

**IIT Madras**  
ONLINE DEGREE



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# Business Data Management

Introduction to HR as a function

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# Overview



# Learning objective

At the end of this case discussion we will learn:

- ❑ What are the various steps involved in a recruitment process
- ❑ How data analytics can be used in this recruitment process



# Key concepts

- Manpower planning
  - Also called as Human Resource Planning
  - Involves
    - Putting right number of people, right kind of people( correctly staffed)
    - At the right place, right time (in the correct job)
    - Doing the right things (with clarity on what's expected of them)
    - So that it helps the organization to achieve its goals.
- Recruitment process
  - The process of actively seeking out, finding and hiring candidates for a specific position or job.
  - Includes the entire hiring process, from inception to the individual recruit's integration into the company.



# Need for Human Resource Planning

- Organizations need a plan for functioning
  - Analyse the current human resources, how many people, doing what kinds of work, getting what kind of revenue for the organization
  - Create manpower forecasts – how many more people will we need to do how much more for the organization
- Helps plan the labor cost
- Helps in growth and diversification of business



# Brief overview of Tech Enterprises

- Tech Enterprises, a Bangalore based company, provides digital solutions across various domains to their global clients.
- A quick profile for the organization

**Founded in  
2005**

**3500  
employees**

**Glassdoor  
rating - 3.5**

**Attrition rate  
<18%**



# The key players

Person	Role
Madhuri	Program Manager
Ritesh	Recruitment Head, Tech Enterprises
Vidya	VP ,Tech Enterprises





# Caselet 1 – Madhuri's team

- Madhuri has been with Tech Enterprises since her recruitment at campus as a fresher.
- She has grown through the ranks to become a project director in 13 years and leads a team of 55 employees



## Caselet 1 :

### Madhuri's team needs a replacement

- Abhi, who like Madhuri was hired out of campus as an engineer and is part of Madhuri's team has decided to pursue further education. He has resigned and is serving his notice period. His last working day is 31<sup>st</sup> May
- Madhuri now needs a replacement for Abhi and contacts Ritesh for this hiring.
- Ritesh handles the recruitment for Vidya's business at Tech enterprises. He is part of the HR Team and works closely with Vidya and her leadership team which includes Madhuri



# Internal sourcing of candidates



# Caselet 1: Internal sourcing

- To replace Abhi, Ritesh opted for internal sourcing
- In internal sourcing, a position is filled by sourcing from the existing employees, either by promotion or by lateral movement.
- Ritesh mailed the employees with the criteria
  - 5+ years of work- experience in this company
  - Experience of managing a small team and working in a cross-functional group of people
  - A 2 year history of good appraisal rating
  - Experience on Visualization tools, basic data modelling



# Key concept

## Appraisal:

- The process of evaluating an employee's current and/or past performance as against certain predetermined standards.
- All organisations have some formal or informal means of appraising their employee's performance.
- The performance appraisal process, therefore, will include defining the job, appraising performance and providing feedback.



# Internal sourcing

Before starting the formal recruiting process, companies would much rather check if they have internal resources who can actually do this role.

To ensure this companies typically

- Publish all vacancies on the intranet or internal portal for employees to apply for
  - Employee must meet certain criteria before they can apply for a role
- Check similar skill sets from employees on the bench



# Internal sourcing (contd)

Post shortlisting, Internal candidates are assessed through interviews and certification tests and then selected for the role

HR informs the existing manager or the bench manager on successful placement of an internal candidate and usually a period of 2 months is identified for transitioning the person from one role to another



# Job description, Candidate sourcing





## Caselet 2 : Madhuri wins a deal ...

- Over the last two years, Tech Enterprises has seen plenty of growth.
- Much of this growth has created a need for a strategic, specific recruiting processes.
- Madhuri, who you have previously met is the Program Manager who handles a team of 55 and has recently won a large business deal for a telecom major in the beginning of Mar 2021



# She needs more people on her team

- Madhuri needs 5 team members and 1 project leader in the month of June 2021 to complete deliverables of the latest project.
- She will need another 5 team members and 1 project leader in the month of August 2021
- Madhuri reaches out to the Recruitment Head Ritesh and tells him that she desperately needs 12 people on board in her team and asks him to start looking for suitable profiles



# Madhuri's next steps

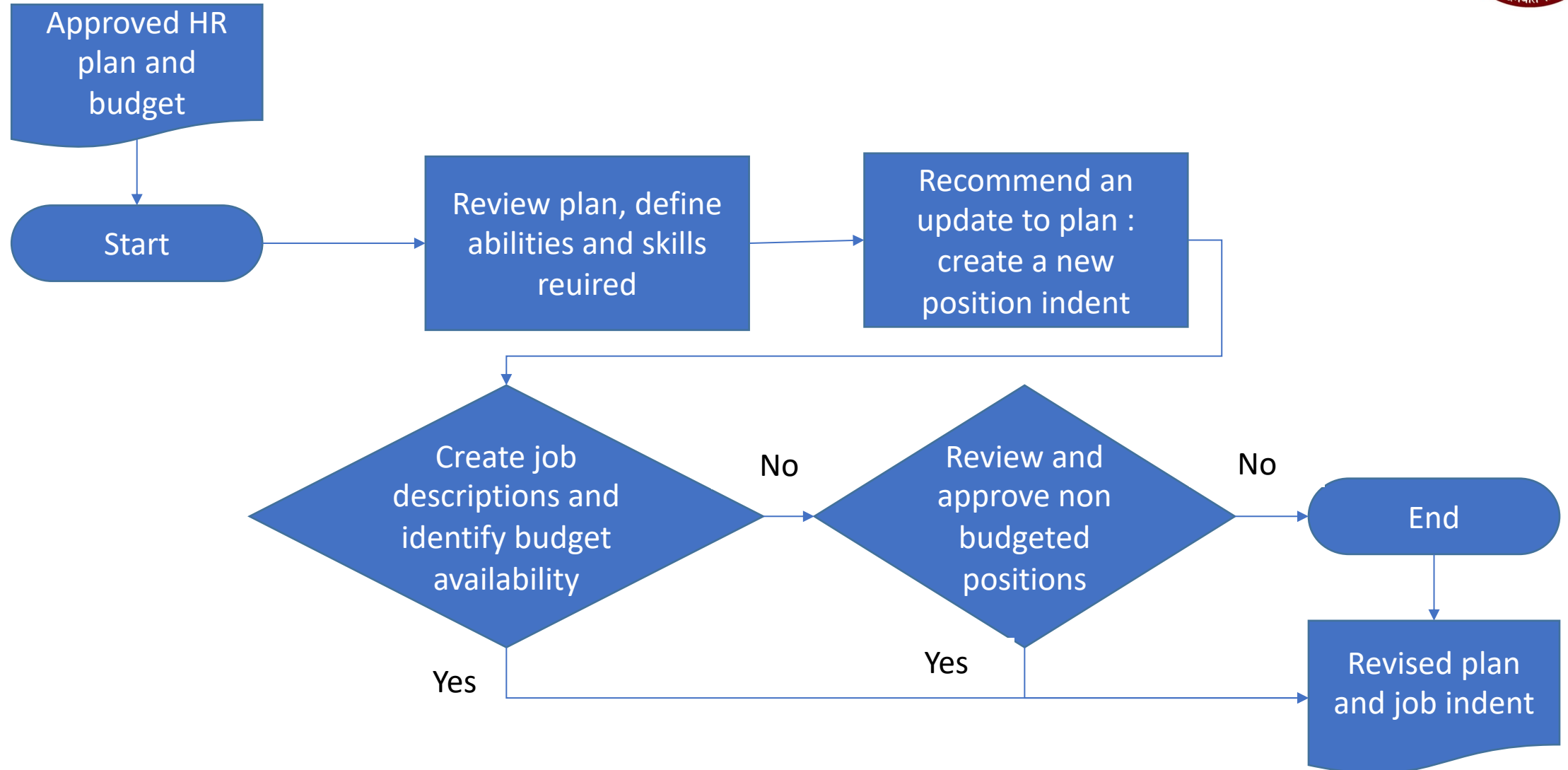
- Ritesh asks for Madhuri for the following
  - What is your headcount plan for the year? Do you have a budget for these positions ?
  - Can you get me an approval for these positions and raise a requisition ?
- Madhuri then reaches out to Vidya, VP of her business and outlines her requirements, updates the manpower plan and seeks approval
- Once the approval process is completed Ritesh once again initiates the process, but this time Madhuri's needs are more complex

