

The AEM-Cube

How does it compare with the psychometric approach?

These are the personal reflections of a recently certified independent consultant with wide experience of psychometrics and test publishing.

We asked Ian Florance to highlight some issues that individuals should consider when 'test-driving' the AEM-Cube report, in particular comparing what the AEM-Cube does with the most widely used psychometric tools (EI measures: MBTI and other type measures; Hogan and other five factor based assessments).



1. The AEM-Cube measures different things

The AEM-Cube offers something different from (yet another) model of human personality. A lot of the other points I want to make derive from this understanding so I'll explain it at slightly more length.

The factors tested by titles like Hogan (and NEO, 16PF etc) are constructs based on data collection and analysis, stemming from Cattell's work on the original 16PF. Type measures (such as MBTI) stem from Carl Jung's model (from 1921).

In both cases, the claim is that the tools measure underlying 'drives' which define individuals' default or typical behaviour and therefore predict future performance, development areas, job-fit etc. Some of Hogan's tests use such information to predict leadership derailers based on the same sort of information.

It is not clear what the status of these fundamental drivers are: are they controlled by genes, experience or some combination of the two? This has huge implications for what a user does with the results.

The AEM-Cube reports on 3 'Axes'. Two of them (Attachment/Exploration) are scientifically well-attested evolutionary instincts. The other (Maturity in Complexity) is influenced by experiences. Together, these measures provide us with something different from standard psychometrics. The three key differences can be briefly summarised.

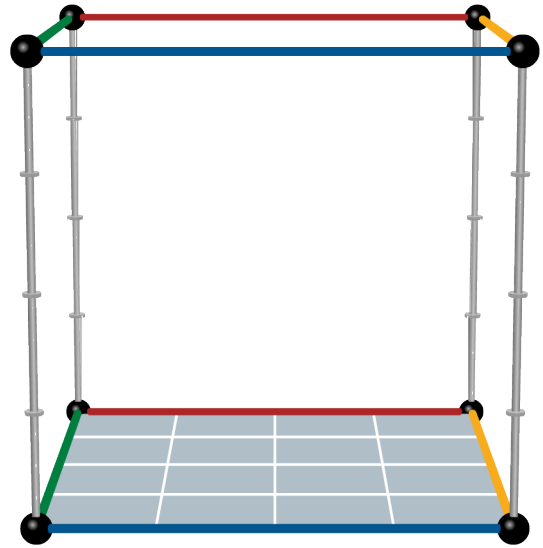
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- makes an explicit, operationalisable link between individual, team and organisational performance. Psychometrics, which focuses on individual differences finds this connection very difficult to make ("OK, so Jenny is an introvert narcissist; how does this help me when our profit margins are being squeezed?"). In contrast, OD tools tend to ignore the critical contribution of individuals. The AEM-Cube is unique, in my experience, in that it's a tool which addresses both organisational development and individual management;

- focuses on outcomes rather than behaviour. Rather than stating "Raschid will tend to behave like this in this situation" it indicates that two people with the same results may behave in different ways to achieve the same fundamental work objective;

- has an explicit focus on change.

I'll now both explain these in more detail and draw out implications.



Visualisation of the AEM-Cube

2. Internationalism.

The two evolutionary drives that the AEM-Cube reports are global, part of common human development and unaffected by culture. Similar claims made for psychometric tests are in my experience as a test publisher, at best, arguable. 'Adaptations' of conventional tests for different cultures often turn up significantly different base results. They need more care if they are being used on a multinational team.

3. How Individuals link to organisational needs.

The AEM-Cube draws on science which describes processes within ANY living system – whether an individual human being, an organisation, a colony of muskrats or a prairie. The process by which these systems develop,

flourish and decay is described in the S-curve section of the report. The AEM-Cube therefore can make an explicit link between the stage an organisation is at and what contribution an individual can make since both analyses are based on the same basic concepts.

4. Individuals and groups.

Psychometrics is 'the science of individual differences'.

Team applications of psychometrics add personalities of individual members together and use that additive process to describe groups.

The theory behind the AEM-Cube describes how groups and teams develop. An extension of it suggests how different teams communicate with each other and cause efficient or blocked operations. The AEM-Cube theory adds a useful new concept of diversity in addition to the one required by legislation and further shows why this is critical to team performance.

