Lessons from the History of Automation:
The Case of the Luddites
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BINGHAMTON UNIVERSITY
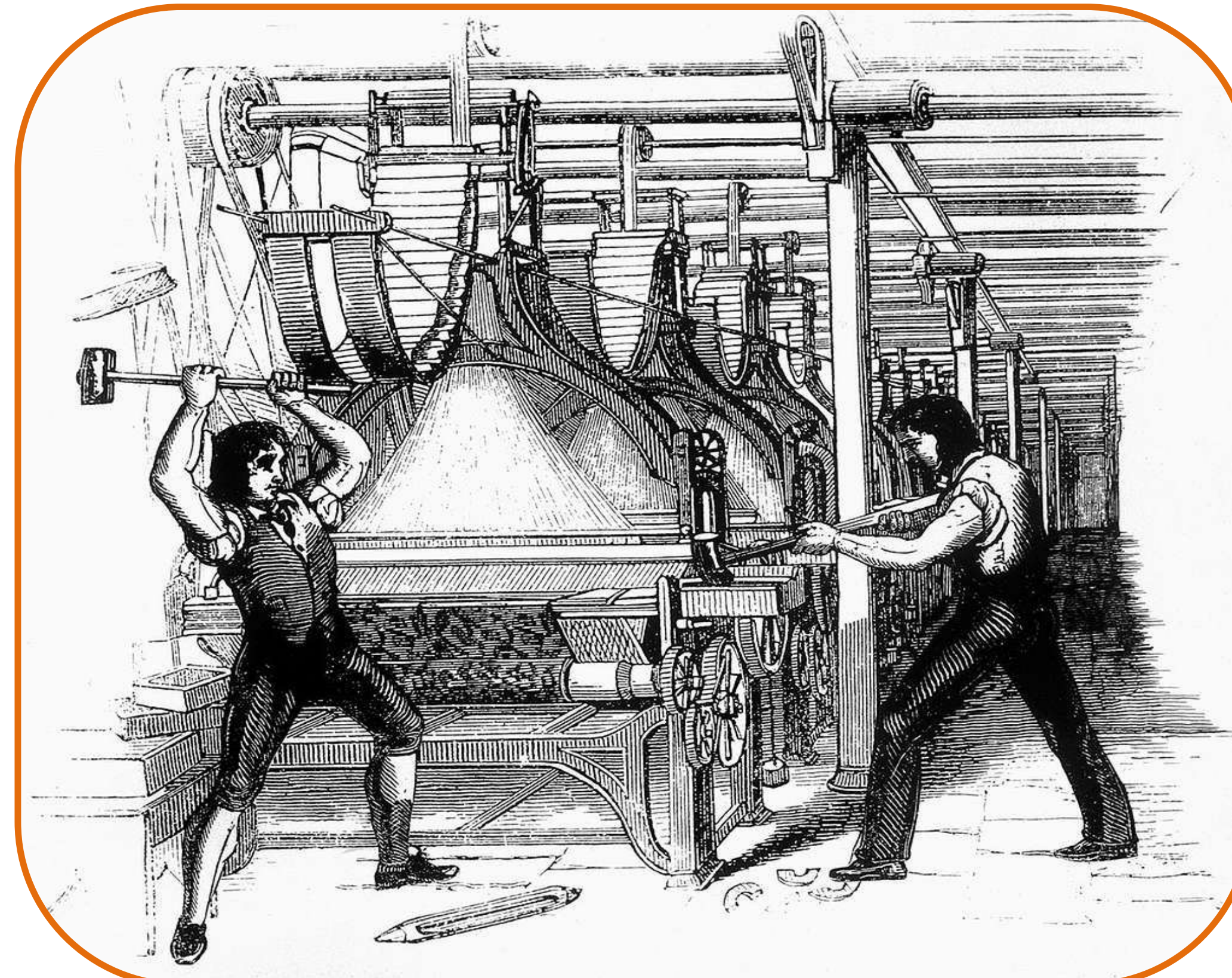STATE UNIVERSITY OF NEW YORK

Bibliography

Background
- There is increased fear of automation today, but predicting the consequences of innovation is often difficult
- Analyzing past eras of transformation such as the British Industrial Revolution can help us understand current and future challenges

