

# REMOTE PROCTORING

## THE FUTURE OF INVIGILATION FOR E-ASSESSMENTS?

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## OVERVIEW

- What is remote proctoring?
- A case study – TSA
- Benefits and Issues
- Questions

# What is remote proctoring?



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## Remote proctoring

A service that emulates the role of an on-site **proctor** or invigilator – confirming the identity of the test-taker and safeguarding the integrity of the exam or assessment

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## Lots of providers..

proctoru

question  
mark

janison  
insights

Surpass   
*Powering Assessment*

 PROCTOREXAM

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 SUMADI™  
AI-POWERED PROCTORING

 MERCER  
 mettl

 Speedwell

## Types of Remote Proctoring

Verification of identity

Auto monitored or AI based proctoring

Live human proctoring

**Features**

Record

Review

Live intervention

# Remote Proctoring for Admissions Tests – a case study



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## Admissions Testing – some background

Cambridge Assessment Admissions Testing creates and delivers high-stakes admissions tests for a range of institutions, including Oxford, Cambridge and other Russell Group universities in the UK, as well as a range of institutions internationally.

Mainly focused on entry into undergraduate HE, on to a range of courses such as Medicine, Engineering, Mathematics, Science, and Economics.

Recent experience of RP with our Thinking Skills Assessment (TSA)



# TSA

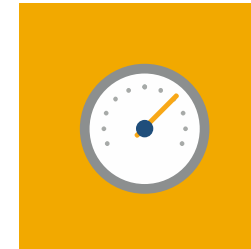


# Ashoka: Flexible delivery - remote proctoring

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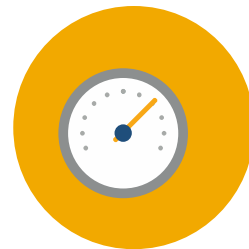
‘Being a leading liberal arts university, and following a holistic admissions process, we seek to evaluate and identify high-potential candidates with critical-thinking skills and problem-solving abilities.’



**Computer-based Thinking Skills Assessment (TSA)**



**2800 candidates from 26 countries**



**1091 candidates have sat the test using Mercer Mettl remote invigilation**





### Auto Proctoring (AI flags)



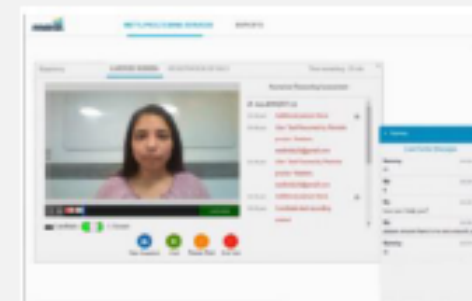
- Facial recognition
- Device detection
- Body detection

### Record & Review Proctoring (AI flags)



- Validate the AI flags
- Understand the severity of each flag
- Weed out any suspicious cases

### Live Proctoring (AI flags + Human Proctors)



- Pause the test
- Chat with the candidate
- End the test

### Authentication



- Enter registration details (fields are customizable)
- Click picture of yourself
- Click picture of ID proof
- 24\*7 support to verify candidates

### Secure Browser



- No Background Software Works
- No Screen Recording
- No Screen Sharing
- Allow Relevant Software
- Allow Formula Books