# The recruitment process flow

A good **recruitment process** can minimize the time involved in the searching, interviewing, **hiring** and training. It can streamline these **processes** and make your search for viable candidates much more efficient. It is very **important** to build a positive image to your customers, peers and competitors.



# Sub process 1 : HR planning and job indent





# Key concepts

- **A requisition or an indent**
  - A form usually created by HR that outlines:
    - the budgetary details
    - the timelines of the position required
    - whether the position is full time part time or on TPP
    - skills and capabilities required.



# Key concepts..

- **Job description (JD)**

- A quick summary of :
  - what the role is expected to do,
  - key responsibilities
  - how the performance will be measured
  - the skills, capabilities, experience and educational qualifications required to do that particular job

# The JD explanation



## Application Security Engineer | Tech Enterprises

The Application Security Engineer will be responsible for integrating security into the development of ABC's applications. The Application Security Engineer will work closely with the product and software development team to threat model, vulnerability scan, and pen test the early software, system, and network architecture and identify required control points in the application stack. The Application Security Engineer will also work closely with developers to diagnose, document, and remediate application security vulnerabilities. The Application Security Engineer will also be responsible for evaluating, recommending, and implementing application security related software in an automated continuous integration/deployment environment.

### Primary duties:

- Work closely with application development and QA teams to help formulate and implement a strategy for software security that is tailored to the specific risks facing the organization, including threat modelling and applications security advisement services.
- Conduct application security assessments / penetration tests and implement tools for dynamic/automated code reviews
- Ensure application design and implementation best-practice with role-based and appropriate access standards, as well as integration with Identity and Access Management environments.
- Ensure compliance with society, regulatory, and industry standards for application security.
- Continuously evaluate the organization's existing application security practices, define and measure security-related activities, and demonstrating concrete improvements to the application assurance program within the organization.
- Conduct code reviews and penetration testing
- Develop and maintain unit and integration tests designed to ensure security controls are tested on every build

### Primary and Secondary Skills Requirements:

- Primary Skills: Development language - Java development, JavaScript, Python, Ruby, C++/C#, Perl Application Security etc.
- Secondary Skills: Security penetration testing tools - Metasploit, w3af, Blackduck, Veracode & burp suite (any one or two)
- Other Skills: Jenkins, Pivotaltracker, Cloud Foundry, AWS

### Position Requirements:

- Bachelor Degree in Engineering.
- CEH, GSEC, GIAC certification preferred.
- A strong understanding of application security frameworks
- 5 years' experience in application development and security.
- Practical understanding and use of commercial application security tools
- Must be fluent in write technical reports based on findings.
- Proficient with development languages including Java, Python, Ruby.
- Strong self-starter who has the ability to operate independently.
- Excellent oral/written presentation skills with ability to communicate effectively with senior executive leadership; proficiency in preparation of presentations, analytical reports, and documents regarding program operational status, achievement and performance.
- Understanding and passion for Agile/XP/Scrum/Kanban is preferred
- Understanding of Test-Driven Development built on User Stories

### What we offer you

Tech Enterprises will offer you an inviting workplace, talented colleagues from diverse backgrounds, career path, and steady growth prospects with great scope to innovate. Our goal is to create an ecosystem of easily configurable data applications focused on storytelling for public and private use.

### Contact us to apply

Hiring manager: XYZ ABC

Send your resume to: xyz@techenterprises.com





# The search for candidates begins ....

- Madhuri creates job descriptions, one each for the project leader and ten team members along with the timeline on when she wants these role filled in
- Ritesh reviews these job descriptions and commences the hiring process to remain compliant with Madhuri's timeline. He creates **a recruitment plan** that outlines the steps and expected timelines. He runs this past Madhuri so that they are both aligned on the outcomes



# The Recruitment Plan

- The recruitment plan consists of
  - Open Position
  - Timeline
  - Channels of fulfilment



# The sourcing process

- Ritesh creates an opening on company's website and puts an advertisement on a recruitment portal.
- Ritesh notifies all employees about the **Employee referral policy** and announces bonus of either INR 15000 for team members or INR 25000 for project leaders.
- He also uses Tech Enterprises's Twitter, Facebook, LinkedIn accounts to broadcast the job openings as part of the **social media** campaign.