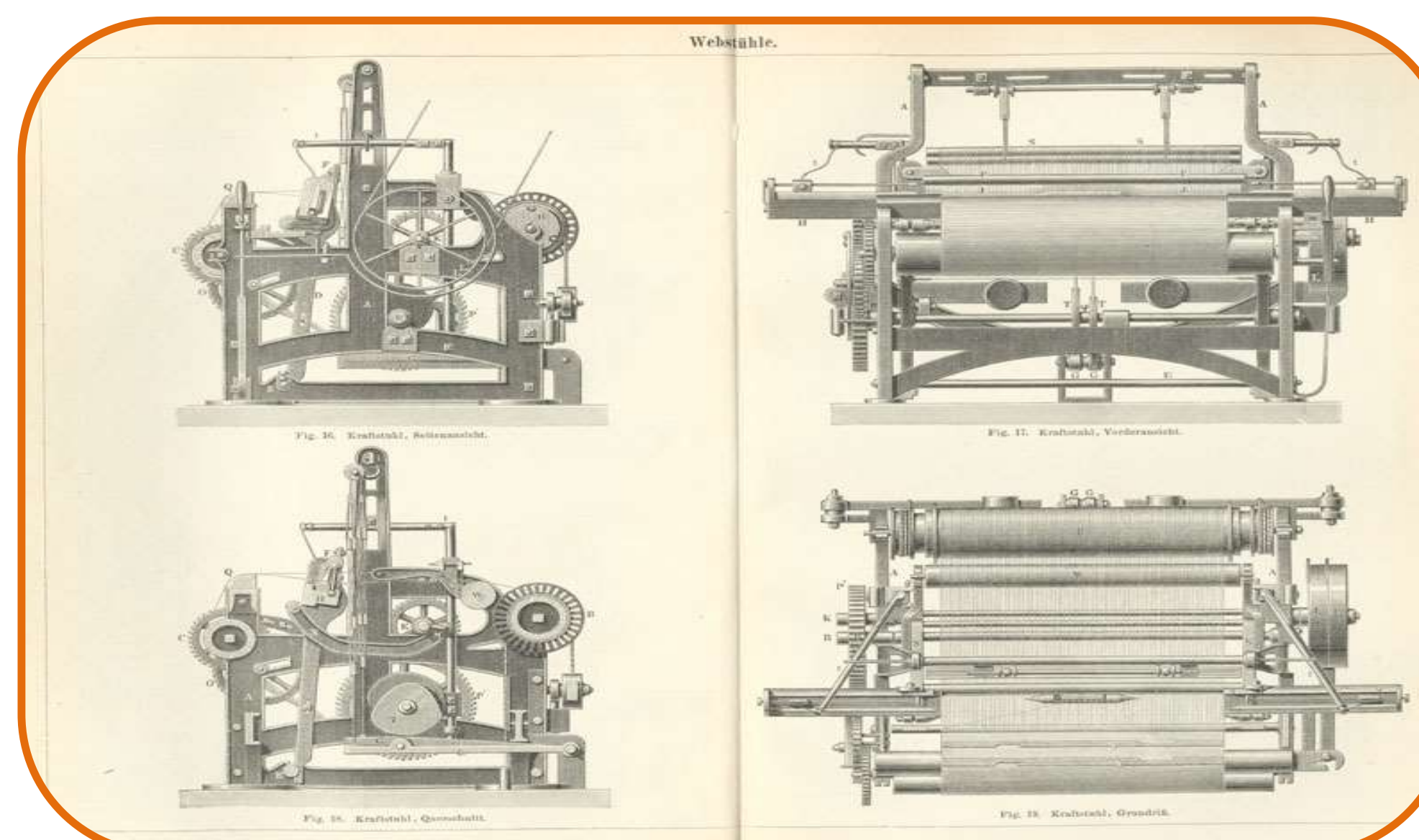Picture of Ned Ludd

Consequences of innovation
- Real wages only rose by around 12%, while production from workers rose by 46% from 1770 to 1840
- Riots caused new legislation making machine-breaking a capital offense.

Drawing of Luddite machine breaking

About the Luddites
- Active 1811-1817
- Movement of skilled textile workers during the Industrial Revolution who had to compete with new power-loom textile production
- Some lost their jobs and others worked for lower wages
- Not much was done about their predicament
- They protested by breaking the machines that unemployed them
- Their riots often range from small 10-15 luddites to over a hundred at a time.

Blueprint of a power loom

About Automation
- Routine jobs are most risk of automation
- More jobs could be replaced as technology evolves
- Technology can be labor-saving and labor-augmenting
- The problem of automation can get better or worse as time goes on

Benefits of Innovation
- Increases production and economic development
- Increases the standard of living in the long term
- New markets and job opportunities
- Some can improve labor productivity for workers.

Consequences of innovation
1. Lower labor demand from labor-saving technology
2. Unemployment and job displacement
3. Social unrest from poverty and loss of jobs
4. Increased income inequality due to stagnant wages
5. Possible political crises

Selected Sources
- "Engels' Pause: Technical Change, Capital Accumulation, and Inequality in the British Industrial Revolution" by Robert C Allen
- "The Luddites: Machine Breaking in Regency England" by A. J. Peacock and Malcolm I. Thomis
- "The Technology Trap: Capital, Labor, and Power in the Age of Automation" by Carl Benedikt Frey