The DNB experience – identifying graduate potential
From DNB: Siri Langangen

- Head of HR Corporate Trainees
- Master in Business and Economics
- Leading the DNB assessment center team

Background
- Trends
- The ideal trainee
- Screening
- Assessment centre
- Validity
- Evaluation
- The next step

www.cut-e.com
From cut-e: Espen Skorstad

**Background**
- Trends
- The ideal trainee
- Screening
- Assessment centre
- Validity
- Evaluation
- The next step

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>MD cut-e Norway</td>
<td></td>
</tr>
<tr>
<td>Specialist in work and organizational psychology</td>
<td></td>
</tr>
<tr>
<td>Member of cut-e’s assessor team in DNB</td>
<td></td>
</tr>
</tbody>
</table>
Today’s agenda

- DNB and the trainee programme
- Trends within talent recruitment
- How does an ideal trainee look like?
- Screening
- Assessment centre (AC)
- Logistics: What happens during the day?
- Evaluation of the screening process
- Evaluation of the AC
- AC DNB in the future and key points
Why does DNB have a Corporate Trainee Programme?

Attract young, talented employees

Background
Trends
The ideal trainee
Screening
Assessment centre
Validity
Evaluation
The next step
About the programme: What do we offer?

- 2 year programme
- Relevant job in DNB after the programme
- Unique learning opportunity
- Structured training programme
- Stays in 5 different departments
- Extensive experience and network in the group
- Own mentor with a leading position

Background
Trends
The ideal trainee
Screening
Assessment centre
Validity
Evaluation
The next step
What does an ideal trainee look like?

Background
Trends
The ideal trainee
Screening
Assessment centre
Validity
Evaluation
The next step
### Screening #1: EasyCruit

#### Background

#### Trends

#### The ideal trainee

#### Screening

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you completed a master’s degree (by August 2012)?</td>
<td>Yes</td>
</tr>
<tr>
<td>Have you achieved grades above average?</td>
<td>Yes</td>
</tr>
<tr>
<td>Do you have more than 1 year of work experience after completing your studies?</td>
<td>No</td>
</tr>
<tr>
<td>Have you participated in any student organizations or volunteer work whilst studying?</td>
<td>Yes</td>
</tr>
</tbody>
</table>
In fiscal year 7, the highest expense costs for Euro-Bank were personnel expenses followed by EDP expenses.
What is an assessment centre?

- Multiple candidates
- Multiple methods
- Multiple assessors
- Data integration

Source: British Psych. Society
What do we measure?

- Effective communication
- Constructive teamwork
- Influence
- Initiative and responsibility
- Analysis and judgment
- Business development
Time table: 08.00-14.00

**Background**
- Trends
- The ideal trainee

**Screening**

**Assessment centre**

**Validity**

**Evaluation**

**The next step**

---

**CANDIDATE 1-6**

- **08:00-08:30**
  - registration and ‘photo shoot’

- **08:30-08:55**
  - welcome and information about the AC

- **09:00-10:15**
  - group exercise

- **10:15-10:45**
  - meeting with DNB trainees

- **10:45-11:05**
  - break

- **11:05-12:05**
  - retest

- **12:05-13:20**
  - lunch

- **12:50-14:05**
  - lunch

**CANDIDATE 7-12**

- **08:00-08:30**
  - registration and ‘photo shoot’

- **08:30-08:55**
  - welcome and information about the AC

- **09:00-10:45**
  - analysis and presentation exercise

- **11:05-12:50**
  - interview
Time table: 14.00-17.30

- Background
- Trends
- The ideal trainee
- Screening
- Assessment centre
- Validity
- Evaluation
- The next step

- 13:20-15:05: interview
- 14:05-15:05: retest
- 15:05-15:15: break
- 15:15-17:00: analysis and presentation exercise
- 15:15-16:30: group exercise
- 16:30-17:00: meeting with DNB trainees
- 17:00-17:25: closing plenary
# Competency matrix

<table>
<thead>
<tr>
<th>Ability tests</th>
<th>Personality test</th>
<th>Presentation exercise</th>
<th>Group exercise</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initiative &amp; Responsibility</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis &amp; Judgment</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructive teamwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Types of psychometric assessment used by country

