

HEALTHCARE BPO · PREDICTIVE HIRING

# Decoding attrition: predicting who would stay, with 89% confidence.

How Medusind Solutions replaced manual, bias-prone hiring with PMaps Job Fit Assessments — and a predictive attrition model that turned competency scores into retention foresight.

MEDUSIND SOLUTIONS

HEALTHCARE BPO

PARTNER SINCE 2015

CLIENT |



Medusind®

**89%**

PREDICTED STAY  
PROBABILITY, VOICE  
FN.

**1,052**

CANDIDATES IN  
ATTRITION STUDY

**9+**

CUSTOM ASSESSMENTS  
SINCE 2015

**6,000+**

HEALTHCARE  
PROVIDERS SERVED

## 01 · EXECUTIVE SUMMARY

# From manual hiring to predictive retention.

Medusind Solutions — a leading healthcare BPO serving 6,000+ providers across the US and India — wanted to move away from cumbersome, manual recruitment toward fair, automated, bias-free selection.

Since 2015, PMaps has delivered **9+ customized Job Fit Assessments** across Medusind's roles, scoring candidates on cognitive ability, job skills, and behavioral competencies. PMaps then went further — building a **predictive attrition model** on real tenure data.

The model revealed that Voice-function employees with the right competency profile carry a **striking 89% likelihood of staying** — turning assessment scores into retention foresight.

## AT A GLANCE

<b>Client</b>	Medusind Solutions
<b>Industry</b>	Healthcare BPO
<b>Founded</b>	2001
<b>Workforce</b>	6,000+ providers
<b>Footprint</b>	US & India
<b>Solution</b>	Job Fit Assessments
<b>Partner since</b>	2015
<b>Method</b>	Attrition modeling

## HEADLINE OUTCOMES

### STAY PROBABILITY

# 89%

Predicted retention for right-fit Voice-function hires.

### STUDY SCALE

# 1,052

Candidates analysed, Jan 2022 – Jan 2023.

### ASSESSMENTS

# 9+

Role-tailored assessments delivered since 2015.

### MODEL

# GLM

Logistic regression + decision-tree prediction.

### SELECTION

# Bias-free

Objective scoring replaced subjective screening.

### TEST LENGTH

# 30-40 min

Per role-specific assessment.









At a striking 89%, predictive modeling revealed a substantial likelihood of Voice-function employees remaining with the company.

02 · THE CHALLENGE

# Manual hiring couldn't keep pace – or predict who would last.




Medusind's conventional process – sifting resumes, lengthy offline interviews, manual document handling – was slow, resource-heavy, and prone to subjective bias. Worse, it gave no signal on who would actually stay.

- 
**Manual processes**  
 Rigid ATS/HRMS, heavy manual input
- 
**High attrition**  
 Resources spent on short-tenure hires
- 
**Talent gap**  
 Hard-to-find cognitive + domain skill
- 
**Talent competition**  
 Fierce rivalry for healthcare talent
- 
**Verbal communicators**  
 Clear communication is mission-critical
- 
**Time on wrong candidates**  
 Bias-prone screening raised time-to-hire

THE BRIEF

## Hire objectively. Predict retention.

Medusind needed an objective, virtual, automated way to select the right candidates without prejudice – and a way to understand which traits actually drive whether a hire stays or leaves.

- 
**Fair & unbiased**  
 Objective scoring over subjective opinion.
- 
**Virtual & automated**  
 Accessible, remote, end-to-end.
- 
**Predictive**  
 Competency scores linked to retention.

## 03 · THE SOLUTION

# PMaps Job Fit Assessments, tailored by role.

Medusind collaborated with PMaps to identify the key competencies and cognitive abilities for each role — then deployed 9+ customized, 30–40 minute assessments across its verticals.

ASSESSMENT	BUILT FOR
<ul style="list-style-type: none"> <li>• <b>Medical Coder Assessment</b></li> </ul>	Coding accuracy, domain knowledge & cognition.
<ul style="list-style-type: none"> <li>• <b>Voice Assessment</b></li> </ul>	Communication readiness for the Voice vertical.
<ul style="list-style-type: none"> <li>• <b>Data Assessment</b></li> </ul>	Precision & proficiency for the Data vertical.
<ul style="list-style-type: none"> <li>• <b>Health-Care Assistant Assessment</b></li> </ul>	Role-fit for patient-facing support work.
<ul style="list-style-type: none"> <li>• <b>Medical Analyst Assessment</b></li> </ul>	Analytical & numerical acumen for analysts.

