

# CAPTain Online

## *Explained*

The summary is based on the studies done by Cristoph Nagler and Co., CNT, Hamburg, Germany

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## **CAPTain Online: Computer Aided Personnel Testing**

**CAPTain Online** is a continuously improved test system, which meets the highest professional standards and after training can be used by any professional. **CAPTain Online** supports efficiently the work of corporate HR professionals, adds value to the efforts of selection and training consultants and helps employees in better understanding and developing their competencies.

**CAPTain Online** can be used for the following purposes:

- *Selection of external applicants*
- *International personnel assessment*
- *Analysis of employees' potential*
- *Analysis of training requirements*
- *Assessment of employees' performance*
- *Using in Assessment Centres and Development Centres*
- *Succession planning*
- *Using in Management Audits*
- *Outplacement*
- *Coaching*
- *Monitoring the success of personnel development processes*

**CAPTain Online** is available in versions for:

- *Specialists / employees*
- *Sales representatives*
- *Executives and*
- *University graduates/people just starting their first job.*

**CAPTain Online** is used in more than 10 European countries by companies of all sizes and from all areas of industry and commerce.

**CAPTain Online** is currently available in English, German, French, Italian, Spanish, Swedish, Hungarian, Rumanian, Slovakian, Croatian, Russian and Polish.

## **Scientific principles**

The **CAPTain Online** personnel assessment method is based on the work done by EDWARDS<sup>1</sup>, THURSTONE<sup>2</sup> and KERLINGER<sup>3</sup> on the measurement of behavioural attitudes.

In psychological terms, the construction of **CAPTain Online** is built around the personality theory developed by MURRAY<sup>4</sup>, which in turn revolves around two central concepts: "need" and "press". MURRAY introduced the term "need" to denote situations of internal tension, i.e. needs, aspirations, subjective wishes and attitudes. In the outside world, these "needs" are confronted with a wide variety of environmental situations

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<sup>1</sup> E.g. Edwards, A. 1957. *Technics of Attitude Scale Construction*. New York: Appleton

<sup>2</sup> E.g. Thurstone, L. u. Chave, E. 1929. *The Measurement of Attitude*. Chicago: University of Chicago Press.

<sup>3</sup> Kerlinger, N.F. 1973. *Foundation of Behavioral Research*. New York: Holt-Saunders International Edition

<sup>4</sup> E.g. Murray, H.A. u.a. 1938. *Exploration in Personality*. New York: Oxford University Press

and objects that make specific demands, deriving from the structure of the situation, on the subject and require him to act accordingly. Murray calls the effect of these environmental demands on the subject "press". This theory concentrates on the interface between the personality and the demands of the subject's surroundings, on the interaction between man and his environment. **CAPTain Online** comes in at exactly this interface and measures what work-relevant behaviour patterns have emerged as a result of the demands and the „internal tension situation“.

One special feature of **CAPTain Online** is that unlike the usual norm-oriented assessment procedures, it stipulates an assessment *based on criteria*.

In criteria-oriented diagnostics, the individual is examined with regard to a prescribed result or behavioural goal, the so-called criteria, and the result of the examination is then interpreted accordingly. Thus the decisive assessment yardstick with **CAPTain Online** is to be found in the *concrete requirement profile* and not in the comparison with some kind of random sample of the population at large.

## Contents

**CAPTain Online** is an *attitude and interest test*. For a total of 38 parameters it measures the individual's behavioural attitudes as they affect his performance at work. Among these we count:

- the way the individual deals with practical tasks, e.g. his attitude to work, his working speed, self-organisation and detail orientation
- the way he deals with co-workers, e.g. cooperation, group-orientation, need for recognition and
- the way he deals with subordinates, e.g. management skills and ability to influence.

