

OO is NOT the Silver Bullet

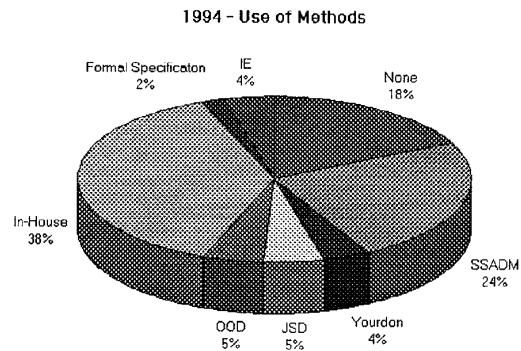
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A recurring theme within the software industry since its inception has been the problem of poor quality software. Over the last few years object-orientated (OO) approaches have been promoted as a major panacea to these ills and it is claimed [1] that already they are widely adopted. This may be true in education where a recent survey of 27 UK universities reported that all were teaching OO technology to some degree [2]. However, the same is not necessarily true of industry and one must question whether or not they are really addressing fundamental problems or are simply yet another technological fad.

Investigations carried out during the last eight years by members of the Commercial Software Engineering Research Group at the University of Sunderland have provided an insight into the changing state of the software industry. Extensive surveys [3-7] have been carried out and within each questionnaire general questions have been used to determine organisations' future plans, the constraints which are placed upon them and the problems that they encounter with regard to the area being surveyed. With regard to OO the results from our 1994 survey on method use [6] indicated that its actual adoption by industry was relatively low (5%, as shown in the figure).

Our surveys have shown that over the years there has been a continuing, if sometimes slow, increase in the use of good software engineering practices (methods, CASE and QA procedures) within the UK software industry. However, what has become very clear is that many of the reasons for the slow adoption of good practices that should lead to the development of better quality software are related not to technology but to people. I would suggest that to a great extent over the last 25 years we have concentrated too much on technological aspects (such as OO) and have failed to develop the human and organisational aspects that should be associated with any engineering discipline. As has been very clearly stated in the a recent report to the UK's Economic and Social Research Council [8] "managers often perceive their staff as costs rather than investments, as units of production, and as sources of error and unpredictability". This attitude must be completely changed. We need to see staff as the most important resource that we have and we need to ensure that they are, and are seen to be above all else professionals in an

industry which more than any other must lead the way in to the 21st century.



References.

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