## 04 · WHAT EVERY ASSESSMENT MEASURES

### Cognitive IQ & ability.

Logical reasoning, computer proficiency, numerical ability, attention to detail, and verbal ability.

### Skill On-the-job skill.

Typing speed, listening skills, and domain knowledge relevant to the role.

### Behavioral Workplace traits.

Cordiality, Dutifulness, Emotional Stability, Receptivity, and Sociableness.

### Post-hire HRMS integration.

Secure document upload, automated email workflows, and centralized candidate data — error-free onboarding.

**Beyond testing.** PMaps integrated directly with Medusind's HRMS — replacing manual Google Forms and data entry with automated document submission and a centralized candidate view.

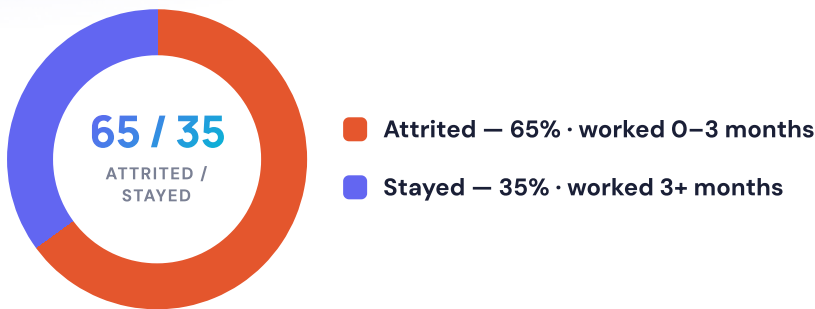
05 · THE ATTRITION ANALYSIS MODEL

# Turning assessment data into a retention model.




Moving beyond descriptive analysis, PMaps categorized employees into two groups to uncover the patterns separating those who left from those who stayed — then built a predictive model on top.

THE DATASET

1,052 candidates · Jan 2022 – Jan 2023.



HOW THE MODEL WORKS

 <p><b>Two-group split</b> Attrited vs. Stayed, to surface patterns.</p>	 <p><b>GLM + logistic regression</b> Two-outcome attrition prediction.</p>	 <p><b>Decision tree</b> Branch-based predictive modeling.</p>
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**Why it matters.** Linking competency scores to actual tenure let Medusind see — before hiring — which profiles were most likely to stay, and which carried attrition risk.

06 · THE FINDINGS

# Which competencies drive staying – and leaving.

Comparing average competency scores between employees who attrited and those who stayed revealed clear, actionable patterns.

### Emotional Stability

#### Stability keeps people.

Low scorers were more likely to attrite (63.7%); high scorers tended to stay (64.2%).

### IQ

#### Higher IQ, longer tenure.

Candidates with higher IQ (54.4%) tended to stay longer in the organization.

### Skill

#### High skill, higher flight risk.

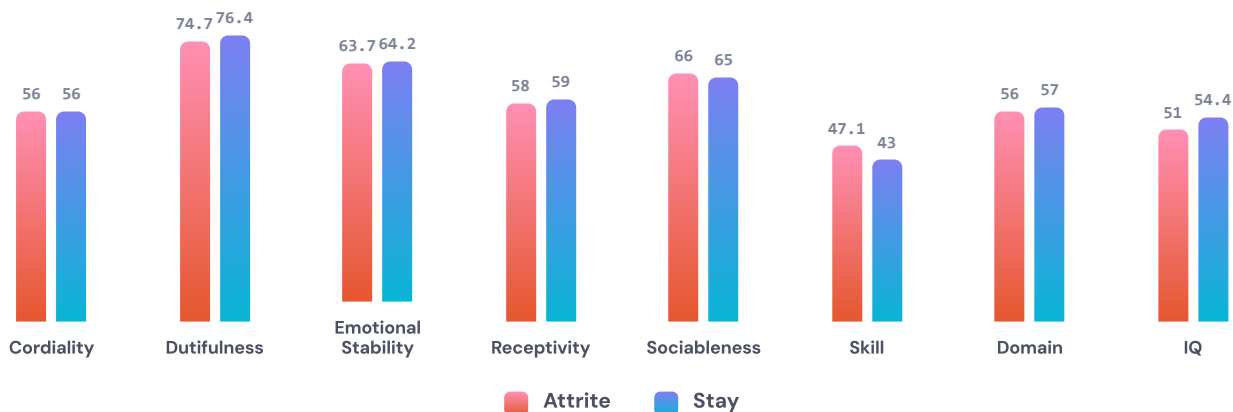
Employees scoring high on the Skills competency (47.1%) were more likely to attrite.