<table>
<thead>
<tr>
<th>Assessment Type</th>
<th>Czech</th>
<th>Norway</th>
<th>Romania</th>
<th>Spain</th>
<th>Sweden</th>
<th>UK/Ireland</th>
<th>DACH</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality questionnaires</td>
<td>25%</td>
<td>38%</td>
<td>26%</td>
<td>33%</td>
<td>33%</td>
<td>33%</td>
<td>28%</td>
<td>25%</td>
</tr>
<tr>
<td>Individual assessment</td>
<td>35%</td>
<td>45%</td>
<td>37%</td>
<td>32%</td>
<td>36%</td>
<td>36%</td>
<td>37%</td>
<td>35%</td>
</tr>
<tr>
<td>Competency-based interviews</td>
<td>28%</td>
<td>42%</td>
<td>43%</td>
<td>47%</td>
<td>42%</td>
<td>42%</td>
<td>45%</td>
<td>41%</td>
</tr>
<tr>
<td>Ability test</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
<td>28%</td>
</tr>
<tr>
<td>Assessment centres</td>
<td>23%</td>
<td>30%</td>
<td>22%</td>
<td>25%</td>
<td>22%</td>
<td>22%</td>
<td>24%</td>
<td>20%</td>
</tr>
<tr>
<td>360 degree feedback</td>
<td>10%</td>
<td>20%</td>
<td>18%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**Kilde:** cut-e Assessment Barometer, April 2011
Predictive validity

OAR = Overall Assessment Rating

- OAR identifies leaders who are promoted more often; correlation with performance between .27 and .64
  - Byham (1970)
- Correlation with performance .33, with potential .63, and with promotion .40
  - Cohen et. al., (1974)
- Estimated correlation between OAR and job performance .43
- Estimated correlation with a large number of criteria .40
  - Schmitt et. al., (1985)
- Meta-analysis found an estimated validity of .31

www.cut-e.com
### Criterion validity (%)

<table>
<thead>
<tr>
<th>Predicted to make middle management</th>
<th>Percentage of people who make middle management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student population</td>
<td>(8 years or less)</td>
</tr>
<tr>
<td>Yes</td>
<td>Year 8</td>
</tr>
<tr>
<td>48%</td>
<td>64%</td>
</tr>
<tr>
<td>No</td>
<td>Year 16</td>
</tr>
<tr>
<td>11%</td>
<td>32%</td>
</tr>
<tr>
<td></td>
<td>66%</td>
</tr>
</tbody>
</table>

*Kilde: Bray & Grant 1966, Bray, 1974, Howard, 1997*
The quality increases if

- There are many assessment techniques involved
- Psychologists were added as assessors (along with line managers)
- The exercises are of a high quality

*Kilde: Gaugler et. al., 1987*
What characterizes a good exercise?

- It is based upon a job analysis
- It is face valid
- It has standardized procedures for scoring

Kilde: Thornton & Rupp, 2006
‘The Jury’
- group exercise

- Verbal communication
- Constructive teamwork
- Influence

Potential biases

- Assessors have different perceptions of the candidate
- Raters make decisions based on intuition/gut feelings
- First impressions
- Similarity effects
- Halo effect
- Stereotypes and prejudices

Source: Skorstad, 2008
<table>
<thead>
<tr>
<th>Atferdsindikatorer for kompetansen effektiv kommunikasjon</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>svak prestasjon</strong></td>
</tr>
<tr>
<td>□ Fremstår uttrygg eller svært nervøs når han/hun presenterer</td>
</tr>
<tr>
<td>□ Er ikke velartikulert</td>
</tr>
<tr>
<td>□ Bruker ord eller talemålter som er lite passende i situasjonen</td>
</tr>
</tbody>
</table>
Assessment centers are too rarely evaluated – at least based on scientific principles

Torsten Holstad, University of Leipzig, has assisted DNB with the analyses of the trainee selection 2009-2012

Different tests, exercises, and staff were used in 2009 compared to 2010-12
DNB – The selection process

Background
Trends
The ideal trainee
Screening
Assessment centre
Validity
Evaluation
The next step
## DNB – The selection process

