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978-1-107-11208-7 - Trusting Judgements: How to Get the Best out of Experts

Mark A. Burgman

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Trusting Judgements

How to Get the Best out of Experts

Policy- and decision-makers in government and industry constantly face important decisions without full knowledge of all the facts. They rely routinely on expert advice to fill critical gaps in scientific knowledge. There are unprecedented opportunities for experts to influence decisions. Yet even the most experienced can be overconfident and error-prone, and the hidden risk is that scientists and other experts can overreach, often with good intentions, placing more weight on the evidence they provide than is warranted.

This book describes how to identify potentially risky advice, explains why group judgements outperform individual estimates, and provides an accessible and up-to-date guide to the science of expert judgement. Finally, and importantly, it outlines a simple, practical framework that will help policy- and decision-makers to ensure that the advice they receive is relatively reliable and accurate, thus substantially improving the quality of information on which critical decisions are made.

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Contents

<i>Preface</i>	<i>page vii</i>
<i>Acknowledgements</i>	<i>ix</i>
1. What’s wrong with consulting experts?	1
What do experts do?	3
So, what’s the problem?	5
We rely on expert judgement, even when we shouldn’t	15
The cause of the reliance	20
Scientific authority	21
Experts and advocates	22
Where does this leave us?	25
2. Kinds of uncertainty	27
Natural variation and lack of knowledge	32
Linguistic uncertainty	35
What is a good estimate?	39
All judgements are uncertain	42
3. What leads experts astray?	44
Status and styles of reasoning	45
Are experts better than non-experts?	52
Psychological biases	57
Conditional judgements	66
Overconfidence	68
Motivational biases	72
Culture, gender and intuition	75
The half-life of facts	80

vi CONTENTS

Experts are human	83
Who is an expert?	85
4. Dealing with individual experts	87
Structured questions for quantities	88
Structured questions for probabilities	95
Using words for probabilities	100
Beyond question format: context, interaction and analysis	104
Conceptual models	107
Discipline is worth the effort	114
5. The wisdom of crowds revisited	116
Dealing with groups of experts	121
Aggregating opinions	130
When are group judgements not worth having?	138
6. Tips to get the best out of experts	141
Advice for decision-makers	141
Advice for experts	144
The myth of expertise	148
<i>Endnotes</i>	152
<i>References</i>	176
<i>Index</i>	201

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Preface

This book is intended for people in government, regulatory agencies and business who routinely make decisions and who rely on scientific and technical expertise. So-called evidence-based decision-making has become more popular over the last decade, but often the evidence we need for these decisions is unavailable. Time, money and the pressing nature of many decisions prevent us from collecting much of the information we need. In its place, decision-makers turn to experts to estimate facts or make predictions. The status of scientific and technical experts has evolved over the last 100 years or more to provide unprecedented opportunities for experts to influence decisions. The hidden risk is that scientists and other experts overreach, often with good intentions, placing more weight on the evidence they provide than is warranted. The tendency to overreach is pervasive and more significant than many scientists and decision-makers like to admit. Much of the evidence for these phenomena is drawn from well-established research on decision theory and cognitive psychology. This book documents the extent and importance of this issue, and then outlines a suite of simple, practical tools that will assist decision-makers to make better use of expert estimates and predictions. It provides the means to discriminate good advice from poor, and to help decision-makers to be reasonably and appropriately sceptical. The book promotes a change in attitude towards expert predictions and estimates such that they are treated with the same reverence as data, subjected to the same kinds of cross-examination and verification. By requiring a little discipline from their experts, decision-makers can avoid the most pervasive pitfalls of expert judgements and assure themselves of relatively reliable and accurate expert information.

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