Section Seven: Changing Schedules, Part I: Policy, Technology, and Expertise

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As the previous sections demonstrate, scheduling is a complex challenge that plays out differently depending on a business's size, location, industry, and philosophy toward its employees. How an employer divvies up shifts among his or her employees may also depend on those employees' obligations outside of work, how they get to work, and when they prefer to work. Accounting for so many scheduling variables often calls for systems that gather that information, combine it, and help to build shift schedules that best combine everyone's needs and preferences. Naturally, technology has stepped into this space to offer solutions. This technology has recently evolved from largely employer-focused programs that optimized schedules to heighten revenue to more balanced systems that bring workers into the scheduling process, giving them the opportunity to communicate with one another and their managers and to have some control over when and how often they work.

Where compromises and solutions may be more elusive, policy may play a role in changing or eliminating scheduling practices that have become particularly damaging to workers and their families. To craft workable policies that cover a wide swath of businesses, though, several interviewees we spoke with for this issue stressed that policymakers should be aware of the scheduling needs and limitations of different types of businesses and take into account what's being done on the ground, to avoid hindering employer-instituted scheduling solutions that are already in place and working for some businesses and their employees.

Workforce management professionals may also be valuable resources for companies seeking to bridge the employer and employee sides of the scheduling conversation to create a solution that works better for both business and worker. These professionals also bring data and analytics to the table to help businesses dispel preconceived notions about how shifts need to be scheduled in order for their particular business to run at its optimal level.

Below we speak with a policymaker about legislative efforts around scheduling and with two technology entrepreneurs who have developed apps that bring workers more directly into the scheduling process. We also discuss with a researcher and a workforce management expert how the scheduling landscape has changed for employers in recent years, and consider what a truly optimal schedule might look like and the benefits it could reveal by incorporating the needs and constraints of both workers and businesses.

"I think that it's our job as legislators to do everything that we can to try to level the playing field."

Senator Cindy Friedman is senator for the fourth Middlesex district of the Massachusetts state senate. This interview was conducted on August 8, 2017, and has been lightly edited.

Q: What does the scheduling bill currently moving through the Massachusetts legislature [S1000] call for?

A: The bill addresses the issue of constantly changing work shift schedules. The purpose of the bill is to create predictable schedules for workers. This has become an issue particularly in big-box stores and fast-food restaurants because of the availability of software that tracks moment-to-moment, day-to-day, and week-to-week sales and trends and allows an employer to change a shift schedule in a minute.

We've worked on two different versions of the bill. The first version more broadly addressed all of the issues that come up because of just-in-time and on-call scheduling. The most recent version hones in on on-call scheduling and treats being on call the same as being physically present. The language that we filed this year basically says that if you're on call, you get paid, because you can't do anything else during the time you're on call—you're working. It's only fair.

Q: Why are you interested in this issue, and why do you feel it is important for Massachusetts right now?

A: I think it's important because it's part of a larger context and a larger trend: the incredible disparity between the haves and the have-nots. There's a whole array of things that you can look at—minimum wage, what we truly pay for really important services, where our money goes, and who gets compensated. I just see an incessant beat against people in the workforce who do jobs that society considers to be not as important or not "quality" jobs. And they tend to be done by women, minorities, and immigrants, who don't have as much of a voice. Unless we're going to have a complete and total shift of our ethical or moral beliefs, as policymakers we need to hit this issue from many different levels.

Fair scheduling is one of the places where you see disparities. As long as we have people who are only interested in the bottom line, or in their stockholders, or in making more money, the gap will grow. This bill is one way of trying to chip away at the disparity: if you're not going to start engaging in what a fair system would be, then we're going to have to start regulating it. And if you can tell us some other way to do it, we're really happy to listen.

Q: Are there particular industries in which, or types of workers for whom, you feel like the legislative approach is most important or effective?

A: I think everybody should get a fair wage for a fair day's work. Where we see the scheduling issue exacerbated is in big-box retail, the fast-food industry, and the restaurant industry. These industries are heavier users of technology to figure out workers' schedules and have the ability to do quick turnaround on schedules with short notice. They could also use this technology to add predictability.

Q: As you've been working on and revising the legislation, what kind of input have you gotten from workers themselves or from worker advocates that's helped you think about the bill?

A: What we've gotten from workers *is* the scheduling issue that was raised. The first people we talked with were from a restaurant-worker advocacy organization, and that's how we became aware of these problems. Senator Elizabeth Warren filed a bill in Congress on the same issue. Workers told us how difficult it was to have predictability in their lives. Childcare, home care, going to school, having another job—all of those areas were affected because of the sudden ability to turn around schedules at the last minute or having to be on-call.

Q: Have you received any feedback from employers? Have you adjusted anything based on that feedback?