# The sourcing process (contd)

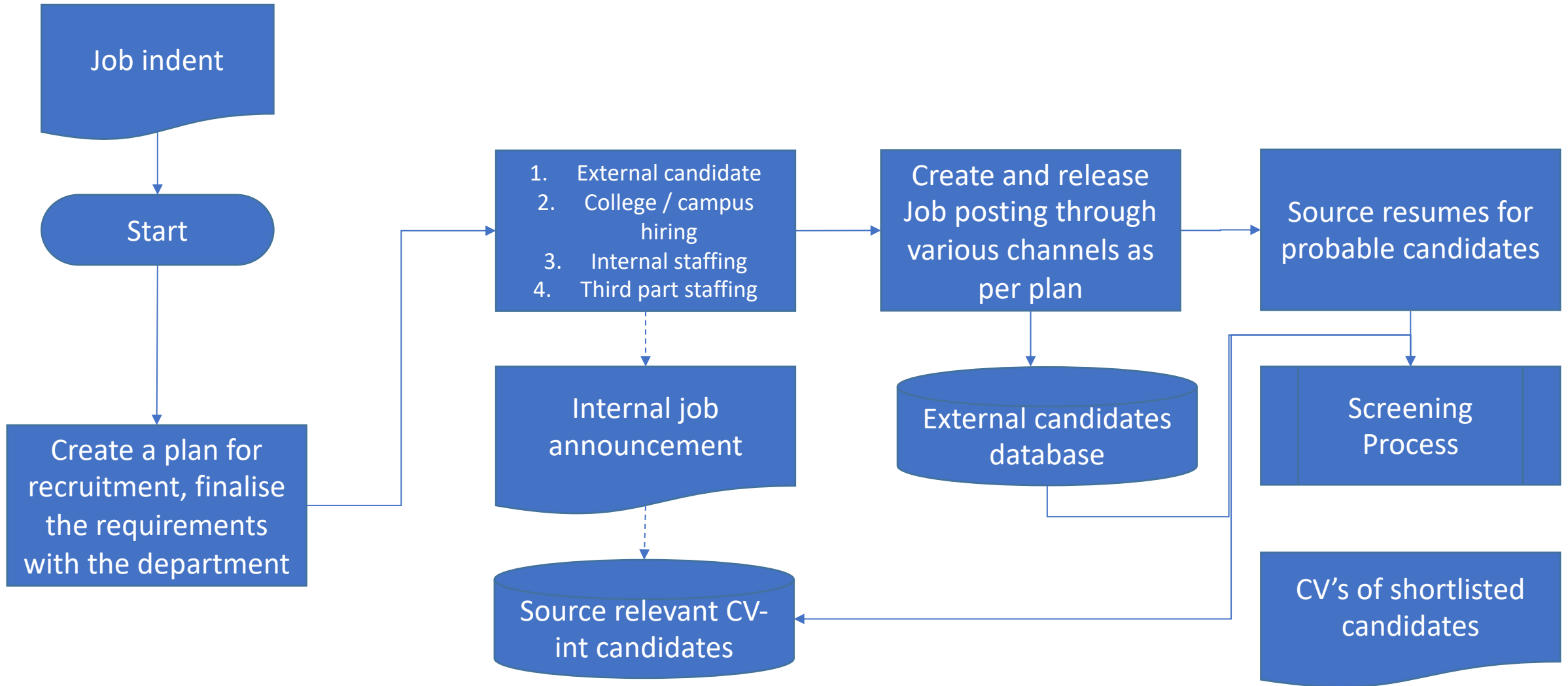
- After a careful self review, he decided not to go for a **walk-in** for team members since only a few positions are available.
- He opts for fresher pool to be **hired out of campus** for the team member positions



# Ritesh encounters an issue

- At the end of first week, he could manage only 5 applications.
- To fit Madhuri's timeline, Ritesh needs to collect more applications.
- Ritesh mulls working with some recruitment consultants to try to find very specialized talent in management to fill the project leader positions.
- Since he has a fixed budget for this quarter, he needs to decide which channels are effective for this recruitment

## Sub process 2 : Sourcing of candidates





# Hands-on session Dashboard for Ritesh

# What will Ritesh focus on for monitoring his own work ?



- To start work the following metrics
  - Which is the most effective channel for this kind of role
- Once he starts on the recruitment process
  - How many CV's has he got from which channel
  - How many new CV's is he getting per week
  - How many CV's have gotten past the screening process
  - How much of a match is there between the CV's and JD's
  - What is the TAT time left on the position ( i.e. how many more days for closing the offer and how many more for the joining )



# What will Ritesh focus on for monitoring his own work ? (contd)



- Once he starts on the recruitment process (contd)
  - How many interviews have been scheduled
  - How easy has it been for candidates to apply

# A walkthrough of the data





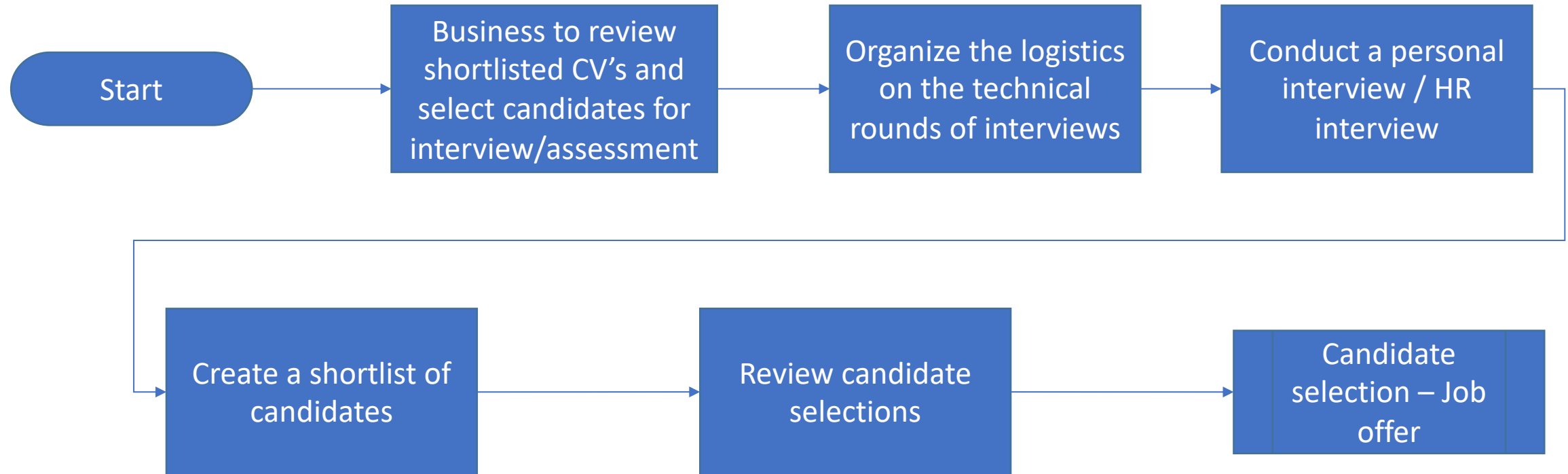
# Results of sourcing strategy

- After a three-week period, Ritesh has 24 applications for the project leader positions, 78 candidates for the team member position.
- Pleased with the way recruiting progresses, he starts reviewing the résumés to continue with the selection process.