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applicants</td>
<td>159</td>
<td>519</td>
<td>347</td>
<td>268</td>
</tr>
<tr>
<td>Participants in AC</td>
<td>58</td>
<td>25</td>
<td>24</td>
<td>24</td>
</tr>
<tr>
<td>Positions</td>
<td>7</td>
<td>7</td>
<td>7</td>
<td>6</td>
</tr>
<tr>
<td>Screening</td>
<td>Numerical/verbal ability test</td>
<td>Numerical/verbal ability test, fx</td>
<td>Numerical/verbal ability test, fx</td>
<td>Numerical/verbal ability test, fx</td>
</tr>
</tbody>
</table>

### Background Trends
- The ideal trainee

### Screening Assessment centre

### Validity
- The next step
<table>
<thead>
<tr>
<th>Test Type</th>
<th>Range</th>
<th>Mean</th>
<th>Mode</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Numerical ability test</strong></td>
<td>2,0-10,0</td>
<td>7,47</td>
<td>10,0</td>
<td>1,98</td>
</tr>
<tr>
<td><strong>Verbal ability test</strong></td>
<td>2,0-10,0</td>
<td>6,62</td>
<td>7,0</td>
<td>1,56</td>
</tr>
</tbody>
</table>
### Screening 2010 - 2012

#### Verbal ability test
- **Range**: 0-80
- **Mean**: 45.1
- **Mode**: 47
- **Std. Deviation**: 12.3

#### Numerical ability test
- **Range**: 0-80
- **Mean**: 48.8
- **Mode**: 44
- **Std. Deviation**: 11.2

#### fx
- **Range**: 0-80
- **Mean**: 48.1
- **Mode**: 47
- **Std. Deviation**: 11.7

---

**Background**
- Trends
- The ideal trainee

**Evaluation**
- Screening
- Assessment centre
- Validity

**The next step**
Screening 2010 - 2012

Background
Trends
The ideal trainee
Screening
Assessment centre
Validity
Evaluation
The next step
Preliminary conclusion: Screening

- 2009: Difficult to discriminate between medium, relatively strong and very strong applicants

- 2010-12: Scores are nicely distributed – easier to discriminate between strong and weaker candidates
Can the screening tools predict OAR?

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010-12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verbal ability</td>
<td>r = .36**</td>
<td>Verbal ability</td>
</tr>
<tr>
<td>Numerical ability</td>
<td>r = .25</td>
<td>Numerical ability</td>
</tr>
<tr>
<td>fx</td>
<td></td>
<td>fx</td>
</tr>
<tr>
<td>Screening total</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05, ** p < .01, *** p < .001
How are the hiring decisions reached?

**Correlation between AC-score and job offer**

<table>
<thead>
<tr>
<th>Total score AC</th>
<th>2009 $r = .37^{**}$</th>
<th>2010-12 $r = .58^{**}$</th>
</tr>
</thead>
</table>

** $p < .01$
Assessing construct validity by The Multitrait-Multimethod Matrix (MTMM)

- **Convergent validity:**
  The degree to which concepts that should be related theoretically are interrelated in reality

- **Discriminant validity:**
  The degree to which concepts that should *not* be related theoretically are, in fact, *not* interrelated in reality
## Convergent validity

<table>
<thead>
<tr>
<th>Initiative &amp; Responsibility</th>
<th>Ability tests</th>
<th>Personality test</th>
<th>Presentation exercise</th>
<th>Group exercise</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis &amp; Judgment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructive teamwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Background

