing. Knowledge sharing is now swift, easy, effective with the use of digital technologies.

Digital Technologies are now helping employees to communicate and collaborate more effectively by facilitating knowledge sharing and retrieval in a timely manner.

Business Organizations can now keep track of its external and internal sources of information so that those who need it can find it more quickly and easily.

A congruence of needs, goals and expectations could enhance motivation to share knowledge through social media for employees and customers or stakeholders.

All said and suggested, privacy concerns can always create tensions amongst consumers, firms and regulators with effective Privacy protection policies and practices.

Frequently Asked Questions relating to Shares help oversees Information Sharing and Virtual Systems

What do we mean by Communication between Virtual Systems ?

There are two types scenarios where Communication between Virtual Systems takes place:

- (a) Inter-VSYS Traffic that must learn the Firewall
- (b) Inter-VSYS Traffic that remains with the Firewall
- (c) Inter-VSYS Communication uses two sessions

What is the meaning of Virtual Systems ?

- (a) Virtual Systems (VSYS) is a virtualization technology that divides a physical device into multiple independent logical devices
- (b) Each Virtual System functionaries as a real device that has its own resources and runs its own services which can be independently configured and managed by an Administrator.

What is the full form of VSYS ?

- (a) Virtual Systems (VSYS) divides a physical divide into multiple basic logical Virtual Firewalls.
- (b) Each VSYS has its own system, resources, performance most of the Firewalls from facilities working as a completely independent Firewall.

Which type of Zone will allow different Virtual Systems to communicate with each other ?

- (a) External Zones are required to allow traffic between Zones in different Virtual systems
- (b) The Virtual System Administrator configures the Security Policies needed to allow traffic between two Virtual Systems

Give example of a Virtual System ?

A System Virtual machine is fully virtualized: it provides a platform for the main execution of a complete operating system.

Multiple Virtual Machines (VMs) can run in parallel on a host systems sharing the physical resources.

Examples are:

- (a) VM ware
- (b) Virtual Box
- (c) Parallels

What are Virtual Systems used for ?

Virtual Machines (VMs) offer many benefits, including consolidates services to reduce costs and improve efficiency, isolating applications to improve security and reliability creating a variety of computing environments to improve flexibility Easily moving applications from one environment to another for portality.

What is the full form of VCC in Computer ?

A Virtual Call Centre or Virtual Call Center (VCC) is a call center in which the Organization's representatives are geographically dispersal, rather than situated at Workstations in one location.

Virtual Call Centre employees may be located in groups in remote offices or working from home.

How do Virtual Machines communicate with each other ?

- (a) Private Network allows a Virtual Machine to communicate only with another Virtual Machine on the host
- (b) Internal Network sets up communication between the host systems and the Virtual Machines on it
- (c) External Network Machines connects Virtual Machines and the host physical network

What are the Virtual Machines Network Types ?

- (a) Private – A private Virtual network allows a VM to communicate only with another VM on the same host
- (b) Internal Virtual Network - sets up communication between a sing host and Connected VMs
- (c) External – Connects Virtual Machines and the host physical network

What do Virtual Machines need in order to communicate with each other ?

In order for VMs to communicate, they must utilize VM networking technologies that enable them to emulate and access the existing physical network and provide additional features.

Virtual Machines are logically isolated entities.

Isolation is key to VM security and integrity preventing one VM from sharing.

Where is Virtualization used ?

Businesses use Virtualization to use their hardware resources efficiently and get greater returns from their investment. It process Cloud Computing Services that help Organization manage infrastructure more efficiently.

What are the examples of a Virtual device ?

- (a) Android emulator
Developers use their tool within Android status
- (b) ios Simulator

Part of Apple's Xcode

Allows for app testing on Virtual iPhones and iPads

(c) Virtual Machines

VM ware and Virtual box are the examples

(d) Network emulator

(e) Smart Home Simulator

How many types of Virtual are available ?

(a) Non-immersive

(b) Semi-immersive

(c) Full immersive

The level of engagement may change depending on the level of immersion.