# 95% ACCURACY IN PREDICTING CHEATING

## HOW OUR AI-BASED BOT WORKS?



### Violations



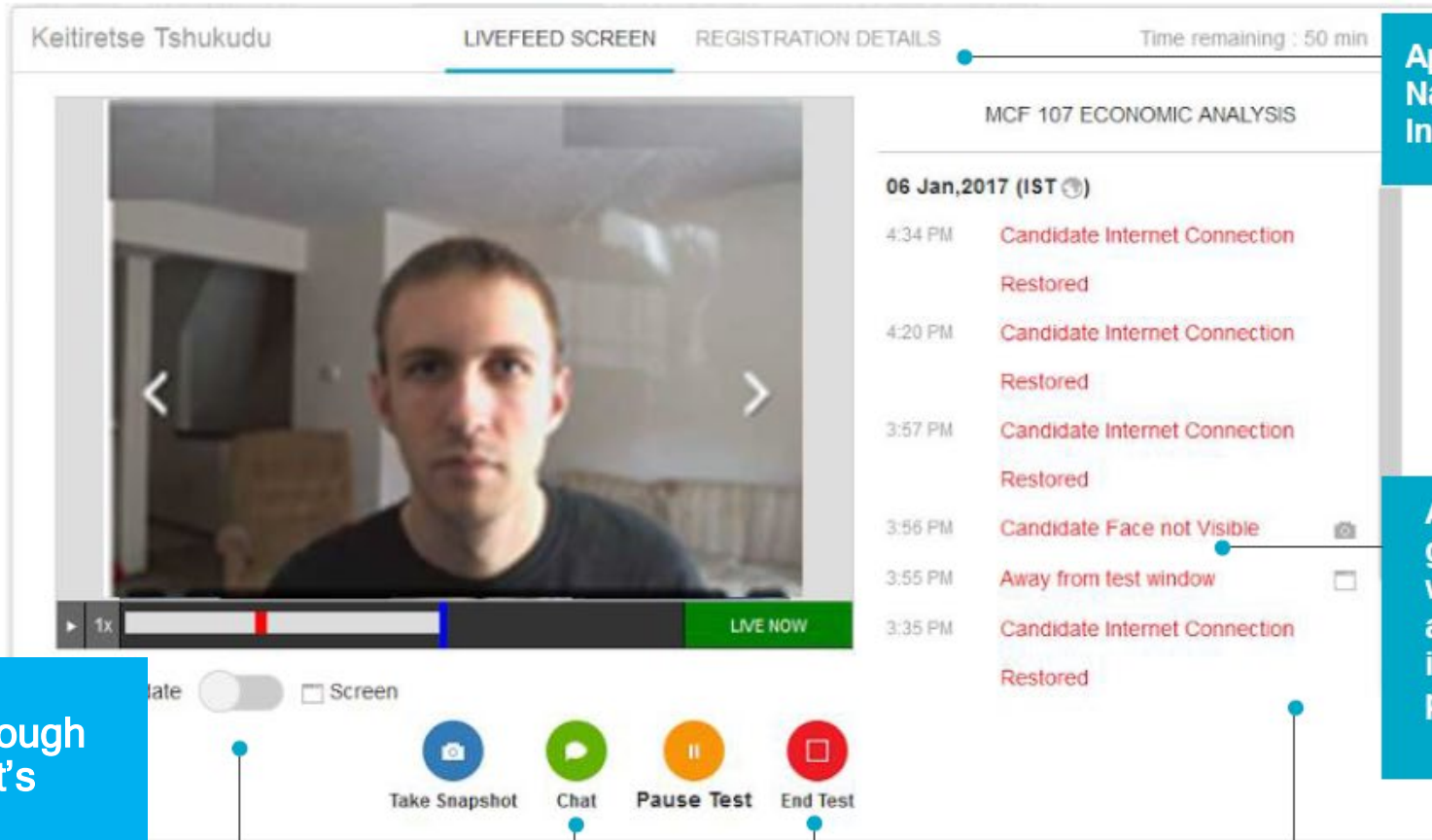
### Credibility Index



### Proctoring Report



# WEB CAM PROCTORING: PROCTOR VIEW AND CONTROLS (2/2)



The screenshot displays the proctoring interface for a candidate named Keitiretse Tshukudu. The interface is divided into two main sections: a live video feed on the left and a log of events on the right. The video feed shows a candidate in a room, with a 'LIVE NOW' button at the bottom right. Below the video feed are control buttons: 'Take Snapshot', 'Chat', 'Pause Test', and 'End Test'. The log of events on the right shows a list of timestamps and messages, such as 'Candidate Internet Connection Restored' and 'Candidate Face not Visible'. The interface also includes a 'LIVEFEED SCREEN' and 'REGISTRATION DETAILS' tab, and a 'Time remaining : 50 min' indicator.

Applicants Details:  
Name, Location, Contact  
Information etc.

Automatically  
generated invigilation  
warnings based on  
applicant behavior,  
image and audio  
processing

Admin can  
playback through  
the applicant's  
recording

Toggle to see applicant's  
screen as well.

