

Contents

<i>List of Figures</i>	ix
<i>List of Contributors</i>	xi
Introduction: Silences, and Beginning to Fill Them <i>Daniel M.G. Raff and Philip Scranton</i>	1
 Part I. Initiatives	
1. The Book-of-the-Month Club as a New Enterprise <i>Daniel M.G. Raff</i>	21
2. Capitalist Routine, Organizational Routines, and the Routinization of Research and Development at Alcoa <i>Margaret B.W. Graham</i>	50
3. The Global in the 1980s and 1990s: Liquid Modernity, Routines, and the Case of Motorola's Iridium Satellite Communications Venture <i>Martin Collins</i>	81
4. The Dynamic Interplay between Standards and Routines: Lessons from Industry and Government <i>Andrew L. Russell and Lee Vinsel</i>	111
 Part II. Operations	
5. Ford Motor Company's Lost Chapter: Purchasing Routine and the Advent of Mass Production <i>Damon Yarnell</i>	139
6. Heuristics, Specifications, and Routines in Building Long-Span Railway Bridges on the Western Rivers, 1865–80 <i>John K. Brown</i>	171

Contents

7. Rules of the Game: Dam Building and Regulation in California, 1910–30 <i>Donald C. Jackson</i>	204
8. Instruments of Change: Contract Regulations as a Source of Flexibility in Defense Procurement, 1942–72 <i>Glen Asner</i>	239
 Part III. Transitions	
9. The End of Judgment: Consumer Credit Scoring and Managerial Resistance to the Black Boxing of Creditworthiness <i>Josh Lauer</i>	269
10. Devising Routines for Project Appraisal at the World Bank, 1945–75 <i>Michele Alacevich</i>	288
11. Routines for Innovation: Problem-Oriented Knowledge Communities and the Production of Clean Combustion <i>Ann Johnson</i>	314
Conclusion: Learning from History <i>Daniel M.G. Raff and Philip Scranton</i>	337
<i>Index</i>	351

List of Figures

3.1.	Table of Contents, from Moorthy et al., <i>Uncompromising Integrity: Motorola's Global Challenge</i> .	96
3.2.	Defining Culture, from Moorthy et al., <i>Uncompromising Integrity: Motorola's Global Challenge</i> .	97
3.3.	Virtual factory concept, emphasizing how institutions and technologies, geographically dispersed, are coordinated through the project and share a common set of goals and practices.	106
3.4.	For each process step, the "process icon" specified the information, material, facilities, and time required to perform the step.	107
3.5.	A shorthand (and obviously self-promotional) characterization of the differences of the basic organizing assumptions of Cold War projects ("existing capability") and those perceived to be necessary in a market-driven context.	108
5.1.	Purchasing forms.	145
5.2.	Stock tags.	146
5.3.	Branch parts sales memo.	147
5.4.	Requisition protocol.	149
5.5.	Fred Diehl's uniform invoice pamphlet.	168
5.6.	Fred Diehl's uniform invoice.	169
6.1.	This map shows the twenty-six long-span railway bridges built on the Ohio, Mississippi, and Missouri rivers between 1856 and 1879.	175
6.2.	Keystone Bridge Company published these partial views of the Steubenville Bridge in its 1874 catalogue.	177
6.3.	American Bridge Company completed the eleven-span Omaha (to Council Bluffs) Bridge for the Union Pacific in 1872.	184
6.4.	Keystone Bridge Company completed the twelve-span Keokuk and Hamilton Bridge over the Mississippi in 1871.	185
6.5.	The St. Louis Bridge in the 1880s, looking at the Missouri shore in the distance.	189
6.6.	The main structural members supporting the St. Louis Bridge.	191

List of Figures

6.7.	This image shows how the two chords or steel beams in each rib land on the piers, passing dead and live loadings into the stonework.	193
6.8.	Completed in 1869, the Truesdell Bridge was the first iron bridge across the Rock River, its five spans each 132 feet long.	198
7.1.	Elephant Butte Dam, built by the U.S. Reclamation Service and completed in 1916.	207
7.2.	Big Bear Valley Dam north of San Bernardino, California, shortly after completion in 1911.	208
7.3.	Detail view of a strut-tie beam designed to provide lateral support for the buttresses of John S. Eastwood's Big Bear Valley Dam.	210
7.4.	Multiple arch dam at Big Meadows under construction in the summer of 1912.	211
7.5.	Downstream side of Ashokan Dam (sometimes called Olive Bridge Dam) shortly after completion in 1913.	215
7.6.	After the Great Western Power Company abandoned his Big Meadows design, Eastwood's next project was the 60-foot-high Los Verjels Dam north of Sacramento.	218
7.7.	Murray Dam near San Diego, 1918.	219
7.8.	Eastwood's "radial plan" design for Littlerock Dam proposed in late 1918.	224
7.9.	Upstream side of Littlerock Dam in 1979.	224
7.10.	In the 1920s Eastwood innovated with "curved face" multiple arch designs but was never able to build such a design in California. Completed in 1923 to provide flood control for Phoenix, Arizona, Cave Creek Dam is perhaps his most remarkable and elegant structure.	227
7.11.	The Grand Dam in Oklahoma under construction in 1939 featuring the double-walled, hollow buttresses that Fred Noetzli proposed in 1924.	228
7.12.	St. Francis Dam in the San Francisquito Canyon north of Los Angeles after completion in 1926.	229
7.13.	Remains of the St. Francis Dam after March 12, 1928.	230
7.14.	Boulder/Hoover Dam near Las Vegas, Nevada soon after completion in 1935.	23