

Developing a new behavioral exercise in Assessment Centers for recruiting expert talent in Mobarakeh Steel Company, Iran

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Mobarekeh Steel Company (MSC)

- ▶ Biggest steel producer in Middle East and Northern Africa
- ▶ Biggest DRI producer in the world
- ▶ Mission to play the leading role in Iran's industrial, financial, and social growth
- ▶ Operates in seven industrial complexes and employs more than 20,000 people in different parts of the country.(Reference: en.msc.ir)
- ▶ One of the seven parts is located in Mobarakeh, Isfahan.
- ▶ 15000 people in 2014. This was a problem for HR department and we decided to downsize organizational structure while increase production.
- ▶ We need to have fewer employees who are more productive. We have to assess people.
- ▶ In 2014, we established an assessment center to support four HR processes: Recruitment, Training, Succession Planning, and Promotion.
- ▶ There are nine groups who are assessed in Assessment Centers in MSC: Managers, **Experts**, Shift formen, Operators, Mechanics, Electricians, Guards, Firefighters, and Clerks.
- ▶ Experts interact with other groups.

- We designed an assessment center for selection of talented people in recruitment process in 2016.
- Focus on the assessment center designed to assess, select, and attract 84 experts among 9772 candidates who attended the Recruitment process, 2017.
- Selected to be assigned in different positions from finance to maintenance.
- They attended a written special exam to be screened.
- We selected three times capacity to be assessed in Assessment Center.
- 219 people were selected to be assessed in our Assessment Center.

Screening Stages

12415 people applied

9772 people attended the written exam

219 people selected and entered in Assessment Center

84 people attracted and entered in the final recruitment process

Competency Modeling

- We needed to identify competent experts who have:
 - intrinsic motivation
 - able to analyze systematically
 - communicate effectively
 - collaborate with others to solve problems and achieve goals.

- We needed to develop exercises to simulate jobs to observe behaviors
 - general enough to be relevant to the wide variety of areas where the experts would work

- After strategic and job analysis we identified 17 dimensions, 6 assessment methods including behavioral simulation exercises.

- No more than 9 dimensions were assessed in any behavioral exercise, as shown in the next slide.

	Row	Dimensions	Test	Computer Project	Interview	Analytical Writing & Discussion	Chart Analysis & Presentation	Game (teamwork)
Abilities and Trait	1	Flexibility and Adaptability				*	*	*
	2	Self-reliance			*		*	*
	3	Result-orientation			*			*
	4	Tending to Learn and Growth			*		*	
	5	Idea Generation				*		*
	6	Quantitative Reasoning	*					
Analysis Skills	7	Data Analysis and Interpretation					*	
	8	Simplification and Identifying Key Events				*	*	
	9	Cause and Effect Analysis				*	*	
	10	Inductive Reasoning and Conclusion				*	*	
	11	Writing Skill				*		
	12	Computer Skills		*				
Social Skills	13	Active Listening			*	*	*	*
	14	Oral Expression			*	*	*	
	15	Social Perception			*			*
	16	Collaborative Problem-solving			*	*		*
	17	Leadership						*

Analytical Writing and Discussion (AWD)

- Design of AC to attract talented people in Recruitment process is very different from the ACs designed to assess Managerial Competencies in Succession Planning.
- For example, in AC for managers we have Fact Finding (FF) -- based on taking best choice in the decision making process
- But in AC for attracting experts we have Analytical Writing and Discussion (AWD) -- based on analyzing and generating choices in the process of making decisions, and discussing the process of the analysis.
- AWD is differentiated from other analytical exams such as Critical Thinking, GRE, FF, and so on.
- This presentation focuses only on AWD.

Compare AWD with other analytical exams

Criteria	Exam			
	Analytical Writing in GRE Test	Critical Thinking Test	F.F in Assessment Center for managers	AWD
Possible to assess analytical skills	*	*	*	*
Possible to assess written skill	*			*
Possible to assess active listening and oral expression skills in the face-to-face discussion.			*	*
Gives enough time to participant for thinking openly.	*			*
Gives opportunities to assessor for interacting with participant in order to assess Flexibility and Learning.			*	*
If participant expresses a reason that breaks assessor's mind set, there is time for assessor to ask questions and maybe it is an opportunity to learn from participant and correct his viewpoint.			*	*

Symbol “*” means that exam is able to do what is in the Criteria column.

