



# On-line Assessment for Graduate Recruitment in UBS

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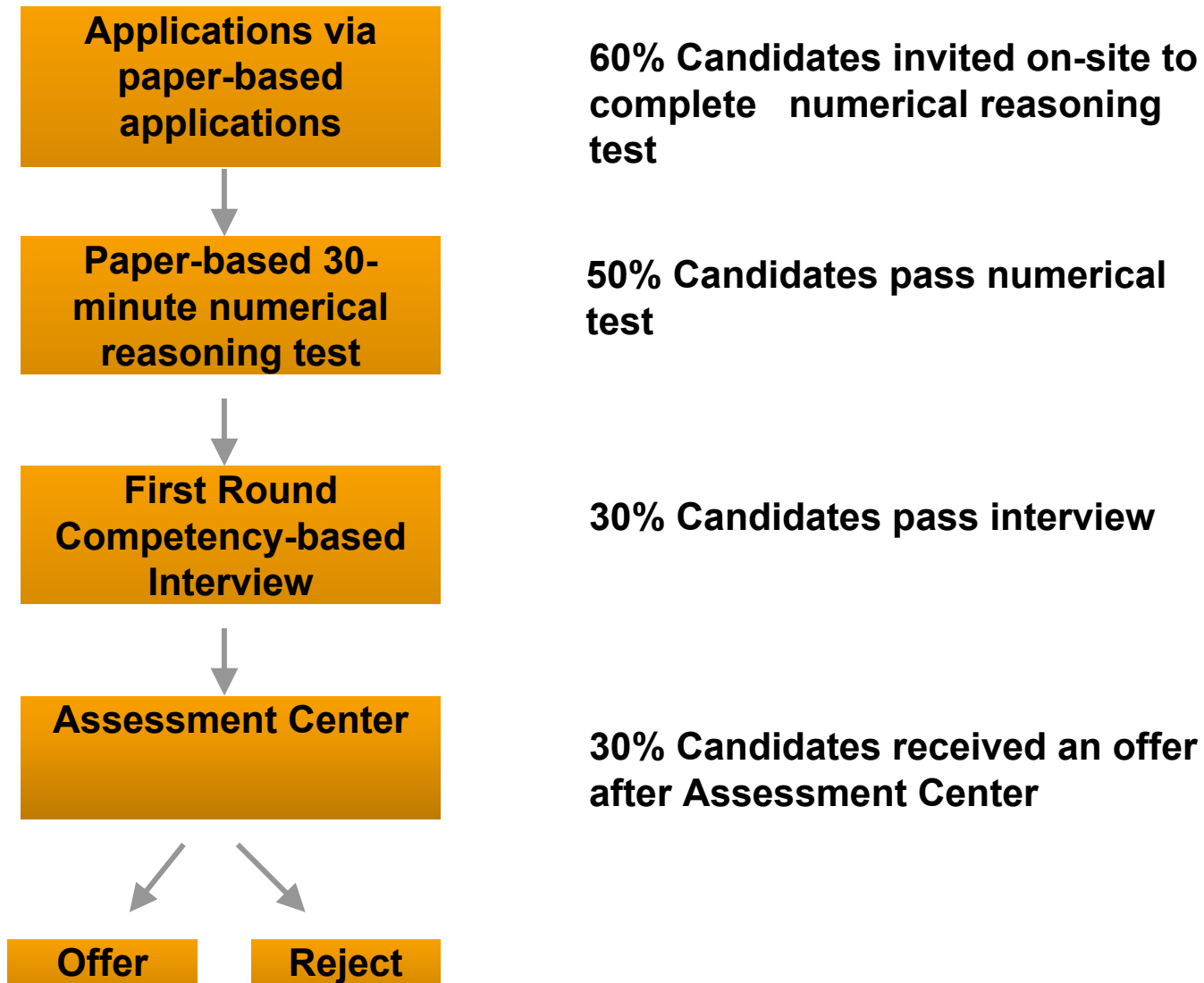


# Overview

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- ◆ Overview of UBS Europe Campus Recruiting Process and the business case for going on-line
- ◆ Composition of the on-line application form and the key benefits of the on-line application process
- ◆ Focusing on the on-line assessment process and validation of the on-line assessment tools
- ◆ Upgrading the on-line application process

# UBS Europe's Campus Recruiting Process 1998



# The Business Case for On-line Application

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- ◆ **Ineffective Sifting** – difficulty in differentiating between applications at stage 1 of the process, resulting in high volume of candidates proceeding to stages 2 and 3
- ◆ **Under-Committed Candidates** – low level of focus on part of the candidate
- ◆ **Practiced Responses** on Numerical Reasoning Test
- ◆ **Limited Reach** – applications limited to candidates who attended events and could pick up application forms
- ◆ **Inaccurate Data** – due to illegible handwriting or human error in translating data from paper to electronic format
- ◆ **Lack of Candidate Differentiation** – resume format and content standardization made it difficult to gauge which candidates would “fit” with UBS core competencies
- ◆ **High Costs** – due to paper-based resume processing and large volume of candidates for numerical testing and assessment centers

**A slow, highly administrative, and low satisfaction process resulting in an application-to-offer time frame of between 8 and 16 weeks and a time to fill of all positions of 6 months on average**

# Making the Changes

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**UNDERCOMMITTED  
CANDIDATES**

```
graph TD; A([UNDERCOMMITTED CANDIDATES]) --> B[Implementation of an on-line application comprising personal profile information, numerical reasoning test, and competency-based questions that requires 30-90 minutes to complete]; B --> C[The time commitment and rigor of the on-line application deters non-committed candidates from applying, ensuring UBS receives applications from candidates specifically interested in UBS opportunities];