What is Virtual Memory RAM ?

Virtual memory is also known as a Page File is essentially a block of space on your hard drive or solid state drive allocated by the OS to pretend to be RAM when your physical RAM runs short for actively running program.

Why do we need Virtual Machines ?

(a) For a single user, a VM offers advantages of manageability and security

(b) VM offers advantages of flexibility of running a separate operating system and non-native applications, making them ideal for Software developers and testers.

What are the benefits of a Virtual Machine ?

(a) Cost efficiency

(b) Multiple applications

Is it VCC O or I ?

VCC is represented by 1

VCC is primitive symbol

VCC is represented as a high (i) logic level in the Simulator and Wave form Editor

Why is it called VCC ?

The term "VCC" is commonly used to represent the Voltage Supply in Electronic Circuits.

The "V" stands for Voltage

The "CC" stands for "Collector-to-Collector"

In bipolar junction transistor (BJT) circuits.

What is VCC in Amazon ?

Virtual Contact Center in Amazon Web services

What is Virtual Network ?

A Virtual Network connects Virtual Machines and devices, no matter their location using Software.

In a physical network, layer 2 and 3 functions of the OSI Model happen within Physical switches and routers.

How do Virtual Machines share resources ?

When an ESXi host runs multiple Virtual machines, it allocates to each Virtual Machine a share of the physical resources

With the default resources allocation settings, all Virtual Machines associated with the same host receive an equal share of CPU per Virtual CPU.

What are two modes of Virtual Communication ?

- (a) Via Video Conferencing tools, emails, instant messaging solutions
- (b) Using other employee communication and Collaborated apps

What are the steps to create Virtual Machine ?

Step 1 Prepare your Computer to Virtualization

Step 2 Install Hyper Visn (Virtualization Tool)

Step 3 Import a Virtual Machine

Step 4 Start the Virtual Machine

Start 5 Using the Virtual Machine

Step 6 Shut down the Virtual Machine

What is the full form of VCC for work from home ?

VCC or Virtual Contact Centre

Based out of Delhi/Noida/Ghaziabad

What is the Characteristics of a Virtual Switch ?

A Virtual Switch or V switch is a Software Program that enables one Virtual Machine (VM) to communicate with another

Virtual Switches are used to establish connections between Virtual and Physical networks and to convey a VM's traffic to other VMs or a Physical network.

What is Taxonomy of Virtualization ?

The Taxonomy Model demonstrates the various layers of a Virtual Server architecture and virtualization domains in a structured way

Can two Virtual Machines communicate ?

- (a) Internal Network - Virtual Machines cannot access to Internet or other Networks but can communicate with each other
- (b) Bridged Network - Virtual Machines can access to Internet or other and be visible externally

What is important in Virtual Communication ?

- (a) Effective Virtual Communication provides the ability to communicate more quickly and effectively
- (b) Effective Virtual Communication produces a message that is clearly sent in a Technology and accurately received by another person

What devices are used for Virtual Reality ?

- (a) Virtual Reality Headsets
- (b) Head-mounted device – google, a Visual screen or display

What does Virtual mean in Communication ?

Virtual Communication refers to emails text messages, web chats and other forms of communication that do not happen in person.

With in-person communication what is important is -

- (a) Being straightforward
- (b) Having the right tone

4.3 E-HR Enables Data Accessibility to Senior Management

E-HR utility comes in providing further flexibility for the business Organizations to manage and organize their work efficiently, effectively and productively.

E-HR is for improvement of efficiency and effectiveness. Improvements in -

- (a) administrative processes
- (b) customer service
- (c) strategic roles of human resources (Sahar Khiz, 2011)

E-HRM stands for Electronic Human Resources Management. E-HRM main types are – Operational, Relational and Transformational.

The contribution of e-HRM for Managers comes in the areas of -

- (a) Strategic planning for staffing purposes for the business Organization
- (b) Conducting all Talent Acquisition Interviews and selection procedures
- (c) Hiring manpower from the Market to foster a productive work atmosphere

E-HRM facilitates opportunities to delegate the data entry to the Employees.
E-HRM facilitates the usage of HR market places for e-recruitment.
E-HRM continues to be a collection of many different technologies.