### Dutifulness

#### Consistently high.

Strong across both groups – attrited (74.7%) and stayed (76.4%).

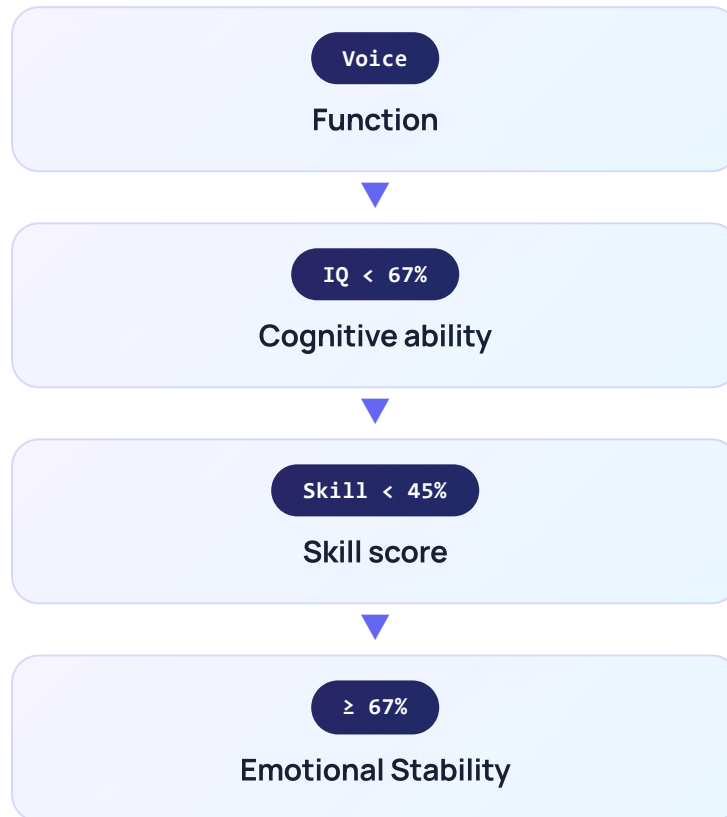
ATTRITION ↔ AVERAGE COMPETENCY SCORES



07 · THE PREDICTIVE RESULT

# An 89% stay-probability profile.

Through predictive modeling, PMaps determined that Voice-function employees fitting a specific competency profile exhibit a significant stay probability of **89%**.



PROBABILITY




**89% stay · 11% attrite.** Voice-function hires with this profile are highly likely to remain with Medusind.

A clear, data-backed target profile for retention-focused hiring.

08 · IN THEIR WORDS

# Medusind credits PMaps for streamlined, tech-driven recruitment.


Hear it directly from Medusind's HR leadership — on filtering candidates effectively and staying on plan with PMaps assessments.

CUSTOMER STORY · VIDEO

## Laxmi Menon

Vice President — HR, Medusind



▶ WATCH THE STORY

“

We have been working with PMaps for nearly a month on our assessment tests, which has helped us filter candidates effectively. We utilize technology as much as possible — it ensures that we stay on track and stick to the plan.

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ON WORKING WITH PMAPS



## THE TAKEAWAY

# Right talent, **objectively,** **since 2015.**

PMaps' assessments let Medusind hire candidates with the traits and skills each role demands — emotional stability, computer proficiency, typing, domain knowledge, and IQ — while attrition modeling minimized subjective bias and revealed who would stay.

[BOOK A DEMO →](#)[START A 7-DAY FREE TRIAL](#)[✉ ssawant@pmaps.in](mailto:ssawant@pmaps.in)[☎ +91 8591320212](tel:+918591320212)[🌐 www.pmapstest.com](http://www.pmapstest.com)**89%**

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