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**LACK OF CANDIDATE  
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graph TD; A([LACK OF CANDIDATE DIFFERENTIATION]) --> B[On-line application requires candidates to answer a series of open-ended competency based questions that relate to past experiences]; B --> C[Gives Recruiters the ability to use candidates' responses to enhance the information already captured in the candidates' resumes, enabling them to better assess their potential fit at UBS];
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# Making the Changes

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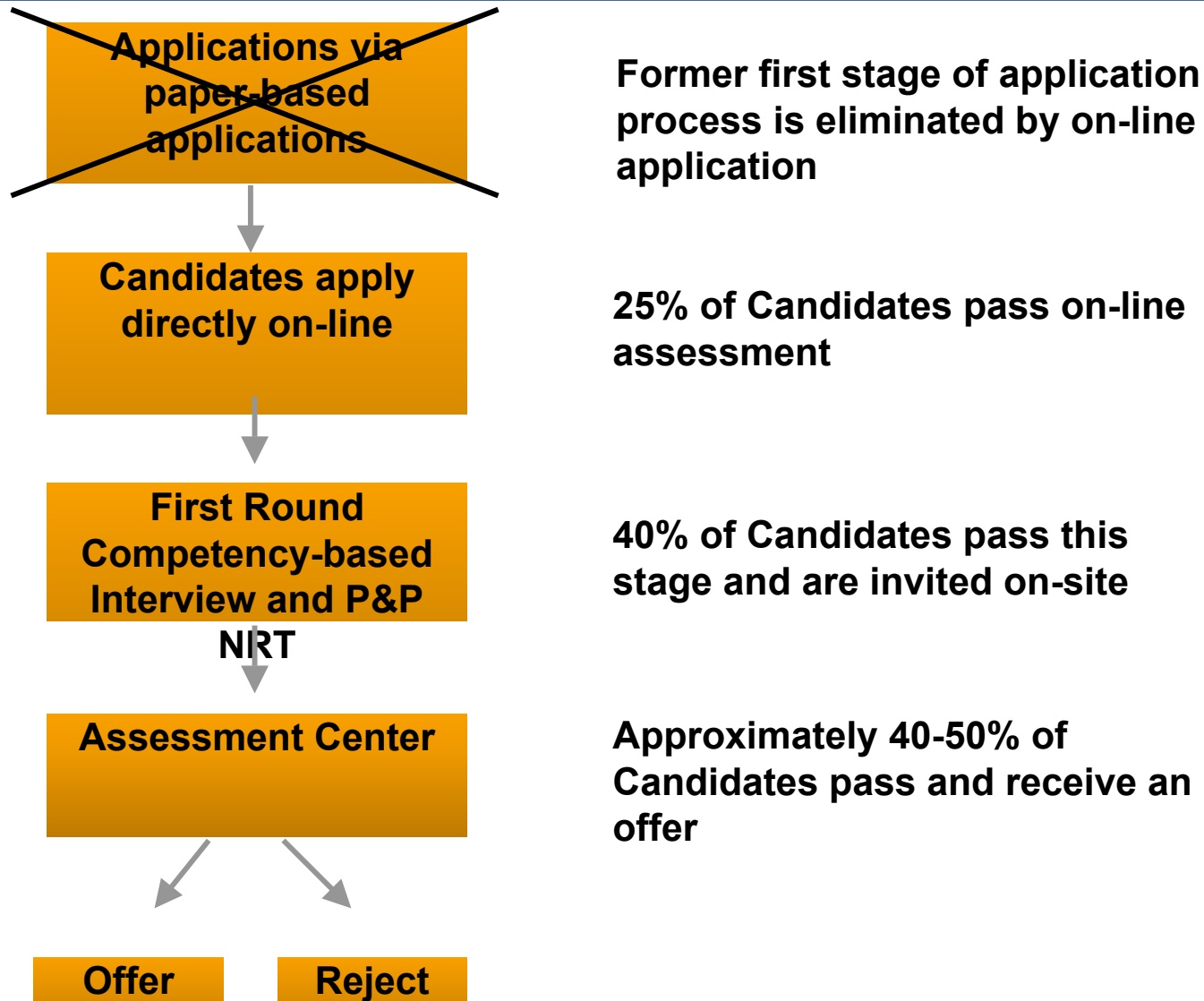
**INACCURATE DATA**

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graph TD; A([INACCURATE DATA]) --> B[All candidate data is received via a single Web-based channel]; B --> C[Web-based application data enables UBS to complete timely and accurate data collection, processing, and storage. Also enable candidates to update their application information in real time];
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**All candidate data is received via a single Web-based channel**

**Web-based application data enables UBS to complete timely and accurate data collection, processing, and storage. Also enable candidates to update their application information in real time**

# UBS Europe's Campus Recruiting Process 2001



# UBS Campus Recruiting On-line Application

The screenshot shows a Netscape browser window with the following elements:

- Browser Title Bar:** UBS Warburg - graduate careers home page - Netscape
- Address Bar:** Location: http://165.193.155.124/career/e/html/warburg/index.shtml
- Navigation Bar:** Back, Forward, Reload, Home, Search, Netscape, Print, Security, Stop, Netscape
- Page Header:** UBS Warburg logo, navigation links: UBS home | UBS Warburg home | Glossary | Sitemap | Search | Contact us
- Secondary Navigation:** UBS Graduate Careers | UBS Private & Corporate Clients | UBS Private Banking | **UBS Warburg** | UBS Asset Management | UBS Corporate Center
- Main Content Area:**
  - Left sidebar: mba, graduate, intern buttons; UBS Warburg worldwide text.