E-HRM facilitates process of Green HRM which further involves undertaking the process of undertaking Environment-friendly HR initiatives resulting in greater efficiency, lower costs and better employee engagement and retention. All these initiatives help the business Organization reduce carbon footprints by electronic filing, car sharing, job sharing, teleconferencing and virtual networks.

Summing up, E-HRM full utilization helps the business Organization to -

- (a) upgrade the HR functions to web-based technology
- (b) speed up the flow of business processes
- (c) enhance initiatives for all business strategies

It must be noted that, the Information Technology aspects of Human Resource Management possibilities are endless, either in principle or in practice.

Frequently Asked Questions relating to how E-HR enables Accessibility of Data to Senior Management

What does E-HR stand for ?

E-HR stands for Electronic Human Resources.

Electronic Human Resources or E-HR is used by multiple processes and systems
Electronic Human Resources or E-HR provide accurate, up-to-date and complete information about Employees in a Business Organization.

What are the key Components of E-HR ?

- (a) Employee Management
- (b) HR processes and systems
- (c) Secure messaging and alerts
- (d) Financial Dashboards
- (e) Revenue Cycle Management (RCM)

What is exactly the role of E-HR ?

E-HR is the planning, implementation and application of Information Technology for both networking and supporting at least two individual or collective actors in their shared information of HR activities.

E-HR is not same as HRIS which refers to ICT Systems used within HR Department.

What are the benefits of E-HRM ?

- (a) E-HRM can reduce the administrative costs and time involved in the HR

Processes such as data entry, paper work, travel expenses and office space.

- (b) E-HR can automate and streamline HR functions such as Payroll processing, performing appraisal, training delivery and recruitment screenings.

What are the Methods of E-HRM ?

- (a) e-personal profile
- (b) e-training
- (c) e-recruitment
- (d) e-selection
- (e) e-compensation
- (f) e-rewards
- (g) e-discipline
- (h) e-punishment

What are the main components of E-HRM ?

E-HRM is the planning, implementation and application of Information Technology for both networking and collaboration.

E-HRM and HRIS have their strategic role to contribute. Both are not the same.

Virtual HRM or V-HRM is a network based structure built on partnership and initiated by Information Technology to help the business Organization acquire, develop and deploy intellectual capital.

E-HRM is in essence the devolution of HR functions to Management and Employees. They access these functions typically via intranet or other web technology channels. The empowerment of Managers and Employees to perform certain chosen HR functions relieves the HR Department of these task, allowing HR staff to focus less on the operational and move on the strategic elements of HR and allowing Organization to lower HR Department staffing levels as the administrative burden is lightened.

E-HRM develops and become more entrenched in business culture, these changes will become more apparent, but they have yet to be manifested to a significant degree.

A 2007 CIPD Survey states that the initial research indicates that much commented on development such as shared service, outsourcing and e-HR had relatively little impact on costs or staff members.

Justify the emerging role of Electronic Human Resource Management (e-HRM) ? In today's demanding world Information Technology plays a fundamental role in creating new opportunities and delivering competitive benefits to enterprises.

The HR Professionals had to respond to increased competition for changes in both workforce attitudes and composition, shifts in the Employers/Employees functional

relationships and rapid advances in HR Technology.

Moving towards the electronic world is a predictable phenomenon.

In recent years, electronic Human Resource Management (e-HRM) is being used in most of the big Companies and Institutions and is giving the leading satisfying Organizational systems in Human Resource Management because its application are considered to be very effective and cost effective.

Many factors are relevant in Performance expectancy. Effort expectancy, Social influence and facilitating conditions and attitude towards e-HRM.

Understanding employee and attitudes about e-HRM management systems is essential of Organization are in use such system for employee welfare and Organizational improvement.

After all, Electronic Human Resource Management (e-HRM) is a way of implementing HR strategies, policies and practices in Organization through Counseling and directed support of using web-technology-based channels.