- Trends
- The ideal trainee
- Screening
- Assessment centre
- Validity

### Evaluation

The next step
## Convergent validity 2009

<table>
<thead>
<tr>
<th></th>
<th>Correlation (min)</th>
<th>Correlation (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis</td>
<td>-0.20 (interview/ verbal ability test)</td>
<td>0.33 (verbal/ numerical ability test)</td>
</tr>
<tr>
<td>Decision and implementation</td>
<td>-0.02 (Personality test/presentation)</td>
<td>0.33 (presentation/interview)</td>
</tr>
<tr>
<td>Deliver results and meet customer expectations</td>
<td>-0.20 (Personality test/numerical ability test)</td>
<td>0.26 (presentation/interview)</td>
</tr>
<tr>
<td>Learn and explore</td>
<td>-0.26 (Personality test/Verbal ability test)</td>
<td>0.33 (verbal/ numerical ability test)</td>
</tr>
<tr>
<td>Working with people</td>
<td>0.00 (Personality test/group exercise)</td>
<td>0.48 (between group exercises)</td>
</tr>
<tr>
<td>Communication</td>
<td>0.02 (Personality test/group exercise)</td>
<td>0.51 (presentation/group exercises)</td>
</tr>
<tr>
<td>Building relationships and network</td>
<td>-0.10 (Personality test/group exercise)</td>
<td>0.58 (between group exercises)</td>
</tr>
<tr>
<td>Initiative &amp; Responsibility</td>
<td>Correlation (min)</td>
<td>Correlation (max)</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>-------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td></td>
<td>.19 (shapes/interview)</td>
<td>.19 (shapes/interview)</td>
</tr>
<tr>
<td>Effective communication</td>
<td>.08 (shapes/jury)</td>
<td>.41 (neve/jury)</td>
</tr>
<tr>
<td>Influence</td>
<td>.26 (shapes/jury)</td>
<td>.26 (shapes/jury)</td>
</tr>
<tr>
<td>Analysis &amp; Judgment</td>
<td>-.06 (Ability test/shapes)</td>
<td>.09 (neve/ability test)</td>
</tr>
<tr>
<td>Constructive teamwork</td>
<td>-.12 (shapes/jury)</td>
<td>.11 (jury/interview)</td>
</tr>
<tr>
<td>Business Development</td>
<td>.05 (neve/shapes)</td>
<td>.37 (shapes/interview)</td>
</tr>
</tbody>
</table>
Convergent validity:

2009: Weak convergent validity

- 4 competencies display negative relationships between the different exercises
- Especially the personality test seems to measure something different (partly the contrary) than the other exercises do

2010-2012: Better convergent validity, but not good enough

- 2 competencies display negative relationships between the different exercises
- Again the personality test has the lowest correlations to other exercises
### Discriminant Validity

<table>
<thead>
<tr>
<th>Initiative &amp; Responsibility</th>
<th>Ability tests</th>
<th>Personality test</th>
<th>Presentation exercise</th>
<th>Group exercise</th>
<th>Interview</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effective communication</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Influence</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Analysis &amp; Judgment</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Constructive teamwork</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Development</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Evaluation**

The ideal trainee

Screening

Assessment centre

Validity

The next step

---

www.cut-e.com
### Discriminant validity

<table>
<thead>
<tr>
<th>Activity</th>
<th>Correlation (min)</th>
<th>Correlation (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview</td>
<td>-.10</td>
<td>.35</td>
</tr>
<tr>
<td>Personality test</td>
<td>-.34</td>
<td>.88</td>
</tr>
<tr>
<td>Presentation and analysis</td>
<td>.59</td>
<td>.71</td>
</tr>
<tr>
<td>Group exercise 1</td>
<td>.53</td>
<td>.79</td>
</tr>
<tr>
<td>Group exercise 2</td>
<td>.41</td>
<td>.69</td>
</tr>
</tbody>
</table>

→ weak discriminant validity; mainly captures performance in a specific task
## Discriminant validity 2010-12

<table>
<thead>
<tr>
<th></th>
<th>Correlation (min)</th>
<th>Correlation (max)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shapes</td>
<td>-.44</td>
<td>.41</td>
</tr>
<tr>
<td>Neve</td>
<td>.43</td>
<td>.63</td>
</tr>
<tr>
<td>Interview</td>
<td>.45</td>
<td>.54</td>
</tr>
<tr>
<td>Jury</td>
<td>.43</td>
<td>.64</td>
</tr>
</tbody>
</table>

→ better convergent validity
The screening process works very well now
- Hiring decisions are made upon AC results
- Convergent and discriminant validity slightly better, but far from good enough
- The „Assessment center paradox“? (Hoffman & Meade, 2012)
- „TBACs“? (Task Based Assessment Centres)
AC DNB – next step

- Continuous evaluation
- Improve/add exercises and the rater/assessor practice
- Collect performance data and look into predictive validity
  - Completion of the programme
  - Sales or turnover volume
  - Performance reviews by manager
  - Promotions
  - Increase in compensation
- All questions and ideas from the audience are highly appreciated in the break! 😊
DANKE FÜR DIE AUFMERKSAMKEIT!

siri.langangen@dnb.no
espen.skorstad@cut-e.no