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0521380553 - Managing Innovation: A Study of British and Japanese Factories

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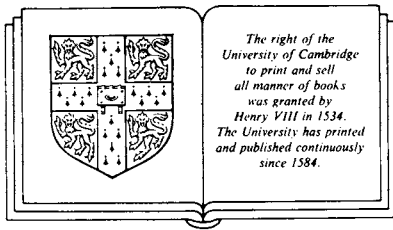
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CAMBRIDGE UNIVERSITY PRESS

Cambridge

New York Port Chester

Melbourne Sydney

Cambridge University Press
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Published by the Press Syndicate of the University of Cambridge
The Pitt Building, Trumpington Street, Cambridge CB2 1RP
40 West 20th Street, New York, NY 10011, USA
10 Stamford Road, Oakleigh, Melbourne 3166, Australia

© Cambridge University Press 1990

First published 1990

British Library cataloguing in publication data

Whittaker, D.H.

Managing innovation: a study of British and Japanese factories.

1. Great Britain. Industries. Technological innovation. Management.
2. Japan. Industries. Technological innovation. Management aspects.

I. Title

658.4'063'0941

Library of Congress cataloguing in publication data

Whittaker, D.H. (D. Hugh)

Managing innovation: a study of British and Japanese factories / D.H. Whittaker.

p. cm.

Bibliography.

Includes index.

ISBN 0-521-38055-3

1. Technological innovations – Great Britain – Management – Case studies.
2. Technological innovations – Japan – Management – Case studies.
3. Industrial management – Great Britain – Case studies.
4. Industrial management – Japan – Case studies.
5. Comparative management. I. Title.

HD45.W44 1990

658.5'14'0941 – dc20 89-33234 CIP

ISBN 0 521 38055 3

Transferred to digital printing 2004

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Foreword

Japan has been getting closer. Soon there will be over a hundred factories in Britain managed by Japanese firms. A few years ago the spread of ‘quality circles’ acquired something of the character of a missionary movement. Today it is ‘just-in-time’ manufacture which is offered as the panacea. Books and articles on Japan abound. Most people in industry, in the universities and in journalism have got some idea that the Japanese organize their affairs rather differently from the way we do, even if they would have to resort to hazy notions of loyalty, paternalism and lifetime employment if they were asked to describe in detail how they differ.

So what need for another book on Japanese industry, some might say, after a superficial glance at Hugh Whittaker’s book. But, in fact, this is not just another book on Japanese industry. First, the book is even-handedly as much about Britain as it is about Japan; a careful point-by-point comparison not only of the nine British with the nine Japanese factories in which he did his detailed field-work, but also of the national structures in which those eighteen factories were embedded. And it is a comparison which illuminates. We learn more about Japan from its being juxtaposed, point by point, with Britain: and vice versa.

And the second point is that Whittaker does not accept that *national* differences are the only kinds of differences to look for or the only kind that can be instructive. His awareness of the variety of patterns *within* Britain and *within* Japan leads him to think in terms of ‘types of employment relations’ – one type predominating in each country, to be sure, but by no means in perfect correlation. And he is able, thereby, to link up with an important tradition of thinking about how large-scale work organizations can be run.

Ever since Robert Owen, thoughtful capitalists and managers have been casting about for some way round the awkward fact that efficient production requires cooperative relationships within hierarchies – between those who do the planning and the giving of orders, and those who take the orders

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and yet at the same time they have to enter into a contractual wage-effort bargaining relationship which by its very nature is adversarial. Two kinds of solution have been offered to the problem, and Robert Owen experimented with both. One kind may be called capitalism-changing solution: the other within-capitalism solution. The first consists of various proposals for the radical restructuring of the ownership function – cooperatives, employee ownership trusts, profit-share schemes – which remove, or substantially modify, the adversarial element in wage determination. The other kind, staying within the conventional capitalist framework with its trade-off between wages and dividends which at least in the short term is zero-sum, has involved styles of management – human relations skills, in one much-favoured formulation. After all, some would argue, in the long term the trade-off between wages and returns to capital need *not* be zero-sum; there can be significant joint gains if ‘the two sides’ of industry cooperate with each other. And in any case, all human relationships, from marriage or parenthood to customer/store clerk contacts, contain both cooperative and zero-sum adversarial elements. It is always possible, by taking thought, to accentuate the cooperative and play down the adversarial.

