Mail Volume Up, Postal Workers Down: 
Technological Change and (Un)sustainability in the Postal Industry 

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Every industry in our economy is about getting something done -- moving materials or people from one stage to another. The automobile industry assembles steel, glass, rubber, and plastic into finished vehicles. Auto workers' knowledge of that process and their power to hold it up give them leverage to improve their compensation and working conditions.

Henry Ford revolutionized auto production by identifying and automating its core process -- assembly. Over the past forty years, U.S. Postal Service managers have revolutionized their industry by automating its core process -- letter sorting. This paper will describe the automation process, its impact on workers, and some steps their unions can take to regain their lost leverage. We focus on the American Postal Workers' Union, whose members sort mail, but our conclusions also apply to the three other unions in the industry. Our sources include interviews with APWU leaders and members in New England, public testimony by postal union and industry leaders, Postal Service documents, a tour of USPS facilities, and USPS videotapes on automation.

KEY TECHNOLOGIES AND AUTOMATION

The postal system moves billions of pieces of mail from unique senders to unique recipients. Its core process is sorting the mail so that each of those pieces ends up in the right place. Automating that process means creating machines that recognize the addresses on each piece of mail, no matter how illegibly it is written or where on the mail piece it appears; assigning it a unique value corresponding to its unique recipient; and routing it into a series of streams that end up in the right place.

This became possible with the creation of the bar code and of Optical Character Readers which could convert the information in a written address to a bar code, which could then be scanned to send the letter to its recipient.

Over four decades, Postal Service management has invested billions of dollars in Optical Character Readers (OCRs) and Letter Sorting Machines (LSMs). These new technologies have revolutionized sorting and mail handling, the heart of the mail delivery process. Instead of postal workers, OCRs now read the address on a letter or package. They then spray barcodes onto those mail pieces. LSMs scan the barcodes, sort the mail, and route it to the proper city, zip, and now carrier route. Generation after generation of these machines have refined the process and applied it to an ever greater portion of the total mail flow.

The drive to automate coincided historically with a drive to privatize. The Postal Service's alleged slowness and inefficiency helped make it an early target for free market advocates who sought to shrink bloated government bureaucracies and give their work to more efficient private companies. Bar coding and optical character recognition let the Postal System outsource much of
its work by sharing the technologies with presort houses, which now spray bar-coded addresses onto billions of mail pieces and then feed them into the Postal Service's sorting stream; and mail transport companies like FedEx, which move much of the mail from one city to another.

A similar process transformed the Information Technology industry. In the 1960s, the industry was dominated by one vertically integrated company, IBM. But establishing a uniform set of software codes and standards made it possible for many new, competing enterprises to develop new products and integrate them into a common stream. The Old Business Model of vertically integrated semi-monopolies gave way to a New Business Model with vertically specialized, highly competitive enterprises. (2)

In the postal industry, universal bar codes and standards are fragmenting the old, vertically integrated Postal Service monopoly. Taking its place are vertically specialized, competing providers of persorting, mail transport, and mail delivery. The fragmentation may never be complete, partly because it is presently more profitable for the new companies to feed into a common semi-public sorting system. But new Postal Service initiatives promise more fragmentation via:

- Automated Postal Centers or kiosks that let customers weigh mail, buy postage and insurance, look up ZIP codes, and otherwise bypass work presently done by mail clerks.
- The FedEx partnership with a non-union company that handles more profitable express and package mail.
- Outsourcing letter delivery to individual "contractors" who receive mail already sorted into house-by-house packages.

A fuller list of incoming technologies and their impact on the workforce appears in Table 1.