  - Center: Large banner with a woman's face and the word "unlimited".
  - Section: "UBS Warburg graduate careers" with a sub-section "application deadlines" (indicated by a callout box).
  - Text: "To us, the key to achieving growth and change is recruiting the right people into the right culture and giving them every opportunity to succeed."
  - Text: "To find out how you and UBS Warburg might fit together, please select either [MBA](#) (for MBAs who are seeking an Associate full-time or Internship position), [Graduate](#) (for graduates / undergraduates who wish to apply for a full-time position) or [Intern](#) (for penultimate year students who wish to apply for an internship)."
  - Text: "For careers in our US Private Clients organization, visit our [UBS PaineWebber](#) website."
  - Text: "Important legal & regulatory information - please read the [disclaimer](#)." and copyright notice.

Application form accessible from all pages in the website

# UBS Campus Recruiting On-line Application

**UBS Online Application Menu - Netscape**

File Edit View Go Communicator Help

Back Forward Reload Home Search Netscape Print Security Stop Netscape

Bookmarks Location: <http://ubs.v35.projects.shl-isp.com/Default.ASP?WCI=Grind>

What's New The Compass First Intranet Tel. Directory RealPlayer

**UBS** | [Help](#) | [Exit](#)

## Online Application Menu

FOR SDSS SDFDSF

Application Stage: Pending Completion  
Pending Events: No Events

**Key**  = not started  = in progress  = completed editable  = completed locked  = inactive

Europe (excluding Switzerland) [Application Deadlines](#)