AWD have two parts

- 1. Analytical Writing:** comes from GRE test. In GRE test, there are three parts include Verbal Reasoning, Quantitative Reasoning, and Analytical Writing.
AWD has two writing parts: a)Analyzing an Issue b)Analyzing an Argument
- 2. Oral Discussion:** comes from exercises like FF in which the assessor discusses with the assessee.
AWD has a question and answer period with the assessee

Example of an Analytical Writing:

A. Analyzing an Issue

- ▶ You will be given a brief passage that states or implies an issue of general interest. Instructions will be given on how to respond to the issue. Your response will be graded by how well you:
 - respond to the specific task instructions.
 - consider the complexities of the issue.
 - organize, develop, and express your ideas.
 - support your position with relevant reasoning and examples.
 - control the elements of standard written expression

Example of an Analytical Writing:

A. Analyzing an Issue, continued

- ▶ "It takes a village to raise a child." The education of your children is the task of the community as a whole, not merely the province of teachers and local school administrators.
- ▶ In 30 minutes, compose an essay on the quotation above. Discuss the extent to which you agree or disagree with the views expressed in the quotation. In doing so, be sure to explain the reasoning behind your taking this position. Consider to what degree the statement may or may not be true; take this into account in your discussion. You may not write on any other topic.

Source: Barron's GRE, Model Test 2.

Example of an Analytical Writing:

B. Analyzing an Argument

- ▶ You will be given a brief passage that presents an argument. Instructions will be given on how to respond to the argument. Your response will be graded by how well you:
 - respond to the specific task instructions.
 - identify and analyze important features of the passage.
 - organize, develop, and express your analysis.
 - support your position with relevant reasoning and examples.
 - control the elements of standard written expression

Example of an Analytical Writing:

B. Analyzing an Argument, continued

- ▶ Respond to the instructions below and support your position with relevant reasoning drawn from your academic studies, reading, observation, and/or experience.
- ▶ **Argument:** One increasingly popular policy for promoting renewable energy is a feed-in tariff. Under such a policy, investors on any scale, from large corporations to individual homeowners, produce their own energy from solar panels installed on their property. Electricity companies are then required to purchase the energy through a long-term contract at an increased rate that would allow the investors to more than offset the cost over time. There is no denying that the initial cost of solar installation would be a burden on the investor. In strenuous economic times, both businesses and homeowners might be reluctant to make the investment, with concern that the payout could be less than sufficient or the plan might prove unfeasible. However, research has shown that a feed-in tariff plan is not only stable but also exceptionally effective, and ought to be more actively pursued.
- ▶ Write a response in which you consider the assumptions made by the author in the passage. Discuss how these assumptions affect the validity of the argument and the possible implications should these assumptions be proved wrong.

Source: Kaplan Practice Sets- GRE-Analytical 3.

Process of AWD exercise

- ▶ Participant attends the Analytical Writing and Discussion exam about 60 minutes and writes paper (30 minutes for Analyzing an Issue and 30 minutes for Analyzing an Argument).
- ▶ After that, administrator prepares two copies of the paper and guides participant to a room where an assessor seated.
- ▶ The assessor asks participant to introduce himself and express his writing to the assessor.
- ▶ Now participant expresses his writing while assessor listens to him and notes down some points.
- ▶ After finishing reviewing the writing, assessor asks questions and make challenges.

Examples of Questions and Challenges

1. What is your opinion about this conclusion?
2. How did you conclude?
3. What are the assumptions?
4. What are the implications?
5. Please give me more reasons?
6. Why don't you think that the other sides are true?
7. What are the key points?
8. If I say that your reasoning is wrong, how do you persuade me?
9. After listening to my questions and reviewing my reasons, please read your analytical writing again and tell me if your conclusion changed or not.
10. Don't you think that your analytical writing need to be corrected?
11. Please summarize our discussion.
12. What did you learn in our discussion?