Define e-HRM in a systematic manner ?

E-HRM is the planning, implementation and application of Information Technology for networking and supporting actors in their shared presentations of HR activities.

Human Resource Management (HRM) departments using information and communication technologies (ICTs) are becoming an increasingly imported phenomenon called e-HRM.

Automated HR tasks and practices transform traditional paper and pencil, labour-intensive HR tasks-into-efficient, fast-response activities that enable companies to anticipate and profit from environmental shifts to create a much-needed competitive advantage.

Michael Armstrong says “e-HR provides the information required to manage HR processes.”

E-HR is a way of implementing HRM strategies, policies and practices in any Organization through directed support of web technology-based channels.

Kavangh and Thite (2008) says “ The system used to acquire, store, manipulate, analyze, retrieve and distribute information regarding an Organization Human resources.”

Nirupa Rajhans (2012) says “ E-HRM costs lower and improves efficiency by

reducing paperwork and streamlining – work-flow, automating redundant HRM tasks, empowering employees to embrace or self-service HRM delivery system, keeping the Company workforce fully informed about all important HR Compliance issues and Corporate events, speeding up the response time of HRM Systems, ensuring that more informed decisions are made and improving time management.

What are the elements of E-HRM ?

- (a) Technology is necessary to connect spatially.
Segregated actors and enable interactions between them irrespective of their working in the same room or on different continents. After all, Technology serves as a medium to connect and integrate.
- (b) Technology supports actors by partially and sometimes even completely substituting for them in executing HR activities. Hence, Information Technology serves additionally as a tool for task fulfillment.
- (c) The consideration of individual and collective actors considers e-HRM a multi-level phenomenon besides individual actors, there are collective actors like groups, Organizational units and even Organizations that interact to perform HR activities.
- (d) Besides e-HRM other Concepts refer to the same phenomenon widely accepted terms and virtual HRM, web-based HRM or business to employee.
- (e) Virtual HRM refers to technology mediated networks of different internal and external actors providing the Firm with the HR services needed without a conventional HR Department becoming Virtual.

What are the Types of E-HRM ?

- (a) Operational E-HRM
- (b) Relational E-HRM
- (c) Transformational E-HRM

What is Operational E-HRM ?

Operational E-HRM is concerned with administrative functions- payroll and employee personal data.

What is Relational E-HRM ?

Relational E-HRM is concerned with supporting business processes using Training, recruitment and performance management.

What is Transformational E-HRM ?

Transformational E-HRM is concerned with Strategic HRM activities such as knowledge management and strategic recommendation.

An Organization may pursue E-HRM policies from these tiers to achieve its HR goals.

What are the Goals of E-HRM ?

- (a) Reducing cost
- (b) Improving HR services
- (c) Improving strategic orientation

HR Managers can make a Human Resource plans more quickly and actively make decisions fosters define jobs more clearly and enhance communication with the Employees and the external community.

E-HRM is seen as offering the potential to improve services to HR Department clients (both employees and management) improve efficiency and cost effectiveness within the HR Department and allows HR to become a strategic partner in achieving Organizational goals.

E-HRM creates standardization and with stardardized procedures, this can ensure that an Organization remains compliant with HR requirements, thus ensuring more precise decision-making.

E-HRM has increased efficiency and helped business reduce their HR staff by reducing costs and increasing the overall speed of different processes.

E-HRM has relational impacts on a business, enabling a Company's employees and managers to access HR information and increase the connectivity, of all parts of the Company and outside Organizations.

What are the Role of E-HRM ?

- (a) e-HRM can increase the efficiency of HR activities, improve HR services, delivering and transform the role of the HR function into one that is more strategic
- (b) e-HRM increase its value through the more efficient management of generic labour and effective support of differential labour.

What are the Advantages of e-HRM ?

- (a) Improving quality services
- (b) Ensuring efficient services at an amazing speed
- (c) Facilitating routine tasks like record keeping, maintaining the portfolio and collecting and storing relevant information regarding human resources.

e-HRM is unsuitable for Organization where employees are not prepared to accept or use it.