The 38 parameters are divided into the categories

- *Work performance*
- *Management skills*
- *Ability to make decisions*
- *Personality*
- *Team ability and*
- *Potential.*

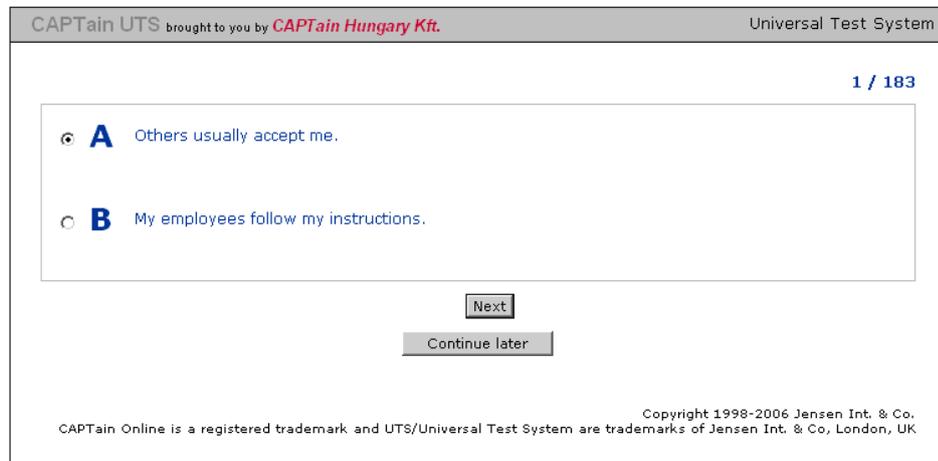
Potential can be understood as basic skills such as basic leadership skills, basic sales skills, creativity and self-confidence. Every characteristic measured by **CAPTain Online** is precisely described, with attention to subtle distinctions.

The question that **CAPTain Online** answers is: *How pronounced are the different characteristics in a particular individual and if this individual's values correspond to the requirements profile or not?*

**CAPTain Online** can also show clearly intra- and inter-individual differences, i.e. changes in an individual's behavioural attitudes, or differing work attitude profiles of different groups of individuals.

## Question-and-answer (stimulus-and-response) formats

Once the test person has entered certain personal information, the procedure itself can begin. 183 pairs of statements appear on the screen, one pair at a time, e.g.:



The screenshot shows the CAPTain UTS interface. At the top, it says "CAPTain UTS brought to you by CAPTain Hungary Kft." and "Universal Test System". In the top right corner, it displays "1 / 183". The main content area contains two radio button options: "A Others usually accept me." and "B My employees follow my instructions.". Below the options are two buttons: "Next" and "Continue later". At the bottom, there is a copyright notice: "Copyright 1998-2006 Jensen Int. & Co. CAPTain Online is a registered trademark and UTS/Universal Test System are trademarks of Jensen Int. & Co, London, UK".



The person ticks the box for either statement A or statement B; he cannot proceed to the next pair of statements until he has made a choice. The test person cannot scroll ahead or back, i.e. he cannot leave out questions or go back and change his mind. This combination of forced choice method and pairs comparison has the advantage that all the questions must be answered and the test person will find it difficult to manipulate the test.

In addition to the self-evaluation analysis, **CAPTain Online** also contains the additional optional function "**CAPTain Online Subjective**". Here, arranged according to subject areas, the test individual can make his own assessment of his work and social behaviour.

Based on CAPTain Subjective, **CAPTain Online** provides the further option for a "**360° Feedback Assessment**", where the test person is evaluated by a group of people composed of his superior(s), peers, subordinates and external clients. This group of employees evaluates his/her work and social behaviour in terms of the 38 parameters. **CAPTain Online** makes possible an evaluation by 10 or more employee.

## Quality criteria

**CAPTain Online** meets the demands of the European DIN 33430 Norm.<sup>5</sup>

## Objectivity

As **CAPTain Online** is a computer-based method, where the test person only interacts with the computer, which also works out the results once the test is completed, **CAPTain Online** test values achieve the *maximum possible objectivity*.

<sup>5</sup> BDP. 2004. *DIN 33430 Requirements for proficiency assessment procedures and their implementation*, Berlin: BDP Verband

## Reliability/Validity

Test results for the reliability and validity of **CAPTain Online** are shown in the table below.