### CAREER CHOICES

[Business Area Preferences](#)

### PERSONAL INFORMATION

[Contact Information](#)  
 [Education](#)  
 [Skills](#)  
 [Work Experience](#)  
 [Open Ended Questions](#)

### YOUR COMPETENCY PROFILE

[Competency Based Questions](#)

Your Online Application Menu tracks your progress through the completion of the application process. The Online Application Menu also indicates your application status and pending events. You will return to this page at the end of each section or whenever you click "EXIT" at the top of the section pages. To begin the first section

**Status**

**Specific Personal Information**

Drag this location to Bookmarks, to Composer (to make link), to Desktop...

Start Inbo... Palm... IC Doc... RE: ... Expl... Micr... Appli... Plan ... RE: ... traini... UB...

11:32

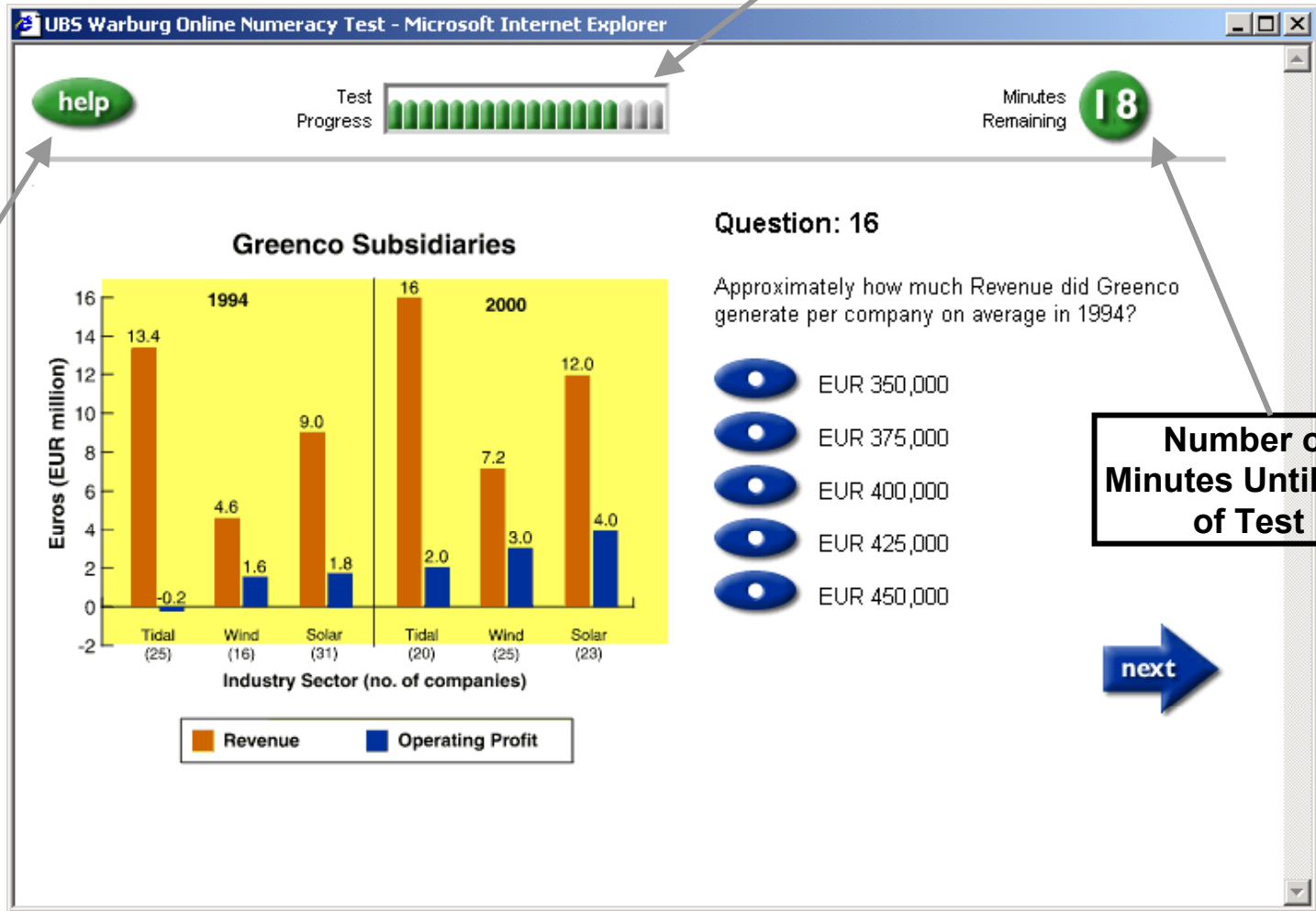
# Focusing on the on-line assessment tools

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- ◆ Numerical Reasoning Test
  - 18 item, 18-minute timed test
  - Quasi-random generation of test from a large item bank
  - Each candidate receives a unique test instance
  - Item bank is equated using Item Response Theory (IRT)
  - Administered via a JAVA applet transferred directly to the local PC
  - Test taking is unaffected by disruption to the internet connection
  - Candidate responses are encrypted and returned to the server for scoring and reporting
  
- ◆ Open-ended Competency Based Questions
  - Three open-ended questions based on UBS Competency Model
  - Require candidates to provide examples of when they have demonstrated the required skills and behaviours