- (d) Helping the reduction of costly time and labour
- (e) Improving accuracy and reducing human bias
- (f) Making reporting and analyzing data quickly
- (g) Benefiting everyone through standardization and automation
- (h) Handling bundles of employees data from multiple locations fairly
- (i) Performing crucial functions of HRM such as recruitment and selection, training and development, using web-based technology.
- (j) Playing decision roles in a paperless office
- (k) Maintaining anonymity of staff in evaluation or feedback giving.

What are the disadvantages of E-HRM ?

- (a) Involves a high cost to maintain in implementing E-HRM
- (b) Difficult to maintain the confidentiality of the input data
- (c) Electronic media are vulnerable and may be attacked by viruses from anywhere on the Internet.
Contracting a virus can disable HR management system severely enough to render it unusable from an indeterminate time.
E-HR is subject to corruptions, hacking or data losses.
- (d) Data entry errors does occur too.
- (e) Organizations need to invest more in training and development before adopting e-HRM

What could possibly be three greatest of contemporary times relating to Electronic media and HR Management ?

- (a) Electronic Recruitment (E-Recruitment)
- (b) Electronic Performance Management (E-Performance)
- (c) Electronic Compensation Management (E-Compensation)

4.4 Provides a Mistake-free exchanges and a sound Interactive atmosphere including Accessibility of Data

Two strategic contributions comes in the utilization of Human Resource Management in Information Technology:

- (a) Provides a Mistake-free exchanges for accessibility of data
- (b) Provides a sound Interactive atmosphere for accessibility of data

Human Resource Management provides the guidance for an Organization's

workforce with the use of Information Technology. Alongwith this comes the satisfaction meeting the demands with greater efficiency with well qualified employees and in helping the support of the business Organization better and better.

The HRIS system help stores, processes and manage employee data- names, addresses, national IDs or Social Security numbers, visa, work permit information and information about dependents.

The benefits of HRIS for the Employees and business Organization are-

- (a) Certainty in the works performed
- (b) Ability to control their information data
- (c) Atmosphere of enabling voices to be heard
- (d) Clarity on where to complete tasks and works assigned
- (e) Pathways for future growth and promotional works
- (f) Real-time analytics and reporting
- (g) Automation of mundane processes

HRIS systems are comprised of Database, Time and Labour Management, Payroll function, Employee interface, Recruitment and Retention issues. The HRIS lifecycle and various stages are requirement analysis, system design, software development, testing, deployment, ongoing maintenance and support.

A classic example is the utilization of HRIS Payroll Software that helps business Organizations automate payroll calculations and minimize manual mistakes.

Frequently Asked Questions relating to Human Resources in Information System provides a Mistake-free Exchanges and Sound Interactive including Availability of Data

What is HR Analytics known as ?

HR Analytics is also known as People Analytics

What is HR Analytics ?

HR Analytics is also known as People Analytics which is the collection and also the application of Talent data to improve Critical Talent and Business outcome.

What exactly is People Analytics ?

People Analytics focuses on the People, challenges, functions, processes and opportunities at a workplace.

What do we mean by Employee People Analytics ?

People Analytics is the practice of collecting and transforming HR data and

Organizational data into actionable insights that improve the way we do our business.

People Analytics are called HR Analytics or Workforce Analytics.

What more can we learn about Employee Performance Analytics ?

Performance Analytics refers to the practice of analyzing key performance Indicators (KPI) in an Organization to develop Strategies to help reach the Organizational functions and outputs.

What is Employee Analytics ?

A rigorous and systematic approach to defining workforce problems and testing successful solutions.

It informs what tools and processes the Organization should put in place to achieve its higher potential.

What are the 4 Types of HR Analytics ?

(a) Descriptive

(b) Diagnostic

(c) Predictive

(d) Prescriptive

They provide HR Professionals with valuable insights into their workforce, help them identify areas for improvement and ultimately drive business success.

What are People Analytics in HR ?

People Analytics is collecting and applying Organization people, and talent data to improve critical businesses outcomes.