# Selecting candidates and onboarding

# Sub process 3: Scheduling interviews and assessments





# The case

- At the end of week 3, Madhuri
  - Has gone through 102 profiles shared by Ritesh
  - **Shortlisted** 7 profiles for the project leader positions
  - Another 25 for the team member positions
- Selection Process
  - Identify an interview panel
  - Each Candidate faces
    - **A written test**
    - **two rounds of assessments : Technical and HR**



## The case (contd)

- Ritesh's team reached out to the 32 candidates shortlisted and arranged for the tests on a specific date and interviews based on common convenience of the interview panel and the candidates
- Ritesh has a template that gathers the feedback on various parameters by the interview panel which he received after the interviews



# The case (contd)

- Shortlisting
  - Project Leader Position: 1 candidates
  - Team member position: 7 candidates
  - Based on the test scores and the interview feedback
- Offer letters
  - Based on Madhuri's recommendation
  - Ritesh rolls out **offer letters**
    - 1 candidate selected for the project leader position
    - 5 offers for the top ranking team member candidates
  - Offer letter has details of the position, the level, the designation and salary details

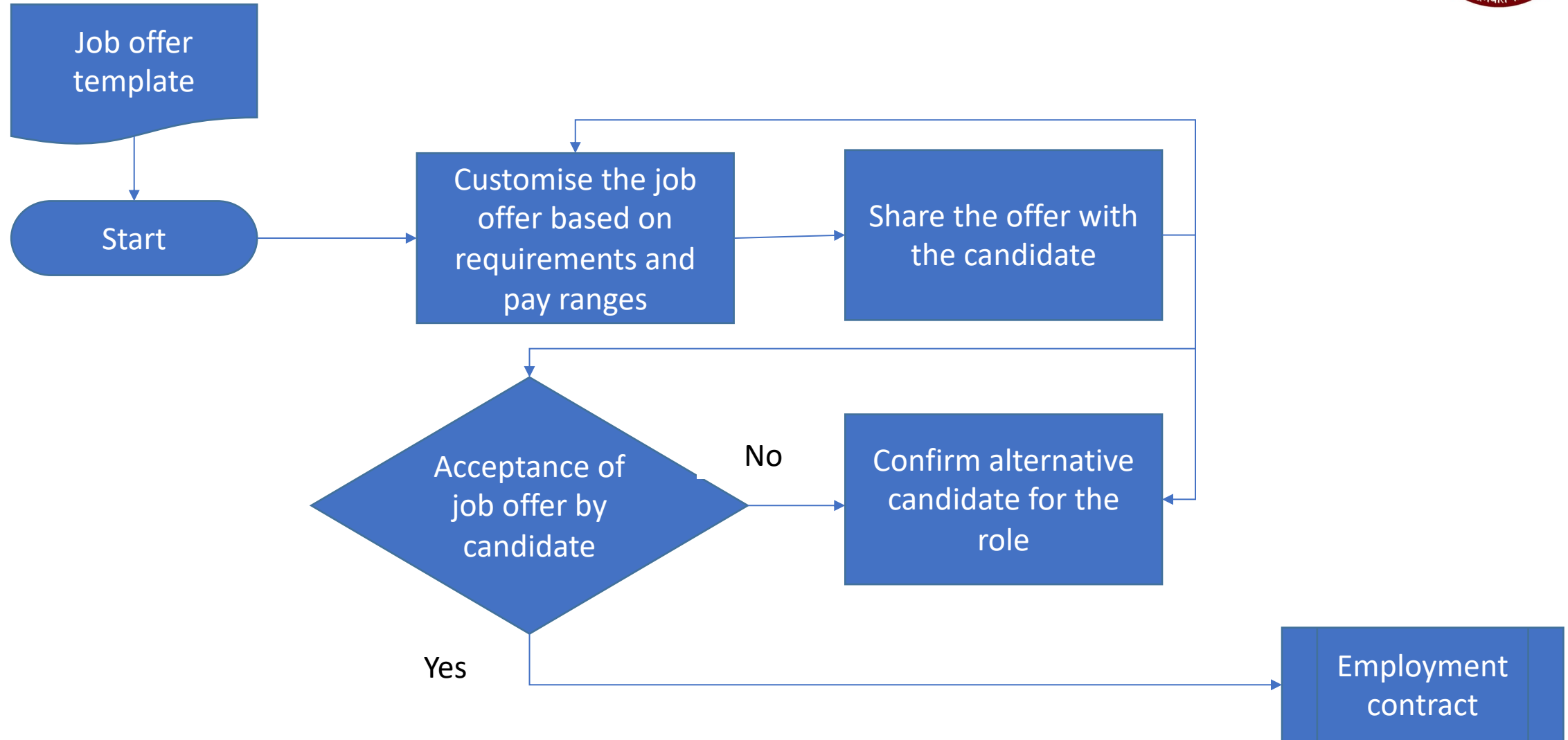




## The case (contd)

- However both the project leader candidate and two other from the team members rejected the offer for reasons like joining date, location or salary