Chat with applicant

End test  
immediately

Audit trail with  
current state

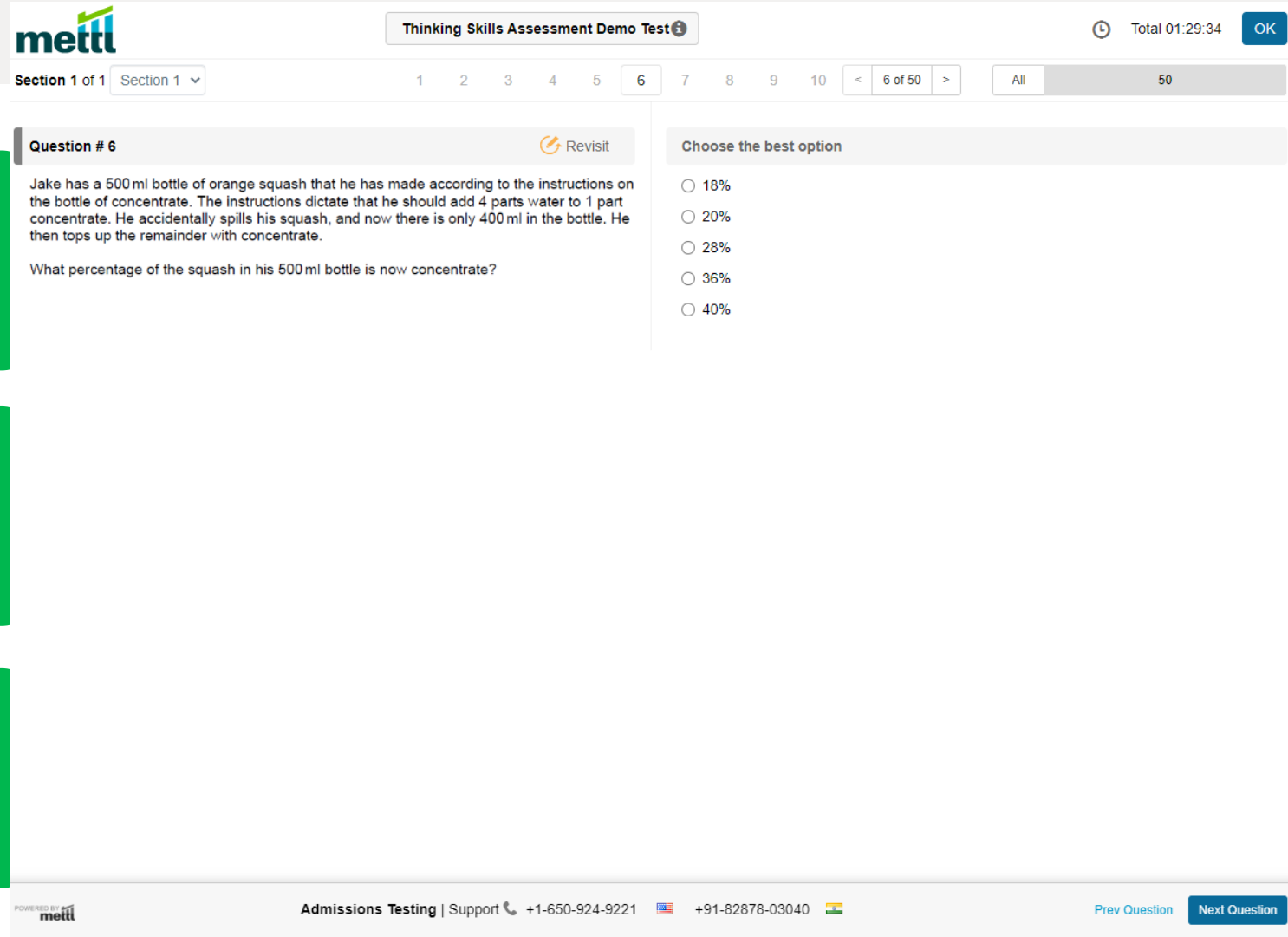
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# Remote Proctoring – May 2020

1600 Thinking Skills Assessments

Petronas Scholarship Programme

School of Economics Stockholm  
University



The screenshot shows a web-based assessment interface for 'Thinking Skills Assessment Demo Test'. The mettl logo is in the top left. The title 'Thinking Skills Assessment Demo Test' is in the top right, along with a clock icon and 'Total 01:29:34' and an 'OK' button. Below the title is a progress bar showing 'Section 1 of 1' and 'Section 1' with a dropdown arrow. A navigation bar contains numbers 1 through 10, with '6' highlighted, and '< 6 of 50 >' and 'All 50' buttons. The main content area is titled 'Question # 6' with a 'Revisit' button. The question text reads: 'Jake has a 500 ml bottle of orange squash that he has made according to the instructions on the bottle of concentrate. The instructions dictate that he should add 4 parts water to 1 part concentrate. He accidentally spills his squash, and now there is only 400 ml in the bottle. He then tops up the remainder with concentrate. What percentage of the squash in his 500 ml bottle is now concentrate?'. To the right of the question is a section titled 'Choose the best option' with five radio button choices: 18%, 20%, 28%, 36%, and 40%. At the bottom, there is a footer with 'POWERED BY mettl', 'Admissions Testing | Support +1-650-924-9221 +91-82878-03040', and 'Prev Question Next Question' buttons.



# Benefits and issues to consider

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## Benefits

- Access – especially for contexts where travelling to an examination centre is a barrier to application
- Logistics – removes headache of setting up and running large examination centres
- Flexibility – has allowed for an agile response to current pandemic
- Security – efficient way of verifying candidate identity; more secure examination delivery; allows for closer scrutiny of individuals as required



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## Issues to consider

- Access – presents issues for candidates with poor Wi-Fi coverage or computer facilities
- Technical failures – outages, systems failures etc.
- Affective factors – some candidates may find remote proctoring adds to the stress of taking an assessment
- Privacy/data collection concerns

# Questions?