A: Some employers told us, "Oh, we don't really do this," or "We have to have the ability to turn around schedules quickly because this is the nature of our business." We also heard from a lot of employers that there's a lot of pressure in very large companies. It's not necessarily the supervisor or the manager of the store making these decisions, but they're being evaluated on making a certain amount of money in every cost period. And the cost periods they are measured on have become smaller and smaller. They don't have flexibility to smooth out employees' schedules. They have technology that tells them every minute where their sales are in that store. They feel compelled to use this technology and, because so much of their cost is labor, to shift people around so they can meet those quotas. It's really being generated from the top.

Q: Are there other strategies or ideas that you think could run parallel to or complement the legislation that could be implemented in the workplace to help to solve this problem?

A: Well, I have found that often threats of legislation help people come to the table. I know that there are a lot of large companies, for instance, that have stopped the practice of on-call scheduling. I also believe if we pay people more—if there's a higher minimum wage—then it gives people more freedom to have some flexibility in their hours and some of these scheduling issues would be helped.

Q: Are you tracking this issue nationally? Are there other states or localities that are starting to work on it?

A: Yes, we've been looking very closely at California. San Francisco passed a scheduling ordinance, and a bill was filed a few years ago in the California State Legislature. Oregon recently passed a scheduling bill. But we're hearing much more about minimum wage. Minimum wage and paid family leave are the issues that have risen to the top in a lot of states.

Q: In the past, these issues were handled by contract in many cases. Do you think that's still a viable way to deal with these issues?

A: If by contract, you mean unions, then yes. That is why we have unions. A wealth of evidence shows that making it easier for people to unionize will reduce inequality and help address the issue. And I think you're going to see more of that as the pressure mounts.

Again, I would emphasize that this is all part of this incredible imbalance that we've created in this country, and I think that it's our job as legislators to do everything that we can to try to level the playing field. I don't mean giving out handouts, but it's so imbalanced that even some people who work full-time aren't able to make ends meet. I think that if we don't have regulations, the imbalance will continue, and I am so clear that if we don't address this, we are less safe, and we will continue to have enormous problems on our hands. It's not just a moral issue, as it should be; it's an economic issue.

"In the last 20 years, I have seen labor budgets get so much tighter, and managers have far fewer labor hours available to them to accomplish the same tasks. Those are enormous pressures on managers that make it very hard for them to assign workers' hours ahead of time and to have trust in their forecasts."

Susan Lambert is an associate professor in the School of Social Service Administration at the University of Chicago and co-director of the Employment Instability, Family Well-Being, and Social Policy Scholars Network. This interview was conducted on August 21, 2017, and has been lightly edited.

Q: Why are we seeing this rise in unpredictable scheduling practices? Are there pressures that businesses are facing that are influencing how they schedule their employees' hours?

A: Well, I think one thing that's important is to clarify terms. When I think of scheduling, it has a variety of different dimensions, and we tend to just lump them all together. Schedules can be alike and different in various ways. The way that my colleague Julia Henly and I think about it includes four factors. One is predictability: being able to anticipate when and how much you'll work. There's also the degree of stability in work hours, which involves variations in the number and the timing of hours. There's employee control which, when employees have it, is called flexibility. And then there's just the overall nature of hours—whether you're getting the number of hours that you want and that allow you to earn an adequate living, or you're getting so many that you don't have much of a life outside of work and you might like to work less. So you could have unstable hours, but if you received your schedule far enough in advance, it would be fairly predictable, right? If you have steady hours from week to week, you don't even really need a schedule, and that would be predictable too. So these dimensions are related to each other, and I think that one of the complicating factors for employers and also for legislative initiatives is that it's all these things coming together.

In terms of the rise, we do have some national data in which we see that a growing percentage of people are reporting that they have an irregular schedule or that their work start and end times vary, and that they're not the ones who are primarily controlling that. So there is some evidence of it, but until recently, we haven't really had good questions that allow us to tease out what is changing. Is it the timing? Is it the number of hours? Is it the lack of worker control?

But overall what we see is that, certainly, there's been a major change. I am not an economist—I'm somebody trained in organizational psychology to look at how work is structured—but from my reading of the broader labor market economics literature, the major changes that are driving this started in the early to mid-1970s when publicly held firms began to be valued much more for their ability to be sold off and to consolidate. In that process, the relationship between individual worker performance and the well-being of the firm pretty much has been severed, especially at the lower levels of firms.