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<th>I. Changes in technology</th>
<th>II. Changes in work organization</th>
<th>III. Impact on the workforce</th>
<th>IV. Impact on unions</th>
<th>V. Impact on sources of inherent power and leverage</th>
<th>VI. Strategies for inserting workers' collective voice and making jobs more sustainable</th>
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<tr>
<td>Optical Character Readers (OCRs)</td>
<td>Disconnect transfer and control of information from the sorting and transport of physical letters and packages</td>
<td>Reduce crew sizes</td>
<td>Increase isolation</td>
<td>Increase stress</td>
<td>Enable outsourcing to presort houses</td>
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<tr>
<td>Multiline Optical Character Readers (MLOCRs)</td>
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<tr>
<td>Postal Automated Redirection System (PARS)</td>
<td>Find addresses for “undeliverable” mail &amp; process Change of Address forms</td>
<td>Will save 2.8 million work hours (1700 FTEs)</td>
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<td>POS ONE automated cash</td>
<td>Fully integrate accounting,</td>
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Table 1.
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<tr>
<th><strong>register and data terminal</strong></th>
<th>marketing, payroll, and sales</th>
<th>analyze customer demand → split shifts and increase temp employment</th>
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<tr>
<td><strong>Automated Postal Centers</strong></td>
<td>Let customers weigh mail, buy insurance and postage, look up ZIP codes…</td>
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<td><strong>Delivery Point Packaging (DPP)</strong></td>
<td>Package mail for delivery</td>
<td>Cut letter carriers’ sorting time, increase their time on the street Make it easier to use temp and part-time workers or contract out mail delivery</td>
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<tr>
<td><strong>Advanced Facer Canceller System OCR Enhancement MLOCR Replacement</strong></td>
<td>Reduce manual handling</td>
<td>Eliminate 1,896 positions</td>
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<tr>
<td><strong>Automated Package Processing System</strong></td>
<td>Eliminate machine and manual handling positions</td>
<td>Save 21.5 FTEs per machine</td>
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<td><strong>Flat Sorting Machine Automation-Automated Tray Handling System</strong></td>
<td>Automatically sweep full trays from the AFSM</td>
<td>Eliminate 1 to 2 clerk sweeper positions on about 350 AFSMs</td>
</tr>
<tr>
<td><strong>Improvements to Remote Bar Code Read and Consolidation of Remote Encoding Centers</strong></td>
<td>Reduce need for remote encoding as automation rates increase</td>
<td>Eliminate 1600 clerks and maintenance workers</td>
</tr>
<tr>
<td><strong>Summary of changes till now</strong></td>
<td>Fewer people doing more work Automation Intensification of work</td>
<td>Workforce dropped 45,181 in three years (1999-2002) Loss of faith in union’s ability to deal with larger changes Increased day-to-day problem solving “Killing solidarity”</td>
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IMPACT ON THE WORKFORCE

Thanks partly to LSMs and OCRs, the volume of mail handled per Postal Service worker has grown by 13% since the early days of automation in 1971 (3). But this increased productivity has come at a heavy price. Postal workers are working unsustainable schedules, speedups, repetitive stress injuries, with less job security, alone. New technologies have allowed postal managers to reorganize the work process, decreasing workers’ control over the pace and flow of work. This undercuts their unions' bargaining power and allows management to introduce still farther-reaching changes like those in Chart 1. Postal unions' power is also shrinking as outsourcing grows and more non-union workers enter the postal labor market. Let us examine these changes one by one.

The postal labor market.

Automated letter sorting technologies have not just transformed the postal workplace, they have redefined the postal industry. When letter sorting was done by Postal Service workers in Postal Service worksites, the industry was a regulated semi-public monopoly with a few package delivery and direct mail companies operating on the margins. Now the industry is decentralized and competitive, with private companies taking chunk after chunk of the Postal Service's work. Mail volume has grown by 133% since the beginnings of the postal automation program in 1971, while the Postal Service’s workforce grew by only one-sixth (4).

Almost all the increase in mail volume has been absorbed by "presort houses." Large-volume mailers such as utility companies send their mail to presort houses which share USPS technology. Like the Postal Service, presort houses scan their clients’ letters, make necessary address changes, spray barcodes onto the envelopes, and feed them into the Postal Service's mail stream partway down the river. For this they receive a postal discount which pays their operating costs and a profit margin. The growing presort industry in turn lobbies for deeper presort mail discounts.

The presort houses are a built-in lobby for shifting more and more postal work away from the Postal Service, and they are a lobby that the Postal Service set up to compete with itself. Congress and USPS managers create presort discounts. Then USPS seminars show presort mailers how to prepare mail properly. As the Postal Service's Chief Marketing Officer put it:

> Partnering with customers through worksharing has been one of the major success stories of the Postal Service over the past thirty years. This $15 billion a year partnership has provided affordable marketing alternatives for customers, cost reductions for the Postal Service, and has been a primary source of growth for the mail. Worksharing has also been an engine of change for the Postal Service. It has helped usher in the age of automation by encouraging customers to prepare machine-readable mail and has remained an important tool for aligning the mail with the operating environment. (5)

Automation and competition, the two trends reshaping the postal industry, are actually a single cycle. New technology enables competing enterprises to do Postal Service work such as preparing mail for sorting. The new competitors and technology vendors grow into "engines of change" that lobby for deeper presort discounts. Deeper discounts in turn create opportunities for
profitable technological innovation and development. It is a self-amplifying cycle, but it took a decades-long push from USPS management to start this built-in outsourcing machine turning.

**Decreasing union density**
From the union's perspective, when the Postal Service *was* the postal industry, unions represented nearly all the industry's workers, and union contracts set they industry's standards for wages, benefits, and working conditions. The few private companies on the margins of the industry did not compete directly for the work that Postal Service employees did.