  - Responses to the questions are reviewed and evaluated by recruiters using behavioural indicators

# On-line Numerical Reasoning Test

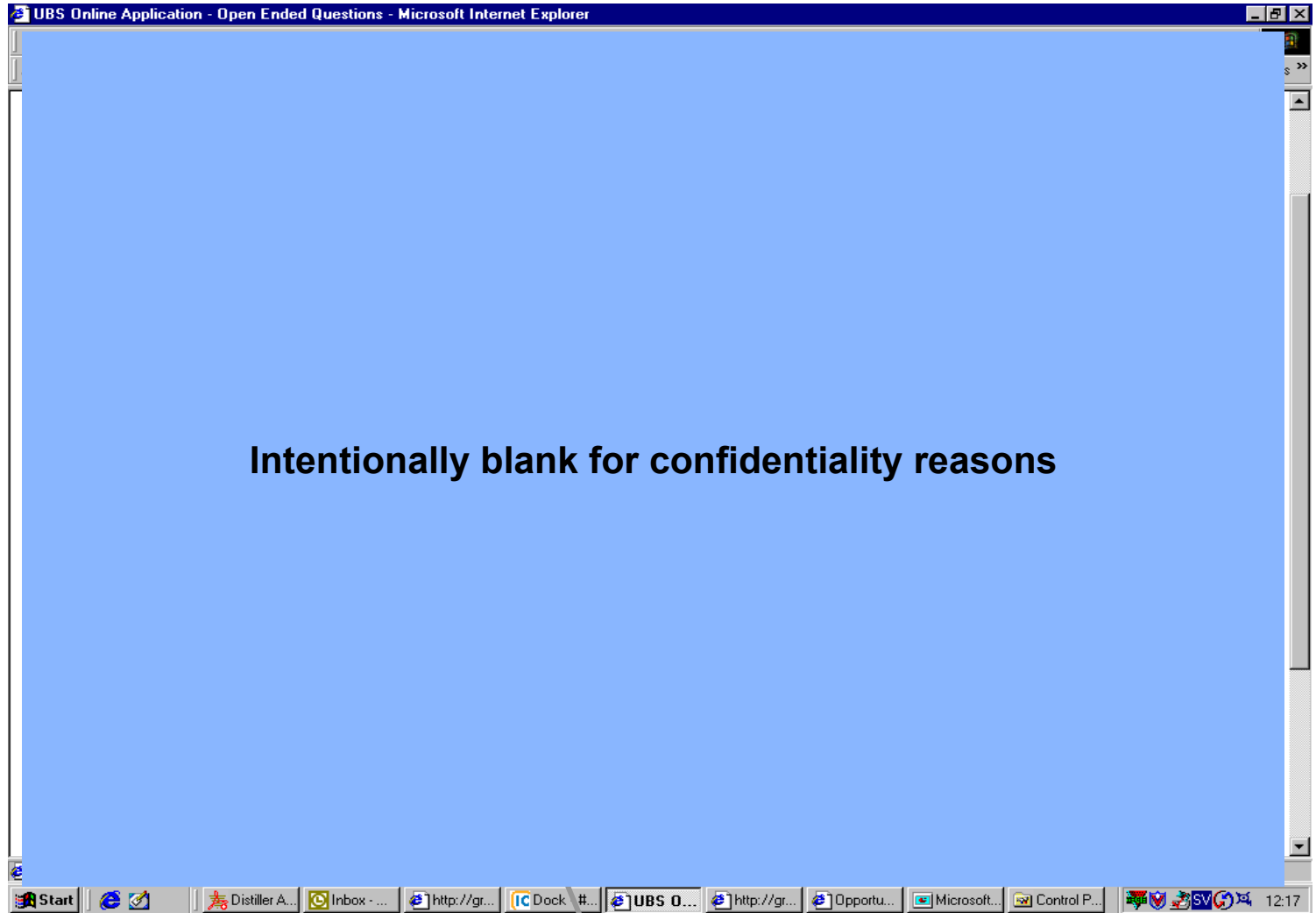
Progress Through Test



Reminder of Test Instructions

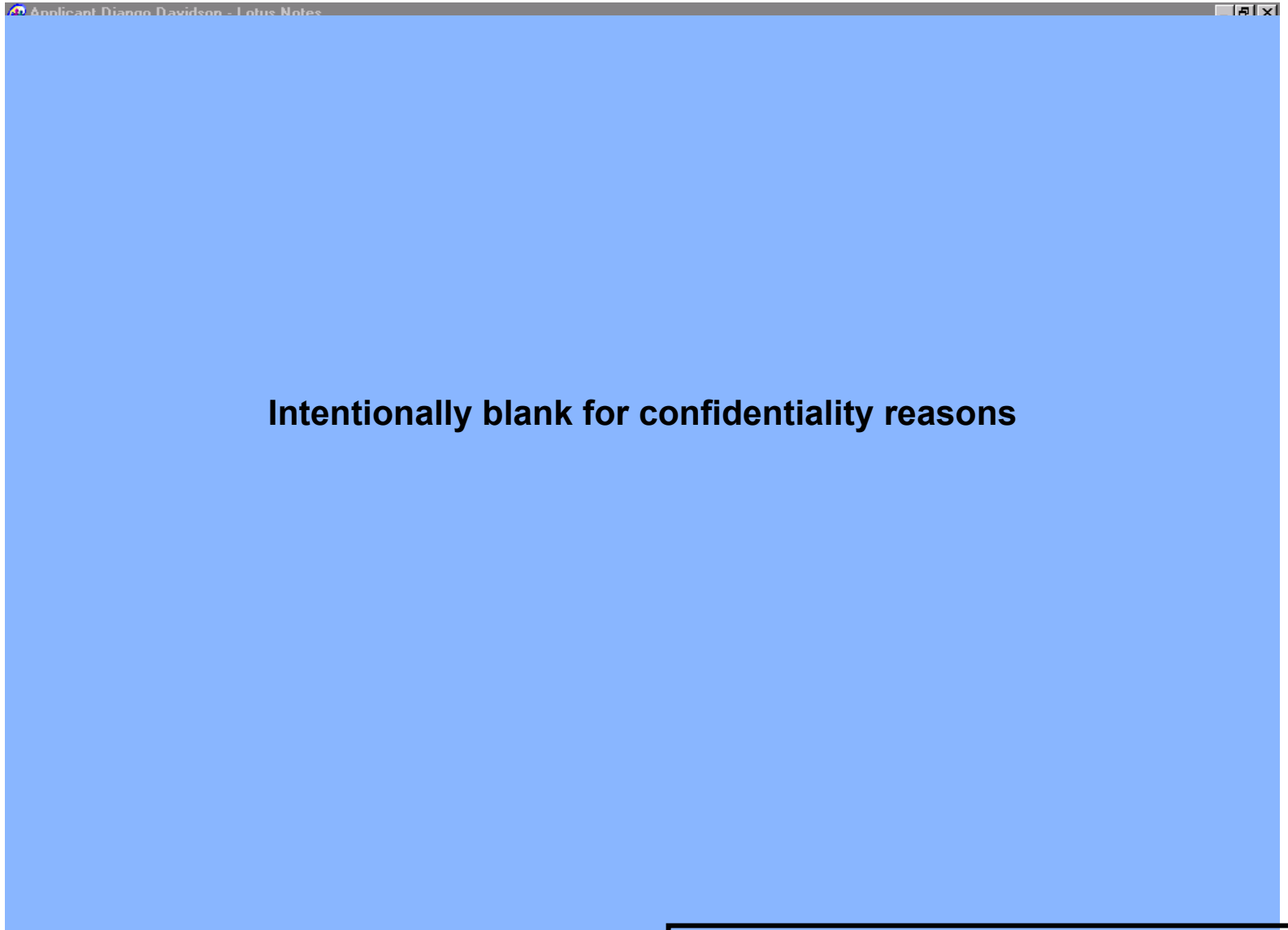
Number of Minutes Until End of Test

# Open-Ended Competency Based Questions



**Open-ended questions tap into  
UBS Competency Model**

# Scoring the Open-Ended Questions



**Intentionally blank for confidentiality reasons**

# Graduate Assessment Center Matrix

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**Intentionally blank for confidentiality reasons**

Assessment Center

# How the Market Responded

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## **What the students do like:**


- ◆ Immediate confirmation that application has been received by recruiters
- ◆ Ability to take numerical reasoning test up-front as they know it is a pre-screening criteria across the industry - anything that reduces time otherwise spent in the offices is seen as a good thing at the early stages of the process
- ◆ Intuitive and user friendly navigation
- ◆ Ability to monitor status of application
- ◆ Increased efficiency of follow-up process
- ◆ Ability to print and save application during completion

## **.....and what the students don't like**

- ◆ Some find the application form too long
- ◆ Many experienced technical problems
- ◆ Students in continental Europe prefer to attach degree certificates and photographs to their application which is not possible