# Sub process 4: Offer roll out





# The case...

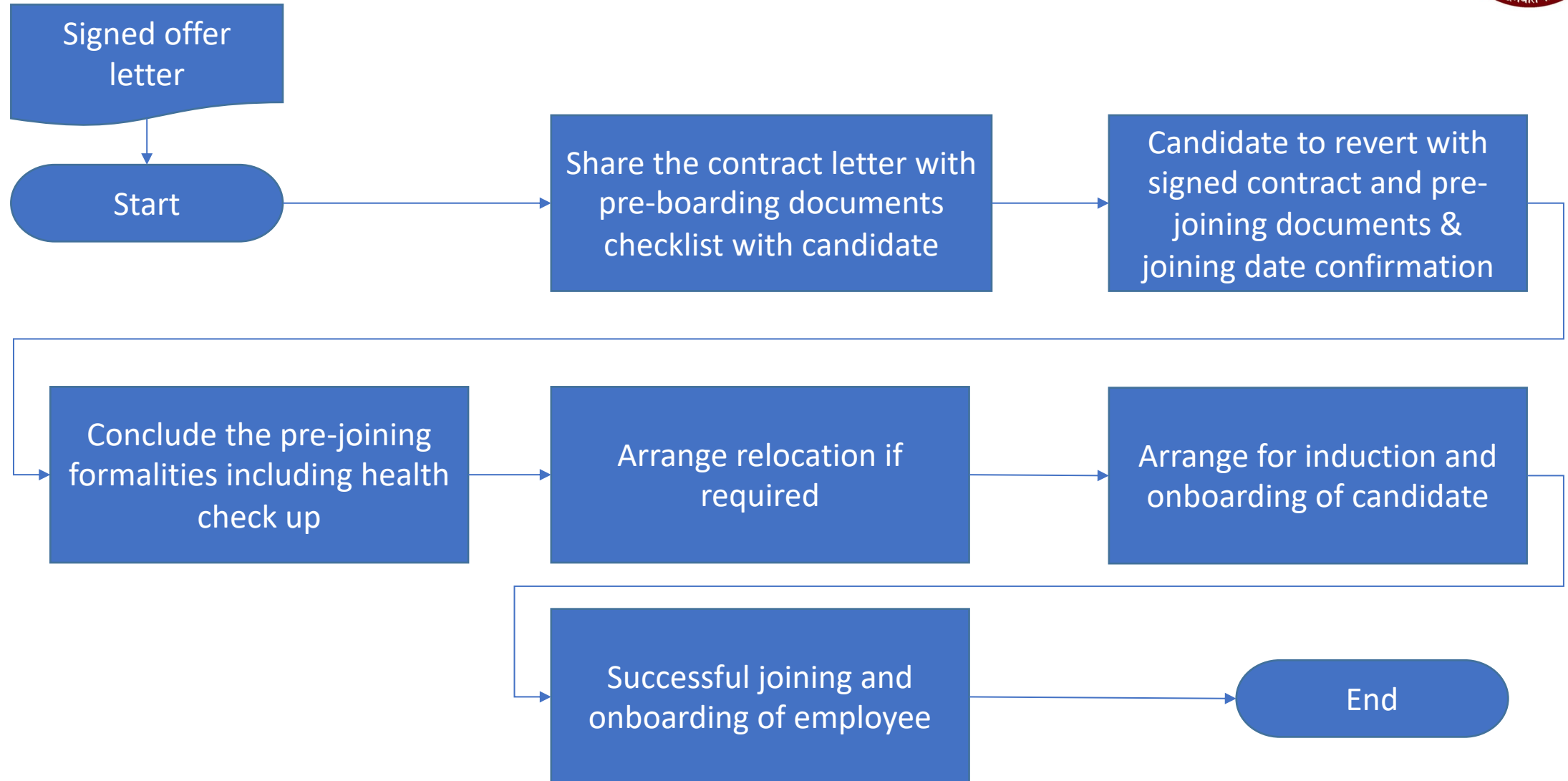
- Ritesh engaged with the candidates and negotiated the joining date aspects where he could. One of the team member candidates was persuaded to join.
- The other shortlisted candidate for the team member was now made an offer while the project leader candidates procedure was revisited and refreshed given this.
- The 5 team members joined Tech Enterprises in two months and the position of the Project leader was also being fulfilled



# The case...

- **Induction and on boarding** was conducted by Ritesh's team ensuring that the all the candidates submitted their documents ( certificates and bank documents ) closing the 5 indents for Madhuri's team
- The other indents followed the similar process