Today the growing non-union postal industry is increasingly setting the industry's standards. As postal unions lose density throughout the industry and power over the work process, postal workers are experiencing:

**Stagnant wages and shrinking benefits.**

**Speedup and repetitive stress injuries.**

**Unsustainable schedules.** In March 2004 the Postal Service stopped processing mail on the day shift and moved it to the afternoon shift, disrupting workers' schedules and making it hard to have a life outside work. Stress shot up and it has stayed up. "I was out of my mind," said one postal worker. "I was talking to the dog."

**Less job security.** With jobs constantly being eliminated by new machinery, postal workers constantly wonder what's next and who's next.

**Isolation.** Social interaction is known to reduce stress on the job, but today's postal worker is interacting less because machines are doing more of the work and it takes fewer employees to service each machine. Multi-Position Letter Sorting Machines, for example, required a 15-18 person team. They were replaced by Multi-Line Optical Character Readers that take two workers, one loading letters into one end while the other removes them from the other. At the end of the day, "You feel a need to declare your humanity and say, 'I am a person,'" said a former MLOC operator.

**Demoralization.** Work reorganization creates more problems and divisions in the workplace, adding to stewards' workloads. As postal unions lose members, dues, power, and places to build solidarity in the workplace, their members lose hope and confidence in the unions. As the President of the APWU's Central Massachusetts Local said, "automation is slowly killing us. There's not much you can do, they are contracting out as much as they can and the amount that they can contract out is increasing daily." (6)

These examples come from interviews with workers who carry out the postal industry's core process, sorting mail. Anecdotal evidence from workers elsewhere in the Postal Service suggest that they face similar pressures as new technologies enter their workspace. Mail handlers, for example, pick up mail from letter boxes and large-volume mailers. Presort houses now handle a growing share of the mail, effectively moving the work from union to non-union workers. The presort industry has also proposed private mailboxes to collect letter mail, especially at peak times; this would further cut the unionized workforce. (x)
Letter carriers, to take another example, used to spend the start of their workday breaking their mail into carrier routes. That sorting is now done by machine, giving letter carriers more time which managers fill by giving them more routes to cover. This increases the physical load of the job, keeps letter carriers from talking together in the post office while they sort their routes, and shrinks the space for building union solidarity. The letter carriers' union is being fragmented as they are turned into delivery machines.

This process will intensify in 2006 or 2007 when the USPS will roll out Delivery Point Packaging. DPP takes all the mail going to a given address and bundles it. DPP will eliminate manual sorting, speed delivery, and make it possible for each letter carrier to cover still more routes.

The condition of rural letter carriers may show where this is heading. Rural letter carriers are contract employees because of the sparseness and variability of their work; they are paid by their volume of work. One Vermont letter carrier reported that every four months an efficiency specialist follows him to record the volume of work he is doing. If it is deemed too low, more routes can be added or his pay can be cut. Delivery Point Packaging may provide a similar way to monitor urban letter carriers, pressure them, and ultimately contract their work to temporary or non-union workers.

STRATEGIES FOR CHANGE

No industry has gone farther than the postal industry in capturing workers' knowledge and collective control of the work process. As USPS managers have cut the labor required per piece of mail and increased the productivity of postal workers, they have undercut their power to demand a share of the productivity gains, even though postal work is intensifying and taking more out of each worker. Henry Ford used some of his productivity gains to pay assembly line workers higher than average wages. USPS managers are using their gains to hammer postal workers twice, in the workplace and the labor market. Postal workers and their unions can try to reverse their shrinking power and make postal jobs sustainable by:

- "Finding out what the other side is eating for breakfast." Research management's goals, the new technologies and work reorganizations they plan to introduce, and their next steps, along with obstacles to work reorganization that unions can use to gain influence in the process.
- Internal education that calls up workers' intimate knowledge of the changes they are experiencing, integrates it into a picture of the whole system, and identifies points to organize around.
- Developing a unified union response to management's automation-and-outsourcing drive. This means:
  - Pulling together the letter carriers', mail handlers', and postal workers' unions;
  - Developing a common strategy; and most important,
  - Unifying and energizing the membership. These three pieces interact: as members process the research, pool their own experiences, and develop strategy, they can gain confidence.
• Bargain with management over every change in work processes and gain some influence over them.
• Go to the public. The Postal Service is a semi-public entity and Congress influences its future. At present, the public has some unhelpful attitudes about postal workers. If postal workers can identify their deteriorating working conditions with other workers’, they can change those attitudes. They can also draw on the public's sympathy for the letter carriers and clerks they know and talk to, as the Teamsters did for UPS drivers during the UPS strike.
• Organize unorganized companies (for example, presort houses) and rebuild union density in the postal industry.

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FOOTNOTES


(3) Richardson and Lessin, op.cit., p. 18.

(4) ibid.

(5) Statement of Anita J. Bizzotto, Sr. Vice President and Chief Marketing Officer of the U.S. Postal Service before the President's Commission (U.S.), March 31, 2003