- ◆ Fear that the computer will screen their application rather than a real person

# How the Business responded

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No decrease in applications  Increase in quality of applications

- ◆ Found the applications to have an increased focus
- ◆ Liked the fact that students met on campus could progress through to interview stage faster by eliminating the old 'stage two' of the numerical reasoning test
- ◆ Increased diversity of applications - recruiting on-line has allowed UBS to run recruiting campaigns in South Africa and the IIM and IITs without having a physical recruiting presence in those markets

# Benefits for the Recruiters

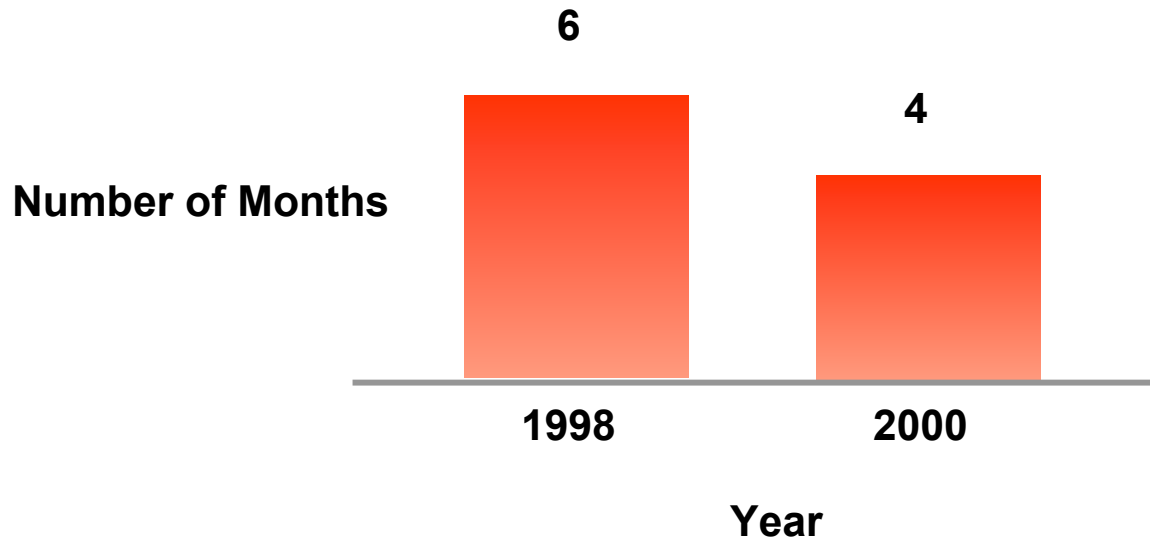
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## **Increased screening efficiency and automation of administrative processes**

- ◆ No manual inputting of Resumes
- ◆ Automatic acknowledgement of receipt to candidate
- ◆ Email and letter correspondence at each stage of the process to reject candidates or to confirm interview status and details
- ◆ Automatic event log to track correspondence with candidates
- ◆ Fewer telephone enquiries due to on-line status check facility for applicants
- ◆ Individual or bulk communications to candidates
- ◆ Statistical reporting

# Considering Key Improvements - Time

**On-line application process has reduced time-to-fill by 33%**



# Considering Key Improvements - Quality

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**On-line application process has positively influenced the quality of candidates**