It enables HR Departments to gain data driven insights to make decisions on different people processes and turn them into actions to drive the performance of an Organization.

Why is HR Analytics used ?

HR Analytics aim to provide insight into how best to manage employees and reach business goals.

HR Teams must identify which data is most relevant, along with how to use it for maximum Return on Investment (ROI)

What is the Scope of HR Analytics ?

HR Analytics empowers Organizations to make informal decisions based on data rather than gut feelings.

By analyzing employee data, HR professionals can identify trends, patterns and areas for improvement, leading to more effective decision-making processes.

Is HR Analytics a Tool ?

HR Analytics is data-driven approach toward Human Resources Management.
HR Analytics is a truly novel tool.

Is HR Analytics a Skill ?

Mastering HR Analytics Skills enhances Career prospects, equipping professionals to handle complex challenges and drive meaningful Organizational change. Adopting Analytical Skills is important for being effective and relevant in a data-driven environment.

Who uses HR Analytics ?

HR Analytics are used by a Business to understand how well the Company hires, manages and maintains employees.

They can identify breakdowns in processing across the Organization as it relates to employees and find ways to save money on things such as the hiring process.

HR Analytics is known to analyze how the following processes operate:

- (a) Performance Management
- (b) Compensation Management
- (c) Organization Development

What is the role of HRBP in HR Analytics ?

Human Resources Business Process are responsible for various HR activities. HRBP metrics help track of the impact of their work, allowing Companies to understand their areas of improvement.

This data-driven approach saves time, helps make sound decisions and reduces cost and effort.

HRBP stands for Human Resources Business Partner .

HRBP is also known for Human Resources Business Process.

David Ulrich is known as the Father of Human Resources.

What are the 3 Advantages of HRIS ?

- (a) Reduce the amount of paperwork and manual record keeping
- (b) Retrieves information quickly and accurately
- (c) Allows quick analysis of HR issues

What does most HRIS contain ?

- (a) Personal history – name, date of birth, sex
- (b) Work history – salary, first day work, employment status, positions in the Organization, appraisal data, pre-Organizational information
- (c) Training and development completed – both internally and externally
- (d) Career plans - including mobility
- (e) Skills Inventory – skills, education, competencies, transferable skills

What are the 5 types of HRIS Systems ?

- (a) Operational
- (b) Tactical
- (c) Strategic
- (d) Comprehensive
- (e) Limited-function HRIS

UNIT V: CASE STUDIES

Case Studies -1

5.1 HRIS in Business

UNIT V

Case Studies -2

5.2 MIS Application in Enabling Managers to make Better Decisions

UNIT V

Case Studies -3

5.3 ERP

Recommended Books for Reading:

1. Ahmad, Shoeb (2004) Human Resource Management and Technical Changes, Kalpaz Publications, New Delhi.
2. Harris, Stancey (2021) Introduction to HR Technologies: Understand how to use Technology to Improve Performance and Process, Cogan Page Limited, London
3. Mandal, R Subhra, Francesca D Virgilo, Subhankar Das (2021) HR Analytics

and Digital HR Practices: Digitalization Post Covid-19, Palgrave Macmillan, Singapore

4. Kumar, Payal, Anirudh Agrawal, Budhwar Pawan (2020) Human and Technological Resource Management (HTRM): New Insights into Resolution 4.0 Emerald Publishing Limited, Leeds (England)
5. Uppal, Nishant (2020) Human Resource Analytics: Strategic Decision Making, Pearson Education, Indianapolis, Indiana
6. Yadav, Shankar, Rana, Maheshwari, Sunil (2020) HR Analytics: Connecting Data and Theory, Wiley Publications, New Jersey (USA)
7. Waddi D. Deborah (2018) Digital HR: A Guide to Technology- Enabled Human Resources, Society for Human Resource Management, Virginia (USA)



Techno City, Khanapara, Kling Road, Baridua, 9th Mile,
Ri-Bhoi, Meghalaya-793101
Phone: 9508 444 000, Web : www.ustm.ac.in