Parameter	Reliability Correlation coefficient	Inner Validity		Correspondence validity			Construct validity		Prognostic Validity		
		Validity coefficient (1)	Validity coefficient (2)	Validity coefficient (3)	Optimum acceptance value (4)		Significant differences (5)		Validity in AC		
		Personality	Intelligence	Supervisor's assessment	Management	Employees	Persons	Professional groups	Phi coefficient (6)	C korr (7)	MWU (8)
<b>A1</b>	.671	.82			.60	.42	x				x
<b>A2</b>	.553	.38			.54	.67	x	x			
<b>A3</b>	.724	.35		.37			x	x	.39	.50	x
<b>A4</b>	.767	.39		.31		.63	x	x	-.42		x
<b>A5</b>	.732	.78	-.34		.48	.56	x	x			x
<b>A6</b>	.822	.77					x	x			x
<b>A7</b>	.714		.22	.40		.44	x	x	.44		x
<b>A8</b>	.758		.28		.72		x	x			
<b>A9</b>	.650				.65		x	x			x
<b>A10</b>	.629						x	x			
<b>A11</b>	.724	.31	-.35		.44	.50					
<b>B1</b>	.691	.76		.40	.64	.80	x	x			x
<b>B2</b>	.759			.38	.39		x	x			x
<b>B3</b>	.762					.61	x	x			x
<b>B4</b>	.685	.51			.69		x	x			

1 Correlation between **CAPTain** and Turnstone's Seven Temperaments Scale, Edwards Personal Preference Schedule and Gordon Allport Personality Inventory.

2 Correlation between **CAPTain** and IST-2000 (Intelligence Structure Test).

3 Correlation between **CAPTain** and the assessment of Supervisors' view.

4 Correlation between **CAPTain** Value and the average value of the self-assessment and the supervisor's assessment.

5 Significant differences between successful and less successful individuals in a professional group and between different professional groups.

6 Connection between the correspondence of **CAPTain** values with the requirements profile and a positive AC result.

7 Here, the difference between the test values and the requirements profile is additionally taken into account.

8 Significant mean value of applicants accepted and those rejected.

Parameter	Reliability	Inner Validity		Correspondence validity		Construct validity		Prognostic Validity				
		Correlation coefficient	Validity coefficient (1)	Validity coefficient (2)	Validity coefficient (3)	Optimum acceptance value (4)		Significant differences (5)		Validity in AC		
			Personality	Intelligence	Supervisor's assessment	Management	Employees	Persons	Professional groups	Phi coefficient (6)	C korr (7)	MWU (8)
<b>C</b>	.761	.52			.39	.48	x	x			x	
<b>D1</b>	.715			.39				x				
<b>D2</b>	.557	.35	.32		.54	.56	x	x			x	
<b>D3</b>	.723	.67					x	x			x	
<b>D4</b>	.723						x	x			x	
<b>D5</b>	.750	.38				.82	x	x			x	
<b>D6</b>	.739			.38	.49		x	x			x	
<b>E1</b>	.709				.53	.66		x			x	
<b>E2</b>	.648				.45	.43	x	x			x	
<b>E3</b>	.658	.43		.36		.62	x	x	.54	.74	x	
<b>E4</b>	.768	.75			.64		x	x				
<b>E5</b>	.729	.45			.66	.49	x					
<b>E6</b>	.687				.89	.44	x	x	.54	.59	x	
<b>F1</b>	.671				.51	.46	x	x	.36	.74	x	
<b>F2</b>	.774					-.66	x	x	.38		x	
<b>F3</b>	.556						x	x			x	
<b>F4</b>	.733		.27			.79	x	x				
<b>F5</b>	.820				.67		x	x			x	
<b>F6</b>	.460		-.39					x			x	
<b>F7</b>	.603						x	x			x	
<b>F8</b>	.827		.29	.56	.60	.43	x	x			x	
<b>F9</b>	.468					.47	x	x				
<b>F10</b>	.687				.58	.55	x	x	.34		x	
<b>N=</b>	<b>103</b>	<b>165</b>	<b>200</b>	<b>59</b>	<b>28</b>		<b>680</b>		<b>346</b>			
<b>Datum</b>	<b>2003</b>	<b>1985/86</b>	<b>2004</b>	<b>2004</b>	<b>1992</b>		<b>1997/2002/03</b>		<b>1996/2003/04</b>			

The *reliability* of **CAPTain Online** was measured using the test-retest method. 92% of the **CAPTain Online** scales have a value higher than  $r = .50$ , and in 58% of cases the value is even higher than  $.70$ . The mean value is  $r = .64$ .