## **RECRUITERS**

- Open-ended questions allow better differentiation
- Random generation of test items means that candidates are no longer “practised” at the numerical reasoning test

## **HIRING MANAGERS**

- Feel that candidates arriving “on-site” are of noticeably higher quality
- Answers to the open-ended questions facilitate managers “rounding out” of the picture in face-to-face interviews

# Considering Key Improvements - Costs

**On-line application process has decreased candidate travel costs by approximately £525,000/ year**

	Average no applications per year	% Candidates invited "on site"	Average cost of travel (£)	Total cost/ year (£)
Pre on-line Application	10,000	60%	£150	<b>£900,000</b>
Post on-line Application	10,000	25%	£150	<b>£375,000</b>

# Validating the Use of Numerical Reasoning Tests

## ◆ Training Results

- May 2001 study of 250 graduates found a strong relationship between **Numerical Reasoning Test (NRT)** scores and the **Graduate Training Programme** exam scores

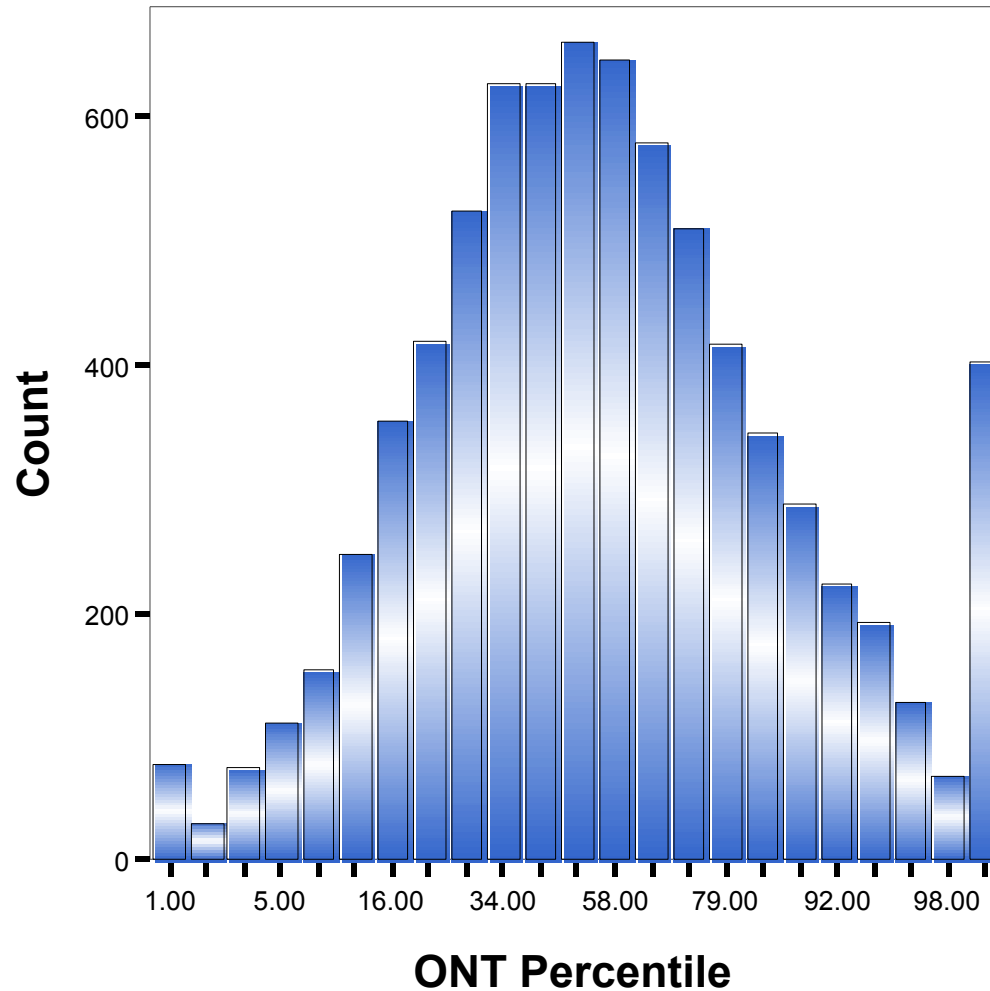
## ◆ Job Performance Data

- Follow-up study found a strong relationship between NRT and **manager's evaluations of overall job performance** ( $r=0.3^*$ )

## ◆ Assessment Center Data

- NRT is highly predictive of **Problem Solving** ( $r=0.35^*$ ) and **Leveraging Resources** ( $r=0.40^{**}$ )
- NRT shows a significant positive relationship with the **overall results** achieved in the assessment center ( $r=0.30^*$ )

# The “On-line Effect”

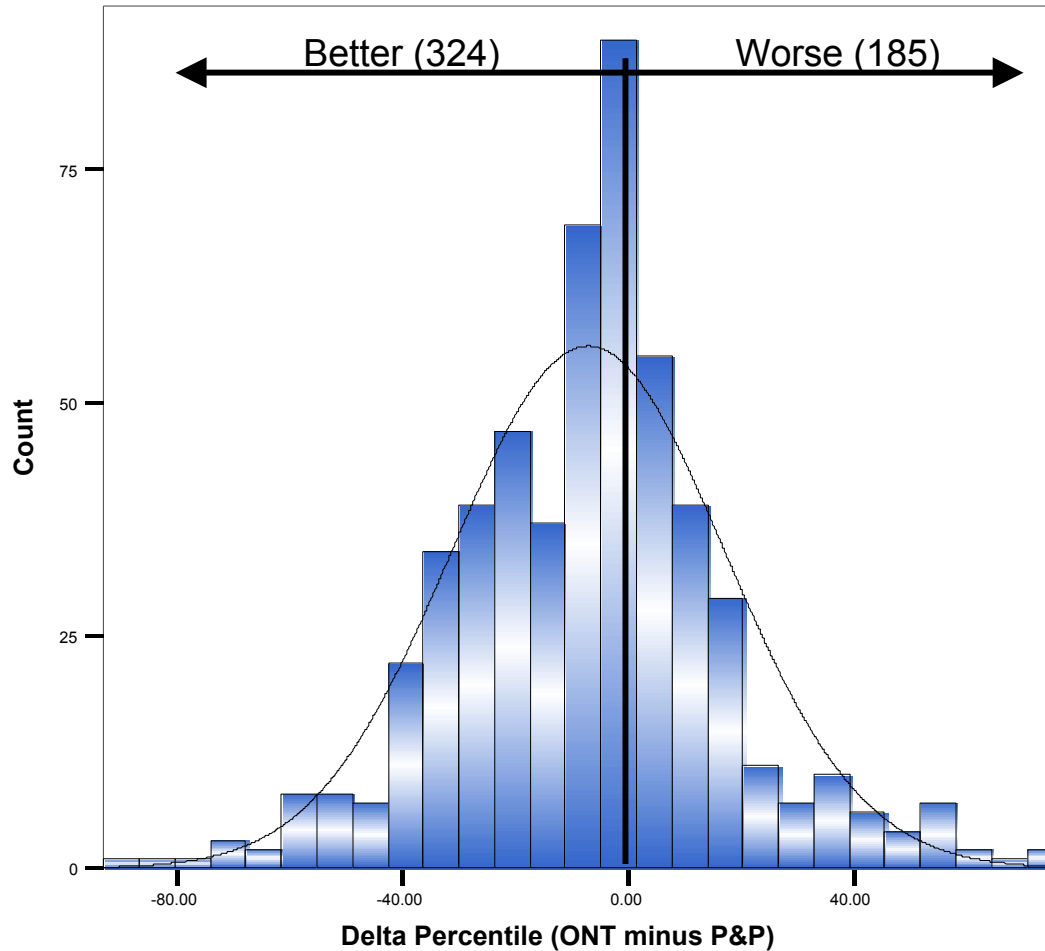


The performance distribution of the on-line test indicates that there is an “online” effect.