# Sub process 5: Induction and on boarding

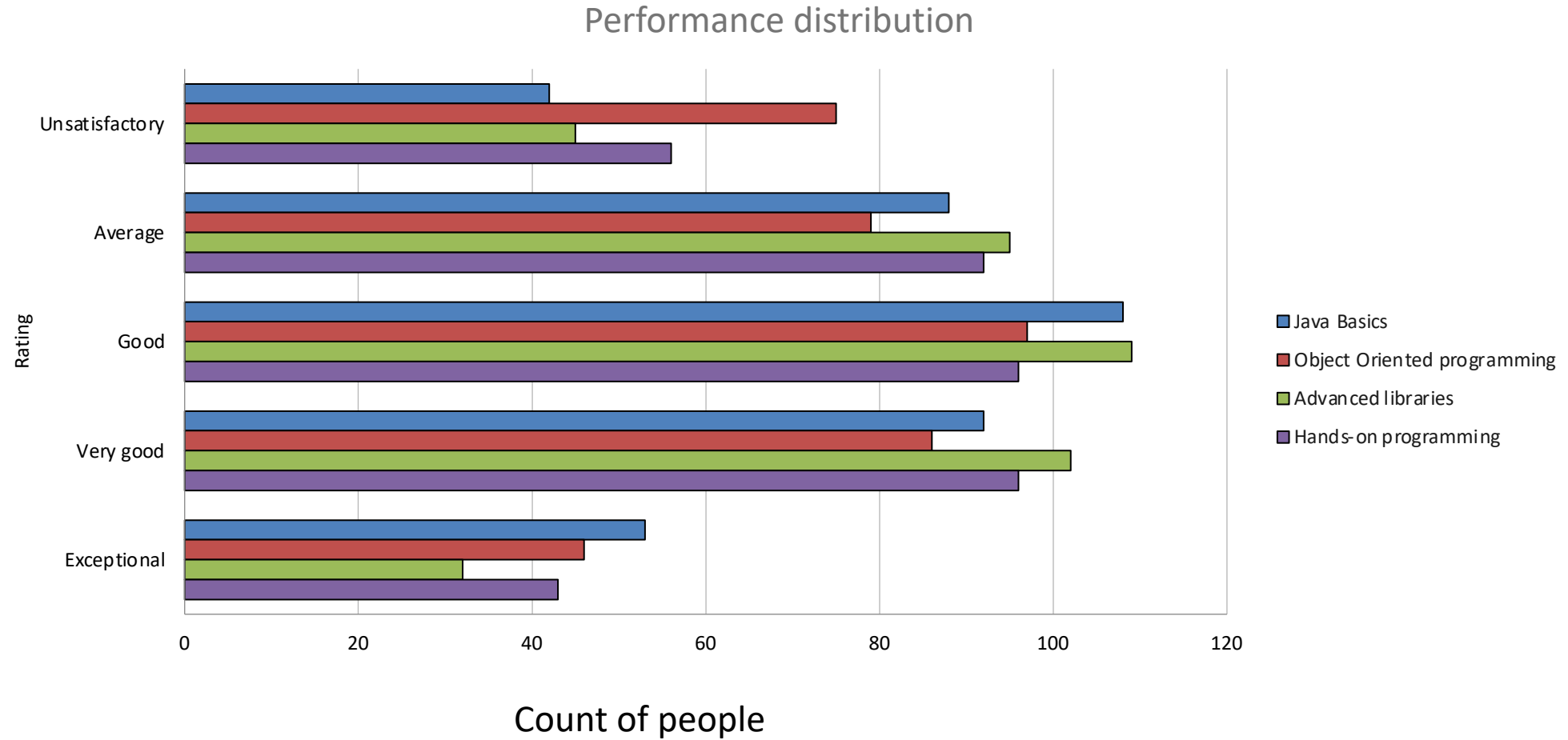




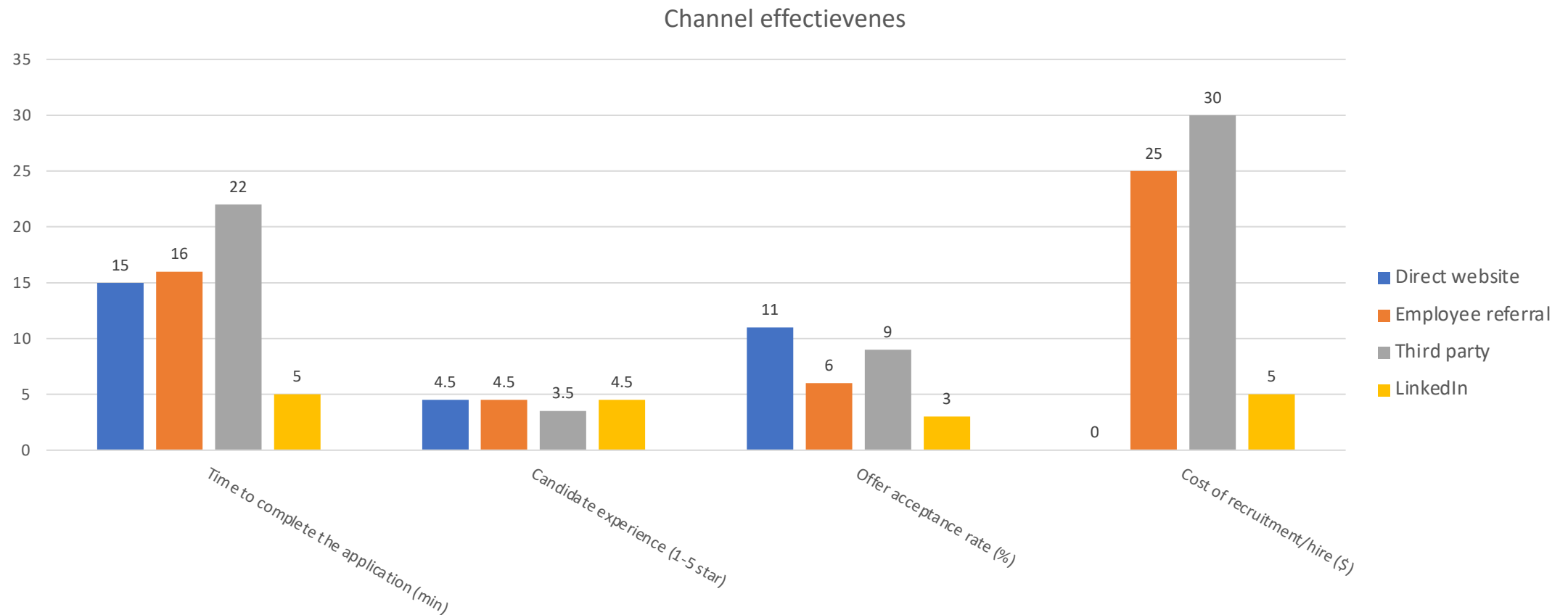
Hands-on session: Dashboard for Madhuri



# Skill distribution dashboard



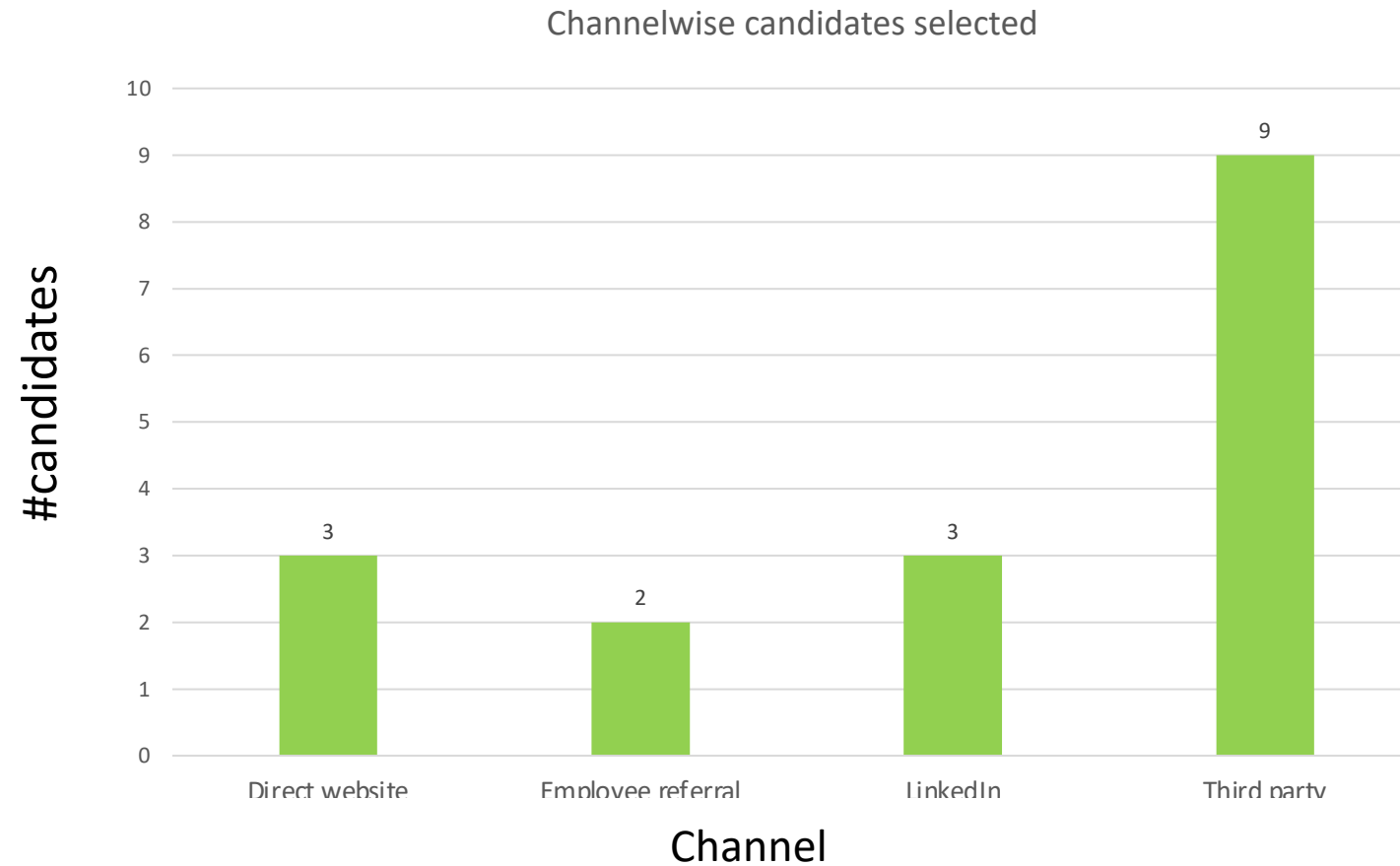
# Channel effectiveness







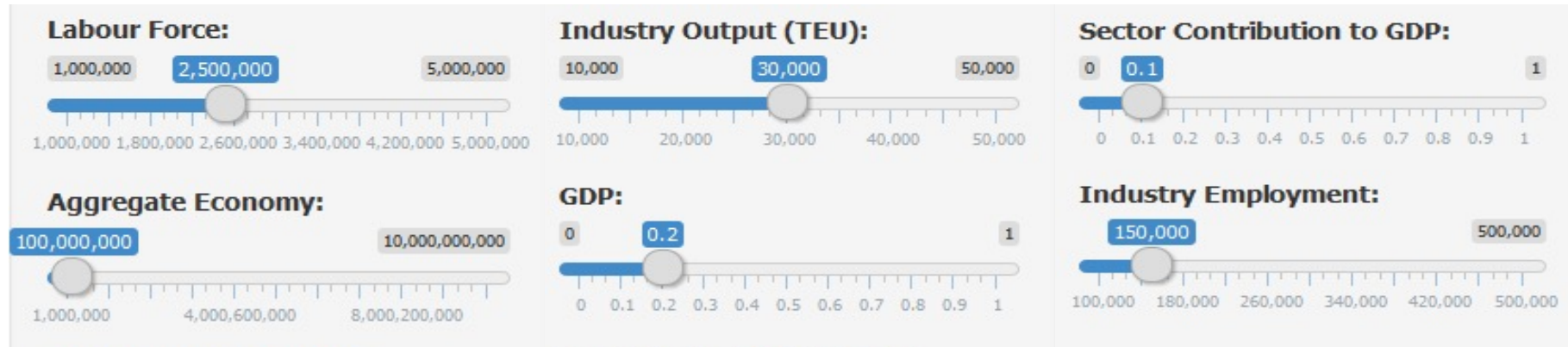