We took several different approaches to prove the *validity* of the **CAPTain Online** results. We checked both the criteria-related validity (by checking the inner validity, the correspondence validity and the validity of **CAPTain Online** in the assessment centre, i.e. the prognostic validity) and also the construct validity by examining group differences:

- In the case of inner validity, high correlations emerged between the scales of different personality tests and the **CAPTain Online** scales that are comparable in terms of content.
- The correspondence validity was worked out by correlating the **CAPTain Online** values with the mean value of self-assessment and assessment by the individual's boss (optimum acceptance value). This validation should produce as many high correlations as possible, such as are also reached by **CAPTain Online**. The average validity coefficient here is  $r = .52$ .
- Predictions of success in the assessment centre (prognostic validity) can be shown by **CAPTain Online** on those scales in each case whose content corresponds to the demands that the assessment centre is supposed to ascertain.
- **CAPTain Online** has an impressive ability to distinguish between successful and less successful members of staff. Nearly all the parameters are able to distinguish between the members of different professional groups.

The results to establish the quality of **CAPTain Online** show the method to be highly suitable for use in the working and professional world.

## Norms

As **CAPTain Online** is a *criteria-oriented method*, no use is made of statistic norms<sup>6</sup>. Nonetheless, we do have empiric data for a number of professional groups.

## Test conditions, time needed

The complete assessment including results takes about 30-60 minutes (depending on version of the test). The test evaluation occurs directly and automatically. The test results are available in less than 5 seconds online or in e-mail.

The test results are also comprehensible to the layman with the help of a printout containing a differentiated report. However, a two-day training course is a prerequisite for a deeper interpretation of the **CAPTain Online** results and for the versatile use of **CAPTain Online**.

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<sup>6</sup> See also the explanations on the construction principles.

## CAPTain Scales' description

### Workstyle

#### **A01 - Intensity of effort**

This dimension describes how important work is to a person. Work as the meaning of life or as a burden – work seen as a necessity or as a personal challenge. The scale does not measure if someone works a lot or a little, well or badly, but rather with what attitude he/she approaches work.

#### **A02 - Target orientation**

We want to determine whether a person knows how useful his/her work is, whether they are aiming for a goal in their work and whether they make a special effort to achieve this goal. Very high test scores mean too high assessment of achieving the goal, so that there is danger of poor quality.

#### **A03 - Personal involvement**

Some people work on specialist tasks in a very conscientious manner. They always complete work started very carefully. Others see themselves more in the role of telling others what they have to do.

#### **A03 - Personal involvement**

Some supervisors work on specialist tasks in a very committed manner and are the No. 1 specialist in their area of responsibility. Others see their duty mainly to give their fellow employees instructions and support them at work.

#### **A03 - Personal involvement**

Some salesmen/consultants do not like to spend much time and detail on difficult questions. They tell the customer what he should do and that takes care of the matter for them. Others want to know the exact details and sink their teeth into a problem without recommending a decision to the customer as soon as possible.

#### **A04 - Personal organisation**

This means the organisation of own work activities. Some people approach things very systematically and know at all times where to find their documents and what the status of their projects is. Others work in a very event related way and react to each new requirement in a very flexible way.

#### **A05 - Detail orientation**

It is above all members of management who often work with general information. In the first place they are interested in connections and structures, before going into details if they need to. Other people can and have to get involved in individual details, but are then forced to lose the overview due to this method.

#### **A06 - Work rate**

This means the speed with which a person carries out their work. There are people who work very quietly and take a lot of time for each work step; others like to work very fast. Some perhaps want to be particularly careful, others do not want to lose any time.

#### **A07 - Persistence**

We use this to describe the time perspective of one's own way of working. A low amount of staying power means aiming for fast successes here, high staying power on the other hand means being able to continue working on long term projects as well.