On the one hand there are a number of applicants performing very well on the test, but there is also a possibility that some of this group are making use of all available resources (e.g. peers, practice tests, trials).

This effect can not be found in the P&P test.

# Relationship Between ONT and P&P Test

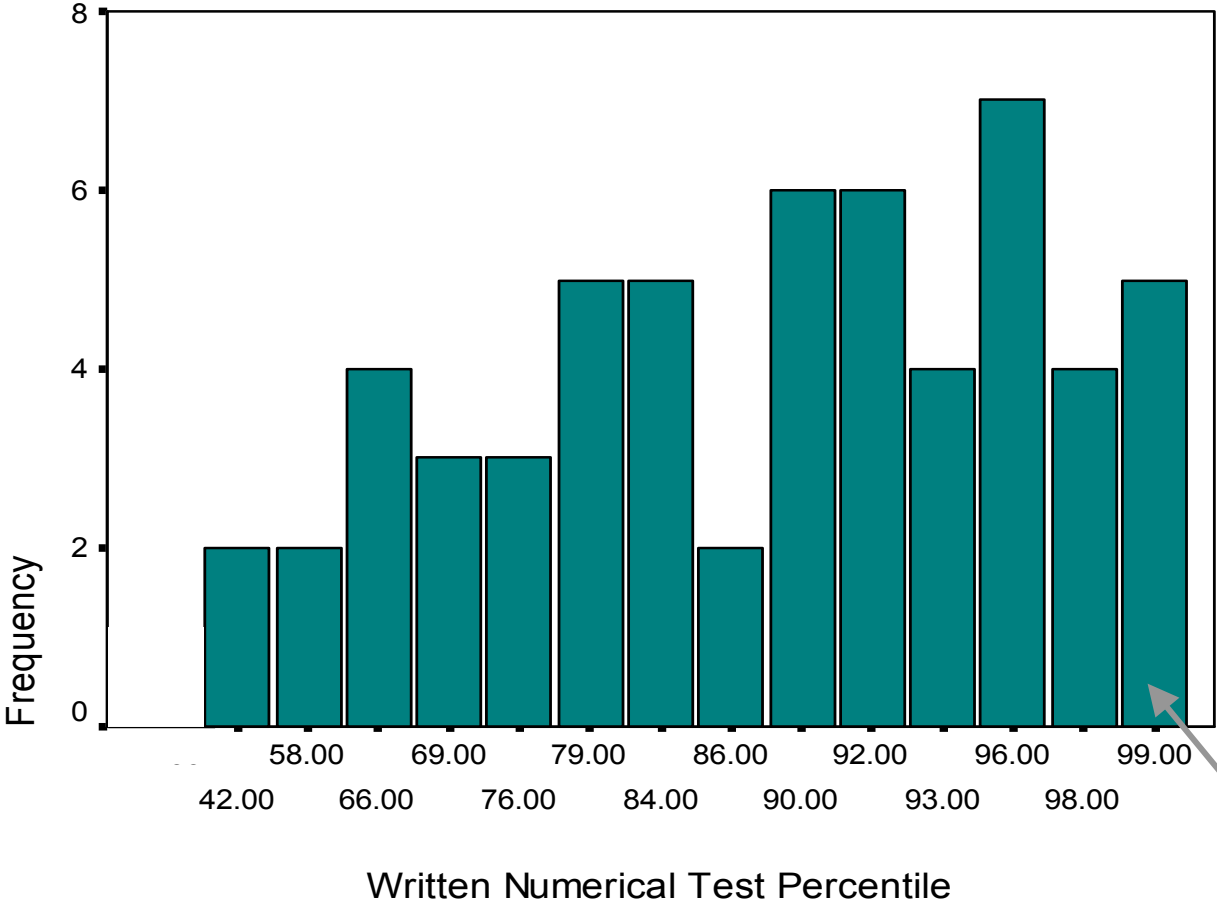


**The correlation between the two tests is 0.45\***

Candidates who perform well on the On-line test (ONT) generally tend to perform well on the Paper and Pencil (P&P) version.

\*Uncorrected for restricted range.  
Corrected: 0.60

# P&P NRT Score for Successful Candidates



**Only 5 candidates from the top scoring 99%ile were offered positions**

# Summary

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- ◆ The UBS Campus Recruiting on-line application process has resulted in key improvements in terms of time, quality, and cost.
- ◆ Use of the numerical reasoning test has been validated in terms of its relationship with “ready for work” training results, assessment center performance, and overall job performance evaluation.
- ◆ A strong relationship exists between the on-line numerical test and the paper-and pencil test, although the “on-line effect” confirms the need to implement follow-up assessments to validate on-line assessment results.
- ◆ While the numerical reasoning test is a key component in the UBS assessment process, other skills and behaviours measured through various simulation exercises form an important part of the overall decision-making process.

# Upgrading the On-line Application Process

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- ◆ Global roll-out of on-line application process to US, APAC, and CH
- ◆ Additional on-line numerical test languages (Japanese, French, Italian)
- ◆ Increased availability of numerical reasoning test
  - Java Applet technology is not accessible by all campuses in Europe
- ◆ Increased Recruiter Functionality
  - CV extraction tool (essential for US region)
  - Search functionality against skills and experience
  - Interview, superday, and assessment scheduling tool
- ◆ Upgrade on statistical reporting functionality
  - Capturing equal opportunities data
  - Integration with internal IT platforms to enable more efficient data analysis