IF THE CAP FITS

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Experiences of taking INFORMS' Certified Analytics Professional exam

CERTIFIED ANALYTICS PROFESSIONAL

The OR Society has a long standing interest in analytics and in helping its members engage with the field. As part of this they have been investigating the possibility of providing INFORMS' Certified Analytics Professional award to Society members and the wider UK community. It was decided that it would be useful to have someone with first-hand experience of the exam … i.e. a guinea pig. This was where I came in.

Having agreed to take the exam I did the usual thing that any conscientious student does: next to nothing for ages and then panicked at the last minute. In many ways the panic was unnecessary; this is not a 'book-smarts' exam but one where prior experience is really the only way to pass. You do need to have significant knowledge of the concepts and methods of analytics, but I would say its one-part theory to four-parts practice. Many questions specifically focus on practice-based challenges (stakeholder meetings, problem definition, lack of data, and so on) and even where the more technical questions arise, predominantly it is on the basis of selecting the right method to fit the problem, or identifying the steps to take when model performance dips. In short, and to INFORMS' credit, this is not an exam that can be bluffed, you have to walk the walk as well as talk the talk.

It is, however, an exam I would recommend, both to analytics/O.R. professionals seeking to 'prove' their practical expertise, and to employers looking for recruits who can genuinely hit the ground running. For the benefit of anyone considering the exam I will give you my perspective on assessing your readiness and how to best prepare.

For *recent graduates* my honest recommendation would be taking the exam after working on some real-life projects. However, you may be able to lean on a mentor or more experienced colleague. The handbook gives a reasonably thorough definition of the analytics project lifecycle so will give a good idea of the topics to cover.

Specialist consultants will likely have the necessary depth to cover many of the questions. However, the bigger issue is breadth. There are many debates about what 'analytics' actually is, and definitions range from 'another name for O.R.' to 'a branch of computer science'. This certificate is definitely more at the O.R. end of the spectrum (no bad thing to my mind), and for specialists with a predominantly IT-type background there will be the need to familiarise yourself with the O.R. cannon to a fairly extensive level. However, for those from an O.R. background, this alone is unlikely to be enough. You will need a reasonable knowledge of a range of topics including data warehouses, project management and machine learning.

Ultimately I think the exam is best suited to analytics professionals working in larger companies, or those working on 'full-stack'-type projects. Whatever view you have on what analytics is, it is a wide-ranging field and the exam reflects this. For this group, working through the handbook and taking a refresher on anything that looks less familiar is likely to be enough.

Overall, I found the experience nerve wracking (my first exam in over 15 years) but rewarding, suitably challenging and definitely a source of personal achievement. As to whether it makes a massive difference to my career, well I've only had the award for one week so watch this space!

(According to the website (https://www.certifiedanalytics.org/faq.php) the pass rate is around 70% so now would seem a good time to enter. Ed)

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