# Channel-wise candidates selection matrix



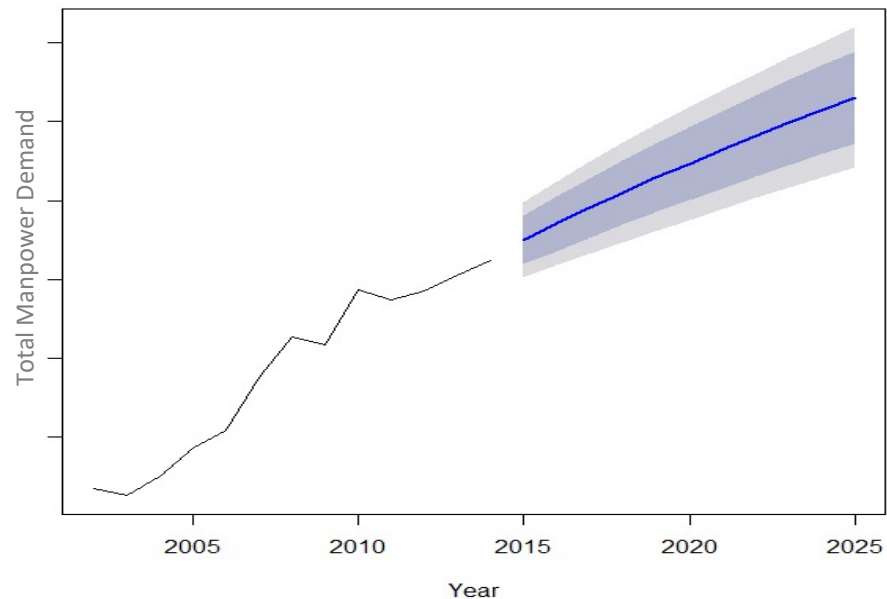


# Summarizing

# Workforce forecast model – Estimate demand



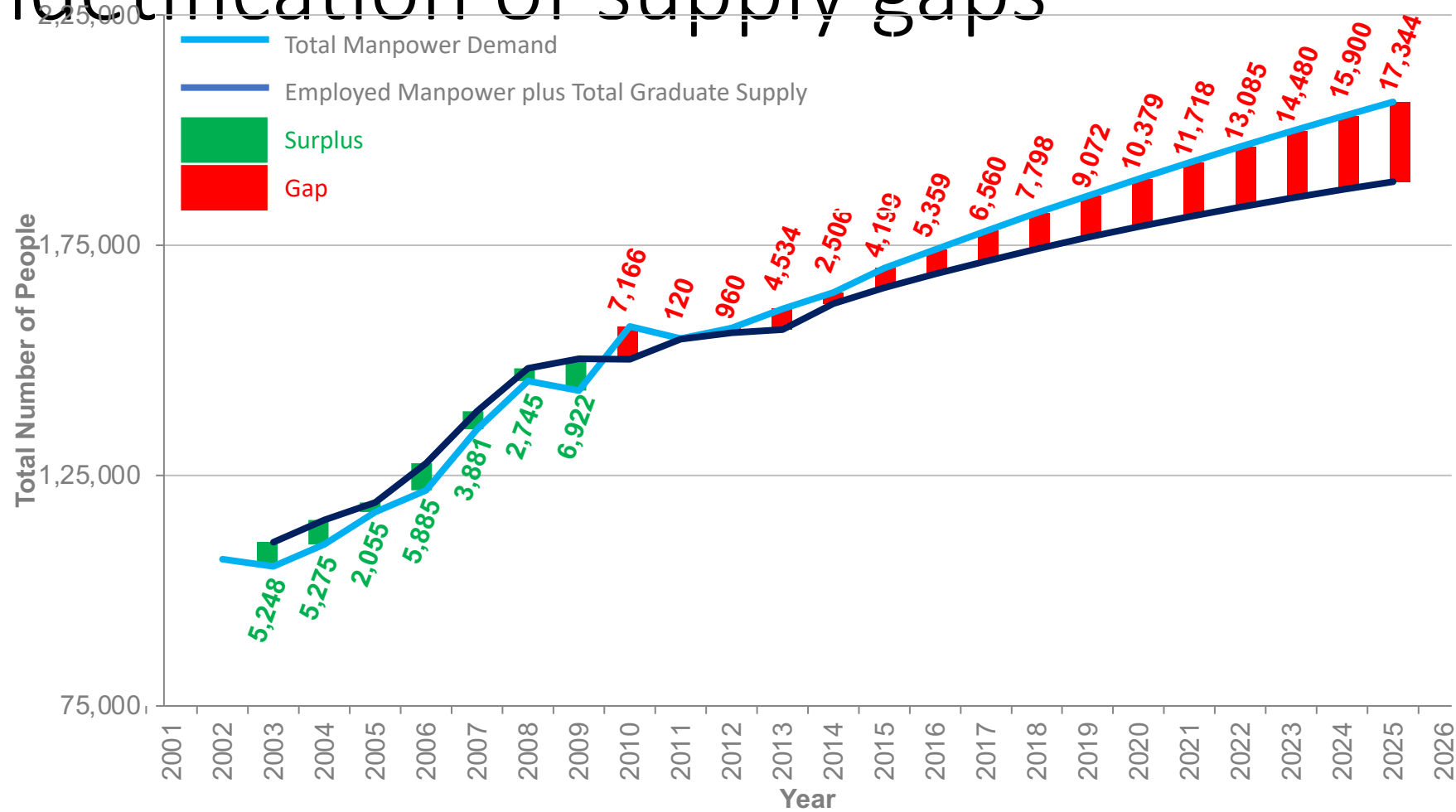
Six to eight factors considered for creating a workforce model and estimating demand