5. Change.

Psychometrics tends to describe a 'state': "This is what you are like and this is what you'd prefer to do." If the 'state' changes then either the person must change (if that is possible) or he/she may become excess to requirements. Psychometrics does not address how and why change happens and what the implications of this are for leadership and for people (beyond what I've suggested above).

The AEM-Cube factors in what every experienced manager knows: that organisations change all the time. The S-curve report section indicates the predictable shape of change. The training explains why this happens. And, in individual debriefing, it shows where each person will contribute best both to the stage the organisation has reached, and in preparing for future developments. This has huge implications for leadership and management actions.

6. Leadership and management Implications.

Very loosely, the majority of psychometrics tends to be used for two purposes: to recruit or to manage individual development. In development situations, test reports are used to plan training, self-development activities, coaching etc.

It is unclear if fundamental psychological drivers are changeable or learnable or not. EI is a key case in point: different theorists are unclear about exactly what EI is and therefore whether you can learn elements of it or whether it is innate.

Neither is it always clear in test report development suggestions whether the candidate is being asked to change fundamental psychological characteristics (which is doubtful or, if possible, ethically questionable) or being asked to develop strategies to cope with unchangeable strengths and weaknesses.

The AEM-Cube is clear about this set of issues. Two of the axes in the AEM-Cube measure basic drives which are unchangeable since they are evolutionarily defined. So, the AEM-Cube:

a) increases test-taker self-awareness, showing them where they will be most comfortable making a contribution (and why they have found it difficult in other stages). The focus is on improving effectiveness in actual work rather than going through a possible process of change before applying this learning to real work.

b) gives leaders and managers hard base information for organisational and structural rather than individual development. It suggests how they should organise their human resources (as they would any other sort of resource) to meet the present AND FUTURE challenges of the business cycle. The data can thus be used for team building, project development, succession planning, full scale OD.

The AEM-Cube links in with the common idea that individual change in many areas is often ineffective and expensive in time and money. A leader's or manager's job is to place people where their contributions will have most effect and, when that task is completed, move them to the next such position. The leader builds teams which are diverse enough in their preferences to cope with the inevitable process of change.



7. Pre-empting problems

Because it provides a way of matching individuals to stages in a predictably shaped cycle of change, the AEM-Cube gives a tool to leaders which can pre-empt problems before they occur, rather than cope with them once they've happened (which, for instance, is how some test/coaching applications work). Psychometrics tends to match people to jobs using relatively stable models of both the individual and of a role, ignoring the processes of change at work.

8. 360

If the AEM-Cube is used in its 360 version it's important to understand that the aim is not, as in many standard products, to work towards an agreed accurate version ("Jill says you're over-emotional; you say you're calm; let's look at instances and see which one is most accurate") but to examine the implications of why those real differences of opinion exist, helping test takers to understand why their preferences are creating these impressions. A shared team 360, in which individuals know each other's scores will aid this process hugely, highlighting where diversity is and helping the team to value it.

9. Background disciplines

Most psychometrics is based on basic psychological constructs and, in particular, the applied techniques developed by occupational psychologists. Over the last 20 years, neuropsychology and the cognitive sciences have been fundamentally changing our understanding of brain-working and overturning some of the assumptions of applied – including occupational – psychology.

The AEM-Cube is based, in part, on these developments in brain science as well as very different disciplines such as evolutionary theory, cybernetics and systems theory which contribute to our greater understanding of many living systems (such as individual brains and organisational dynamics). This difference informs AEM-Cube's very individual approach.

10. How it measures

The AEM-Cube uses the same basic means of measurement as widely used psychometrics: it compares an individual's answers with those of a sample of other people and generates a report from this comparison.

The differences and their implications are:

- Traditionally psychometrics was quite long and time-consuming. Cybernetics shows that this length will tend to make data inaccurate (most obviously, test takers become bored). AEM-Cube is deliberately short.
- Because of this it is easier to look at and interpret responses to individual questions, thus getting finer grained, more subtle information.

11. Other Tests

You asked me to look particularly at some assessments and I've mentioned them in passing. But - to give a few more pointers.