**A08 - Self-Sufficiency**

Very independent people set their goals themselves and plan their work steps alone. Others - mainly in larger organisations - are used to moving in a system of agreements, rules and performance targets. Some people even need clear and unequivocal performance targets in the smallest detail. Compare with scales B4 and F5.

**A09 - Work planning**

Practical-intuitive orientated people concentrate on the matter in hand and rely on experience and intuition. For others, planning and thinking are characteristic. Reflection on theoretic contents and the conceptual development of new ideas for some activities is the most fundamental.

**A10 - Need for change**

This dimension measures how willing a person is to get involved with new things. A low need for change at the same time means a penchant for routine work. A high need expresses itself in openness to all types of change at work.

**A11 - Finishing**

We use this dimension to measure how reliably a person carries out work. Low scores point to not all work that has been started being completed. This can be because the person does not see completion as useful, but also e.g. it is the task of a member of management more to give things a push, than to take care of them personally. High scores mark people who want to complete their work at all costs and whatever the circumstances.

## Leadership

**B01 - Leadership style**

Persons with low scores avoid taking up a management role, as well as being an informal leader amongst colleagues. Scale scores in the middle show that the person influences the group, however without wanting to dominate other people. High test scores show that the person sees him/herself as the one in the group who decides.

**B01 - Leadership style**

Sales persons/Consultants with low scores avoid taking up a management role in contact with the customer. Scale scores in the middle show that the person influences the customer, however without wanting to dominate him. High test scores show that the person clearly sees him/herself as the one who decides what the customer is going to do.

**B02 - Delegation**

Low scores on this scale belong to persons who prefer to spend time on the details for specialist tasks and avoid influencing other people directly. Persons for whom an overview of the matter suffices to instruct and guide colleagues show high scores.

**B02 - Delegation**

Delegation of work is one of the tasks for a member of management. Persons who do not delegate tasks, but prefer to spend time on them themselves have low scores on this scale. Persons who mainly work through other people have high scores.

**B02 - Delegation**

Low scores on this scale belong to Salespersons/Consultants who prefer to spend time on the details of specialist problems and avoid influencing other people directly. Persons for whom an overview of the matter suffices to decide what is good for the customer show high scores.

**B03 - Need to control**

Teamwork only functions if all those concerned take on a piece of the total responsibility and are interested in the work of others in the team. Persons with a low score look after their task themselves. Persons with a high score want to have a say everywhere and take care of everything.

**B03 - Need to control**

The task for members of management consists of taking on responsibility and guiding or steering their employees using instructions or as an advisor. Persons with low scores do not do this. Persons with a high score have a strong sense of responsibility for others and frequently intervene.

**B03 - Need to control**

As a Salesperson/Consultant you only reach the desired result if you take over some responsibility for the customer's decision and state clearly what your recommendation is. Persons with a low score do not want to or cannot do this. Persons with a high score are happy to take on responsibility and tell their customer what he should do.

**B04 - Authority dependence**

This dimension means whether persons define supervisory functions as relevant attribution of roles or give them a particular personal meaning. In the former they treat supervisors in a very matter orientated manner and more helpfully. In the latter they strive for personal recognition and pay attention to a personal subordination relationship.

## Decisiveness

**C01 - Decision making**

This dimension measures how carefully or impartially a person makes decisions in their area of competency. Some people only decide after long and careful consideration. Others are prepared to take risks and make spontaneous decisions based on intuition and experience.

**D01 - Assertion**

This dimension concerns the willingness to push through own interests and views even where there is resistance. Some persons are very aggressive when doing this and frequently get caught up in debates; others hold themselves back – almost to self-denial.

**D02 - Ambition**

This scale measures personal ambition, expressed in demanding goals and in the willingness to behave competitively.

**D03 - Self control**

Some people are very controlled and remain friendly and nice even in difficult situations. However they sometimes have a withdrawn and reserved air. Others cannot or do not want to hold their feelings back. They react spontaneously and therefore sometimes also without thinking. Persons with scores on the middle level are usually open, but adapt their statements to the situation.