Year	Point Forecasts	Lo 95% Confidence Interval	Hi 95% Confidence Interval
2015	1,713	1,643	1,782
2016	1,729	1,627	1,830
2017	1,724	1,699	1,848
2018	1,801	1,637	1,966
2019	1,866	1,726	1,905
2020	1,819	1,758	2,080
2021	1,966	1,728	2,004
2022	1,908	1,831	2,185
2023	1,950	1,866	2,133
2024	2,093	1,833	2,253
2025	2,041	1,829	2,253

Used for generating various scenarios to determine demand-supply gaps

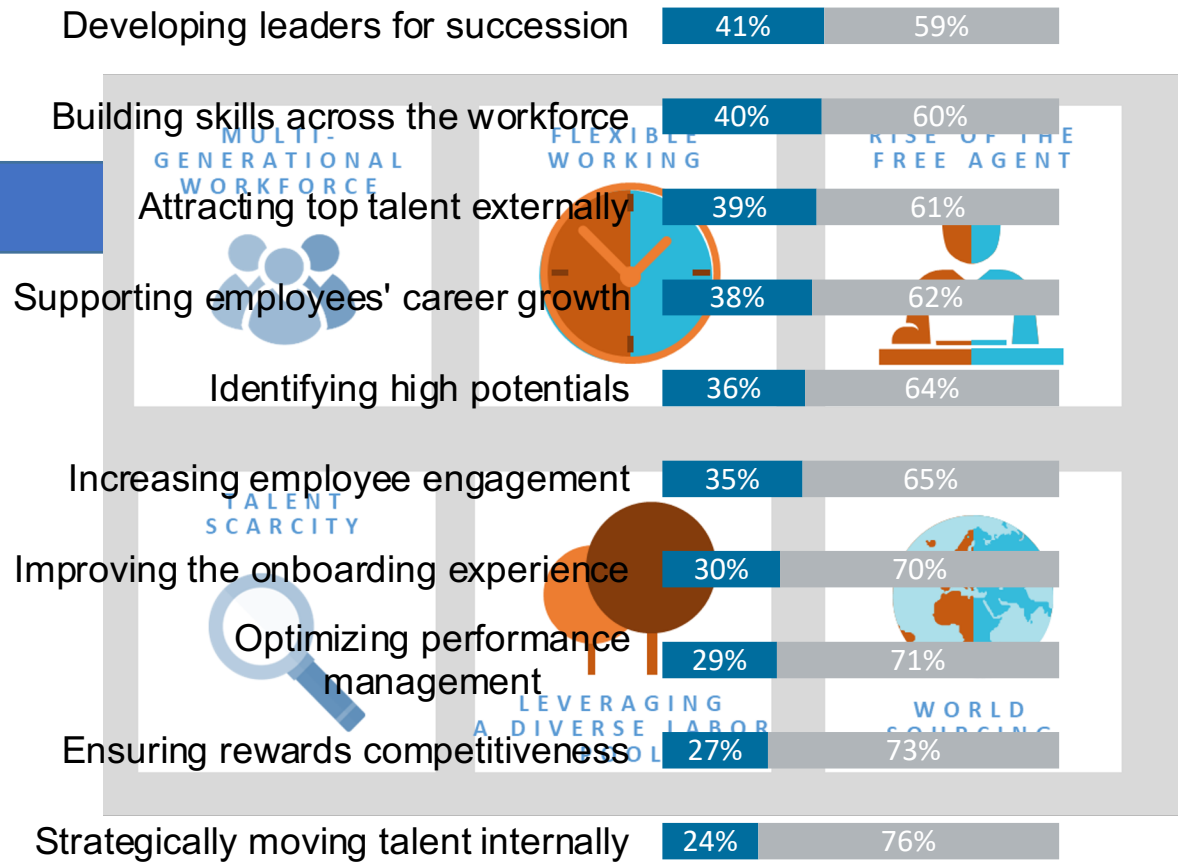
# Workforce forecast model – Scenarios for indetification of supply gaps



# What keeps a CHRO busy

## HR'S TOP 10 PRIORITIES FOR 2018

(from a list of 20 options)



## MANAGING TRENDS IN TALENT MANAGEMENT AND ACQUISITION

India will have 53% companies increasing workforce and intent to hire will be stronger in the tech and pharma sectors CHRO will have to deal with the some of the characteristics of the talent market we see below

# Evolution of the measures and how analytics are looked at

2000 MEASURING HR'S VALUE BY ESTABLISHING HR KPIs	2010 PEOPLE ANALYTICS FOR HR	2020 PEOPLE ANALYTICS FOR THE BUSINESS
<p>'The HR Scorecard' advised using HR metrics, selected on an organisation-by-organisation basis, to measure HR's contribution to the business.</p> <p><b>How can I measure the value of HR?</b></p>	<p>The application of analytics to provide insights on topics related to people in a Talent Supply Chain.</p> <p><b>How should my workforce needs adapt to changes in the business environment?</b></p>	<p>An outside-in approach to people analytics with focus on business opportunities.</p> <p><b>What people factors will improve my business performance?</b></p>

How long does it take to **hire for certain positions at different levels?**

What is the **aging and percentage of open positions?**

How can we build a compelling **job indent to increase applicants per indent and selection ratio?**

What analytics will help us understand **what is the cost per hire?**

How might **analytics for recruitment funnel effectiveness?**

How can we ensure our **that the time to fill and hire for positions is within the norm ?**

How can we **measure the candidate experience** in line with our employer of choice philosophy?

Is our **technology helping the application completion rate?**

I would like to see the effectiveness of hire viz. **first year attrition and performance scores for new hires**

Which sourcing channel **is the most effective** for fulfilling our requirements?



Thank you