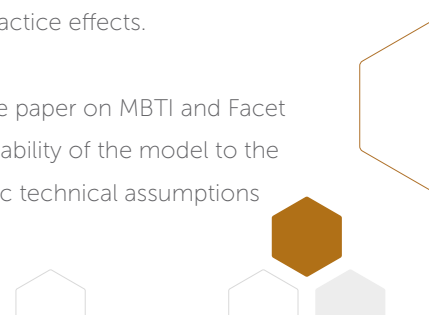
Hogan: As I mention below I still use this test in my mentoring work and find it useful to set up stimulating discussions, particularly as the report is written in a sharp style that supports fruitful disagreement. I also know the authors Bob and Joyce Hogan who are very well-respected experts in the area. However:

- Hogan's derailment model draws on a very small number of theorists and, in my view, is still awaiting confirmation.
- Hogan's view of business is firmly and explicitly based on the US corporate model. This may well be a good model in certain areas but has often failed when transplanted wholesale into emerging economies and has little to say in cultures dominated by different leadership styles or different economic units.

MBTI (and other type measures): I no longer use type measures as anything other than as prompts for conversations. They tempt, despite publishers best efforts, to over-simplicity and to identify individuals with their type 'labels': too many people say "I'm an ESTJ" and act on this rather than, more properly, seeing this code as a description of preference- and one among many.

Jung's model is very old and many people have taken the test too many times, risking practice effects.

Pierce J Howard's recent white paper on MBTI and Facet 5 calls into question the applicability of the model to the whole population and the basic technical assumptions



of MBTI. This dissatisfaction has led to the creation of a number of tools using similar methods but with a number of improvements.

EI: It's not clear yet what EI is – a competence, a personality factor or whatever. It's therefore not possible to say definitively whether it's trainable. Existing EI tests split between those which are about general population characteristics (which tend to be too clinical) and business-oriented ones. EI is not a fundamental driver in the same way that personality characteristics seem to be. EI also requires VERY high feedback skills given its nature. There is no doubt that inter - and intra-personal skills are critical to leadership but I'm not convinced present tools are as good as they could be.

Personal Summary

I've dealt with and used personality tests for 30 years and indeed published and marketed MBTI, EIQ, Firo, 16PF and a number of ipsative systems over this period. I still use Hogan and some EI tools in my work, for very specific purposes, and my comparison here is not meant to imply that all tests have been superseded. Many are still useful.

But there are real concerns that testing, which is a 100 year old technology, has not kept up with both theory and business practice.

The AEM-Cube was the first tool I found that grasped this issue, reimagined assessment and packaged it in a practical, business oriented way. It's the first assessment that applies new findings in brain science to the work context, an effort which is long overdue.

What struck me as unique and important was the way the AEM-Cube explicitly links what we find out about individuals with what we need to do as organisational managers. This still seems to me to be a major breakthrough.

Things to notice / think about in the AEM-Cube Report

1. The AEM-Cube is explicit about its theoretical basis. This needs to be explained. While this can add extra time for understanding to develop, the theory is in itself fascinating and impacts on wide organisational areas.

2. People are increasingly used to psychometric terminology. AEM-Cube uses new terms which can cause initial puzzlement but, if explained carefully, wake people up and engage thinking because they're different.

3. The S-curve section of the report is very different from standard psychometrics and introduces real business issues to the discussion, rather than focusing feedback purely on internal individual issues.

4. The item responses give very clear indicators of why the results have come out the way they are

5. Maturity in Complexity is the one scale where experience can move scores upward and which therefore is amenable to classic development. It is a concept a long way distant from classic psychometrics but makes intuitive sense to people with experience of leading and being led.

6. Note that the report does not make detailed recommendations (Do this; Practice this etc) on what is the 'right' way to overcome weaknesses and build on strengths. Despite the disclaimer on most psychometrics, this sort of material suggests there are in fact good and bad scores! The AEM-Cube makes the same disclaimer but means it. Its report eschews such exhortations and concentrates on enabling the individual to understand what the case is and how this can be applied in the work/change cycle.

Ian Florance is an independent consultant applying various aspects of business psychology and advising psychometric companies. He was a director at NFERNELSON a publisher of tests for schools, hospitals and businesses and of ASE, the psychological consultancy. He has worked with a number of test publishers internationally on marketing, writing manuals, reports and test items. He was publishers' representative on the British Psychological Standing Committee on Test Standards and advised on developing European test competences. He founded and is now secretary of the European Test Publishers Group and works with Professor John Rust at the Psychometrics Centre, Cambridge University. see www.onlyconnectpeople.co.uk for more information





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