Rating

- After discussion finished, assessor rates 10 dimensions

Dimensions	Rating
Flexibility	1-10
Idea Generation	1-10
Writing	1-10
Simplification and Identifying Key Events	1-10
Cause and Effect Analysis	1-10
Inductive Reasoning & Conclusion	1-10
Active Listening	1-10
Oral Expression	1-10
Collaborative Problem-solving	1-10
Flexibility	1-10

WHO the assessors are

- ▶ We had 3 assessors who have trained to run AWD.
- ▶ Two of them had phd degree in Management and another one had master's degree in Engineering.
- ▶ They had certificate as an assessor in the field of Assessment Center Methods.
- ▶ They were able to do analytical discussion better than others.
- ▶ They had enough motivation to develop a new exercise.

Rating

- *Writing Skill has a more specific rating form as following:

	Index	Observation	rating
1	structure	Introduction-body-conclusion	0-2
2	Organizing	Giving a big picture, main ideas and supports; Categorizing and Ordering them;	0-2
3	Objectivity	Using examples and objective reasoning.	0-2
4	Words	Select relevant and meaningful words and writes them correctly	0-2
5	Grammar	Formation of sentences – tenses- conjunctions	0-2
Writing Skill Rating			0-10

Results

1. Mean and standard deviation of ratings on dimensions, and correlations among these dimensions within the AWD.
2. Correlations of the parts of AWD with other assessment results: Interview scores (1, 4, 13, 14), Game (1, 5, 13)
3. Comparison of AWD scores for different demographic groups: means for Men and Women. Correlation of AWD with age.

Results

Dimensions in AWD	N=Mean AWD	N=Std AWD	N=Correlations of the parts of AWD with Interview	N=Correlations of the parts of AWD with Game	N=Correlations of the parts of AWD with Chart Analysis and Presentation
Flexibility	5.54	1.63	-	0.2879	0.2379
Idea Generation	4.16	1.52	-	0.2537	-
Writing	5.48	1.70	-	-	-
Simplification and Identifying Key Events	5.01	1.68	-	-	0.3281
Cause and Effect Analysis	5.02	1.65	-	-	0.3094
Inductive Reasoning & Conclusion	4.75	1.63	-	-	0.3032
Active Listening	5.62	1.46	-	0.1720	0.1956
Oral Expression	5.38	1.53	-	-	0.3318
Collaborative Problem-solving	4.94	1.51	0.3424	0.3223	-

Comparison of AWD scores for different demographic groups

Dimension Code	Dimensions in AWD	Mean (SD) for Men	Mean (SD) for Women	Correlation of AWD with age
D1	Flexibility	5.58	5.16	-0.0274
D2	Idea Generation	4.18	4.05	-0.1226
D3	Writing	5.50	5.18	-0.0331
D4	Simplification and Identifying Key Events	4.99	5.16	-0.0655
D5	Cause and Effect Analysis	5.00	5.21	-0.1187
D6	Inductive Reasoning & Conclusion	4.79	4.39	-0.0135
D7	Active Listening	5.59	5.87	0.0143
D8	Oral Expression	5.31	6.11	0.2019
D9	Collaborative Problem-solving	4.91	5.24	-0.0454

Conclusions

- Developing valid exercises is very important in designing Assessment Centers.
- There is different exercises for each group of people.
- When we are selecting talented experts we need to assess competencies which make differences in their performances.
- Experts support managers in the decision making process. A competent expert has to analyze, design, interact with others, and share their knowledge.
- Analytical Writing and Discussion is one of the most useful exercise to assess and identify talented people for analytical tasks in organizations.
- AWD can be used to assess Critical Thinking.

Conclusions, continued

- ▶ Our world is changing and many companies and countries are being interconnected.
- ▶ Expert talent is needed to inform organizations about changes and connections using social networks, internet, and new technologies such as 3D printers, robots. So, consequently managers have to attract people with special talents who be able to analyze big data to discover developments in the world and manage the organization.
- ▶ Analytical Writing and Discussion, along with other exercises, can help us identify talented people for analytics and collective decision making.
- ▶ It is very important to identify and develop assessors who be able to do this task.

Thank you

Questions and Comments?

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