So, for instance, MacGregor, with his X-theory and Y-theory, suggested that if you treat people as if you expected them to be ready to put effort into doing a good job and making the firm prosper – refrained from suspiciously checking up on them, for instance – they would actually work in a way conforming to those expectations. Alan Fox took the discussion further in his distinction between a ‘high-trust firm’ in which workers can be expected to work ‘responsibly’ because managers accept reciprocal responsibilities (especially the responsibility to be honest) towards the workers, and a ‘low-trust firm’ in which any would-be Y-theory manager would be likely to suffer grievous disappointment and revert to suspicious, ‘give ’em an inch and they’ll take an ell’, X-theory assumptions.

Here, Whittaker has used his empirical observation of the normal, standard practice in Britain and Japan, and combining it with these theoretical ideas, to spell out in some detail the sort of *organizational* characteristics, the ‘type of employment relations’, which one would expect to lead to ‘high trust’ cooperativeness – ‘organization-oriented employment relations’ – and the alternative type – ‘market-oriented employment relations’ – which one would expect to lead to an accentuation of adversarial wariness. The former is characterised by long-term job security as opposed to short-range hire and fire; rate-for-the-person incremental-scale, as opposed to rate-for-the-job, wage structures; relatively predictable career promotion patterns as opposed to wholly discretionary promotion patterns and uncertain prospects; union structures that reinforce a sense of organization membership as opposed to occupational membership.

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And, lo and behold, when he scores his firms on a variety of these characteristics, the correlation between type and country is not perfect. There is some overlap. There are two Japanese firms which are more 'market-oriented' than at least five of the British ones.

It is worth noting, apropos the distinction made earlier between capitalism-modifying solutions and within-capitalism solutions to the cooperation/adversarial opposition problem, that the two Japanese firms with 'market-oriented employment relations' are small, individually-owned, 'pure capitalist' firms. Larger Japanese firms, as Whittaker points out in his second chapter, do significantly constrain exercise of the ownership function. There are many elements in this; high debt–equity ratios; interlocking patterns of shareholdings by a firm's bankers, suppliers, insurers, distributors; minimal year-to-year variations in dividend levels; above all an effective taboo on hostile take-overs, reflecting a dominant social perception of the firm as a community of people rather than as a piece of shareholders' property. The shareholder is not as sovereign in practice as Japanese company law says he is – or as, *both* in law and practice, he is in Britain.

So the fact that the two 'market-oriented' Japanese firms are firms to which all these constraints on the ownership function do not apply may be significant. It may mean that effective, wholly 'within capitalism' – at least 'within pure capitalism' – solutions to the problem do not exist. Some modification of the absoluteness of capital-ownership rights may be a precondition for any successful attempt to accentuate the cooperative, and minimize the adversarial elements in the wage relationship.

But Whittaker takes the story very much further than that. He asks about the efficiency aspects of these patterns of employment relations, which he studies through careful examination of one particular pattern of change – a change which all his 18 factories had experienced – namely, the introduction of new machine tools controlled, not by men's eyes and hands like traditional machine tools, but by computers.

His findings are interesting, and sometimes counter-intuitive. Japanese firms give workers put on to the new CNC machines not more training than do the British firms, but less. But they do seem to expect faster and more extensive learning on the job, and more learning from books. And they have a more broadly defined range of tasks to perform. Factory size seems a potent determinant of training patterns in both countries; the difference between standardized large-batch work and specialized small-batch work less so.