**D04 - Power to change**

According to CAPTain, people who have personal ambition and strength to assert themselves in order to push things forward and want to try out innovations have a great deal of power to change. Persons with low scores on this scale have no impetus for new ideas.

**D05 - Dexterity**

Operative tasks must be put into practice carefully and reliably, whilst strategic management tasks mainly require that time is spent on the subjects with a good overview. Persons with a high score on this scale see their activity in the exact and reliable carrying out of their tasks. Persons with a low score have no interest in this.

**D06 - Physical interests**

This scale measures how important physical interests are compared to work. High scores means that they might interfere with the work.

## Temperament

**E01 - Dependence on others**

The task and the practical correctness are the most important thing for some people. They sometimes appear unapproachable. Others find consensus and good personal relationships very important.

**E02 - Need for acceptance**

Need for recognition guides our activities so that others like us. People with high scores on this scale are usually friendly and strive to fulfil the expectations placed on them. In extreme cases they are dependent on the agreement of others. A low requirement for recognition makes a person more independent but perhaps also less part of team.

**E03 - Need for attention**

This dimension characterises a person's willingness to attract attention to him/herself and to be the centre of attention. Low scale scores describe a communicatively unobtrusive person, high scale scores a person very intent on effect.

**E04 - Social adeptness**

Persons with high scores on this scale have a great need for social contact, get on well with everyone and easily make friends at work. Persons with low scores are more sober and reserved in this respect.

**E05 - Group orientation**

Some people place a great deal of value on belonging to a group and feeling safe in it. Others see themselves more as an individual who acts independently from the opinions and intentions of the group.

### **E06 - Co-operation**

It is important for the work of a team whether its members are prepared to adjust to a certain degree, to agree their tasks with one another and to give each other reciprocal support. Persons with low scores on this scale are not really bothered about good co-operation. Persons with a high points score place a lot of value on co-operation and are happy to fit in.

## **Development areas and attitudes**

### **F01 - Current leadership ability**

According to CAPTain persons who believe in their management qualities, want to take on responsibility, can sell ideas and motivate others, are sociable, are respected, dare to push others and find followers, take up a management role. Persons with high scores meet this model in the main, those with low scores do not.

### **F02 - Potential leadership ability**

This dimension shows whether the person shows behavioural characteristics, which according to CAPTain represent the foundations for management tasks. Most important here is the fact that they behave in a team conform manner, organise co-operation, and see things as a whole, show initiative and interest and work single-mindedly.

### **F03 - Potential for selling**

Proof of the general foundations for sales are for CAPTain, enjoying appearing in public, pleasure in selling, a high level of activity and the willingness to be confronted with challenges in an ambitious way.

### **F04 - Creativity**

CAPTain assesses musical interests, as well as the willingness to give up old thought patterns and to enter into thought games as proof of creativity.

### **F05 - Need for guidance**

This dimension is used to estimate how much personal encouragement and support a person needs at work. A low score characterises a person who can still act independently in difficult situations. High scores point to insecurity, willingness to adapt and requirement for support.

### **F06 - Deliberation**

This concerns whether a person orientates their actions at work according to the criteria of seriousness, level-headedness and thoroughness, or strives for efficiency and personal success.

### **F07 - Tempo of living**

Persons who work quietly have a low score on this scale, active and dynamic people higher scores. A very high score indicates a restless and impatient style of working and is a stress indicator.

### **F08 - Technical orientation**

This scale shows whether a person sees the tasks in their area of activity from a technical or other point of view (commercial, social, communicative etc.). High scores characterise a pure technician.

### **F09 - Self-confidence**

Conviction of own competency is an important determining factor for professional success. A low score on this scale shows a person who works with accompanying self-critical thoughts. A very high value characterises a person who does not accept doubt in their competency.

### **F10 - Social interaction**

Employees who are not disturbed by the presence of others when working but like to work in direct personal contact with others show high test scores. Test scores in the middle level characterise a person who works best alone, but needs a communicative environment, in which they occasionally exchange ideas and receive stimulation. Low test scores are characteristic of the loner, who feels hampered by others in his work performance.

## **Publications**

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