

ART and DRT measure General Mental Ability (GMA) "that, among other things, involves the ability to reason, plan, solve problems, think abstractly, comprehend complex ideas, learn quickly and learn from experience. It is not merely book learning, a narrow academic skill, or testtaking smarts. Rather, it reflects a broader and deeper capability for comprehending our surroundings "catching on", "making sense" of things, or "figuring out" what to do." (► Gottfredson, 1994, p. 13)



#### **GENERAL MENTAL ABILITY**



#### JOB PERFORMANCE

GMA is one of the best predictors of job and training performance across different types of jobs.

Schmidt & Hunter, 1998



#### INTELLIGENCE

Taking into account intelligence as a selection criterion significantly increases the likelihood that the chosen individuals will be able to manage their work better and show higher productivity

Schmidt et al., 1979

### **COMPLEX WORK**

NATURE

The link between the level of GMA and success at work becomes closer the more complex the nature of the work undertaken is

Hunter, Schmidt & Le, 2006

# ABSTRACT AND DIAGRAMMATIC **REASONING TESTS**

LUDĚK STEHLÍK

SERVICE SUPERVISOR



ART and DRT can be used as a stand-alone measure in a high-volume recruitment program, or as a one of methods used in final rounds of selection process (e.g., in combination with tests of integrity, personality inventories, work sample tests, knowledge tests, structured interviews or biographical information).



WWW.ASYSTEMS.AS

## **ABSTRACT REASONING TEST (ART)**

When looking for people to hire, employers look for four basic qualities: intelligence, energy, integrity, and interpersonal intelligence. In other words, they want them to be quick and smart, hardworking and reliable, and rewarding to deal with. The Abstract Reasoning Test (ART) helps to identify those candidates who fit the very first characteristic.

#### HOW WILL ART AND DRT HELP YOUR ORGANISATION **AND EMPLOYEES ?**



#### **SELECTION PURPOSES**

It is most useful in situations when you want to estimate what is the candidate's cognitive horsepower and to size up whether his/her intellectual abilities are sufficient for managing the job he/she is aspiring for.



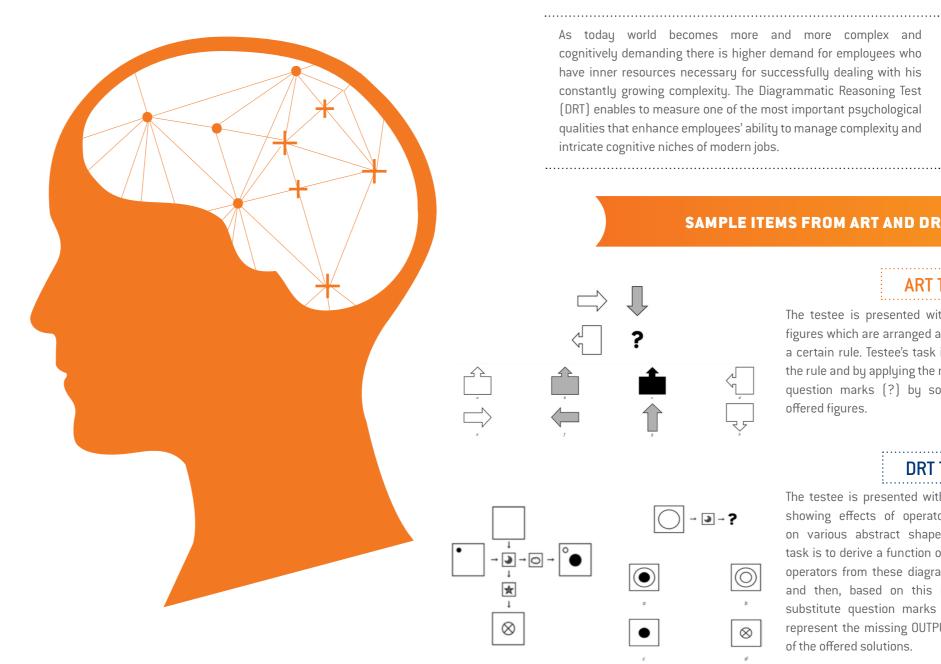
#### TARGET GROUP

Suitable for entry-level jobs of blue/pink/white collar workers (ART) and for jobs of higher complexity, e.g. managers and specialists, (DRT).



#### **INCREASING EMPLOYEE SUCCESS**

By incorporating outputs from ART and DRT into your hiring decision making process you can increase the odds that selected candidates will successfully do their job.



#### **ART - BASIC TECHNICAL INFORMATION**

- 25-minute time limit
- Language and culture free
- On-line administration
- User-friendly interface
- Testing from test taker's home or under controlled testing conditions
- ART consists of 23 non-verbal logical problems with Automatically generated feedback report for both the test taker and the test user
  - Available in 6 CEE languages (Czech, Polish, Slovak, Hungarian, Serbian, Russian) + English
  - Test results are compared to local or international norm group of more than 200 individuals
  - Randomized response alternatives

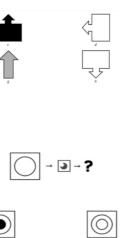
#### **DRT - BASIC TECHNICAL INFORMATION**

- DRT consists of 24 logical problems divided into 6 blocks and 2 subtests
- 18-minute time limit
- On-line administration
- User-friendly interface
- Testing from test taker's home or under controlled testing conditions

### **DIAGRAMMATIC REASONING TEST (DRT)**

As today world becomes more and more complex and cognitively demanding there is higher demand for employees who have inner resources necessary for successfully dealing with his constantly growing complexity. The Diagrammatic Reasoning Test (DRT) enables to measure one of the most important psychological qualities that enhance employees' ability to manage complexity and intricate cognitive niches of modern jobs.

#### SAMPLE ITEMS FROM ART AND DRT TEST



 $\otimes$ 



figures which are arranged according to a certain rule. Testee's task is to reveal the rule and by applying the rule replace question marks (?) by some of the offered figures.

#### DRT TEST

The testee is presented with diagrams showing effects of operators (rules) on various abstract shapes. Testee's task is to derive a function of individual operators from these diagrams at first and then, based on this knowledge, substitute question marks (?) which represent the missing OUTPUTS by one of the offered solutions.

•

- Automatically generated feedback report for both the test taker and the test user
- Available in 6 CEE languages (Czech, Polish, Slovak, Hungarian, Serbian, Russian) + English
- Test results are compared to local or international norm group of more than 200 individuals
- Randomized response alternatives