In exemplary, textbook fashion, Whittaker framed his data collection around a set of hypotheses concerning training and the division of labour. In the end, as will occasion no surprise to anyone except the people who

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write the textbooks, his most interesting observations have to do with something other than the testing of his hypotheses – namely the difference, of which he gradually became aware, between what he calls the ‘technical’ approach which dominated in Japan, and the ‘craft’ approach which dominated in Britain. (‘Technician approach’ and ‘craftsman approach’ might be alternative names.) The Japanese are ready to turn their craftsmen into technicians – to embrace CNC machines as a means of replacing uncertain audio/visual/manual skills which depend on ‘knack’, with precise intellectual skills for solving problems with right-or-wrong answers. British workers and managers, by contrast, were reluctant to give up the idea that the CNC machines should only be run by people who had a feel for metals and could tell from the sound of the tool biting into the work-piece whether the speeds and feeds were right or not.

And in the end this distinction has to be expressed as a Britain/Japan difference, not a difference between organization-oriented and market-oriented employment relations, because, as Whittaker shows, it is a difference determined by *society-wide* and not *organization-specific* variables. ‘Media-climates’ – what the newspaper and trade magazines say about CNC machines and what counts as success in using them – are national. So are educational systems, and Japanese schools produce much higher levels of numeracy and more people with the intellectual self-confidence to learn from instruction manuals, than the British. Faster rates of growth have made the Japanese more generally enthusiastic about technical change, more willing to write off the old and cheer in the new. (Or is it that more gung-ho attitudes towards change have produced faster rates of growth?) A society in which organization-oriented employment patterns are the *norm* does not have the craft unions of a market-oriented society like Britain, hence does not have the apprenticeship patterns that go with them – nor the mystique of craft, nor the hard status privileges attached to skill labels which their owners naturally resist seeing eroded.

All of which would seem to point to the moral that, if you want to make industry more efficient, it is not enough to rely chiefly on exhorting *employers* to mend their ways, while taking care of the societal variables only by squashing the unions and creating City Technology Colleges. Just how much the characteristics of society as a whole constrain attempts to alter the organization and ethos of particular firms within it is shown in Whittaker’s analysis of the extent to which British firms are edging along his continuum towards more organization-oriented patterns. One firm’s attempts to change its job-grading system (for greater ‘flexibility’), and to ‘harmonize’ (to give the same conditions of employment to both manual and non-manual workers) may have effects on work practices and attitudes (in the cooperativeness/adversarial antagonism dimension, that is to say),

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but those effects will be seriously limited by the fact that the changes have to work through and against the norms and interest-constellations of the society as a whole.

It is its sensitive handling of the complexity of all these dimensions, as well as its boldness of scale (detailed case studies of one or two factories are usually enough for most researchers), which make Whittaker's book such a valuable contribution. And it is the graphic detail of shop-floor life and work which make it such an interesting book to read. Those who want to know how to run factories efficiently, those who want to know whether Britain is likely to catch up with Japan, those who want to know whether new technology is the means by which capitalists exercise greater control over and extract greater surplus value from their workers, those who want to know how to promote industrial training, and those who just want to read a good piece of sociology, will all get something out of this book.

Cambridge, Massachusetts

RONALD DORE

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Acknowledgements

I would first like to thank all the people in both the British factories and the Japanese factories I visited for graciously receiving me and patiently answering my many questions. Unfortunately, they must remain nameless, but I have tried to respect and record their experiences and ideas rather than treating them as statistical objects.

I would like to thank Ronald Dore, who gave me invaluable advice and encouragement from beginning to end; also Roderick Martin for his help and many useful comments; Sandra Dawson and other members of the DSES (now Management School) faculty at Imperial College; and William Brown of Cambridge University.

My thanks in Japan go especially to Takeshi Inagami for his help and comments; also to Yasuo Kuwahara, and Osamu Hirota and the staff and researchers of the Japan Institute of Labour; Naoyuki Kameyama of the NIEVR, S. Yahata, O. Yokokawa, T. Koseki, K. Mori and K. Watanabe.

Part of the research in Japan was funded by the Central Research Fund of London University. A fellowship from the Program on US–Japan Relations, Harvard University made the writing up possible, and I would like to express my appreciation to Susan Pharr, Ezra Vogel, Mitchell Sedgwick and the staff and associates of the Program.

My thanks to CUP and especially Patrick McCartan and Trudi Tate for making publication of this book possible, and finally to Toshie, also, for all her patience.