A lot of the attention has been put on profit making through containing costs—and that includes all kinds of costs—and it's not a bad thing overall because from a business perspective, you certainly don't want to waste a lot of money in terms of logistics and inefficiencies. But when it comes to people, cost cutting has some unanticipated consequences in terms of undermining the quality of jobs and creating turnover that then creates additional costs. From my reading and what I see on the front lines in firms, the competitive pressures seem to be heavier in publicly held companies, but certainly privately held companies are not immune to these pressures because they're in a competitive environment. I think we tend to think about those pressures as kind of operating "up there" in some labor market in the sky, but they trickle down to the front lines of firms in terms of what managers are held accountable for. In the firms that I study, in retail for example, the managers are given a labor budget that's driven by their store's sales and traffic, and they're held accountable for maintaining a particular ratio between labor—their staff—and what they've been able to sell. In the last 20 years, I have seen labor budgets get so much tighter, and managers have far fewer labor hours available to them to accomplish the same tasks. Those are enormous pressures on managers that make it very hard for them to assign workers' hours ahead of time and to have trust in their forecasts.

Q: Why do you think a more predictable or stable schedule is so important for hourly workers, especially those who may earn lower wages, both from a worker perspective and from a manager perspective?

A: Well, people need to be able to plan. A lot of the emphasis is put on the need to plan their personal lives—to be able to arrange for childcare, to know when they're going to exercise, or to have time to study, and so on. For example, we hear from college students that their employers are not going to schedule them when they have classes—which is great—but then they'll make a plan of when they're going to study for a test, and then they'll be called in on Thursday. Well, if they knew they were going to have to work on Thursday, they would have studied on Wednesday; but they need the money, and they need to come in because that's how you get more hours in retail—the more you work and the more flexible you are. So then they have to pull all-nighters or they don't do as well in school.

But I would like to also point out there's a work side to why this is important. In order for people to get to work on time and to be able to focus on their work while there, they also need to know when they're going to work. It's hard to have a foot in both worlds, personal and work, and still be very engaged while at work. So that's another reason that predictable and more stable hours are important for people.

From a manager's point of view, as well, it's very helpful to have more predictable, stable schedules so that you know reliably who's coming in on which days. For example, in retail, on Tuesdays there might be kind of a different flow than there might be on a Friday or a Saturday. Tuesdays are all about setting up. It's great to have your workforce that comes through the door on a Tuesday know what needs to be done on a Tuesday, versus having to orient everybody anew to what is done on that day. Another reason this is important for managers is that they've got these over-optimized schedules, where people are being brought in right when the forecasting suggests that they are needed at a given moment instead of having regular start and end times to their shifts. That constant variability is difficult to manage. There's so much energy and attention spent on these staffing dynamics that I would argue could be better spent on making sure the place looks great and customers are getting the service they need, instead of managing constant variation around who's coming in when, when breaks have to happen as a result of that, and so on.

Q: As you've observed businesses and talked with business owners and managers about this issue of schedule predictability and stability, what has jumped out at you as particularly helpful or surprising?

A: One of the biggest things we observed early on. We chose a retail environment as the setting for our first randomized experiment because retail is kind of the poster child for volatility in consumer demand. And we discovered right away that actually, it's not that volatile. There isn't that much variation from week to week over the course of a year, so there's a lot more stability in the business already that might be passed on to workers. What I try to focus on in my work is how we can capture that and deliver it to employees. What happens is that these accountability requirements focus managers' attention on literally the 2 percent or 5 percent variation in demand between weeks in a month, instead of on the 95 percent or 97 percent that's the same, day in, day out, week in, week out. Even when it's 80 percent stability and 20 percent instability in demand, that's 80 percent stability to build on. If we just change those accountability mechanisms to focus more on the overwhelming stability and then find ways to manage the few things that do vary, I think we could have much more stable, predictable jobs for workers.

In the first intervention that we did with a retailer around schedules, we worked with store managers to lay out how much their sales actually vary over the course of a year, to help them start to post schedules a month in advance. And everybody was shocked: they thought that they had so much more volatility than they did. In retail, managers will get a forecast of what their sales traffic is going to be, and that's how they do their labor budget. Well, we've looked at those forecasts and there are very smart people doing this now who are very good at forecasting all of that. If managers just took those numbers and didn't change anything in the schedule, they would be over 95 percent correct almost all of the time. So just take the forecast and go with it and see what happens—that's the kind of experiment I would love to see next.

Another thing that retail managers told us was, "If I could just get more hours, I could sell through them. Give me more staff, and I'll provide more customer service and I'll get the sales up to match that. It won't be a risk at all." So my feeling is, give them a few more hours and then see what happens; and I think it wouldn't be perfect all the time, but it would be better than the system that we have now for both businesses and for workers.

Q: Do you think it's important for employees to have some input or role in planning their own hours, and is it possible to do that successfully from what you've seen?

A: Yes. A lot of that takes place informally right now, where you've got a manager who tries to take people's preferences into account. Some managers set up very nice systems where you mark on a calendar or something the days you want off and you can update your preference. There are also new apps and new technology that allow people to update both their availability to work and also their preferences for work, and managers can then take that into account in making the schedule. Those are just very pragmatic ways for people to have a say.

I think there's a broader issue here, though. Unfortunately, in this country we've seen unions decline, but there is such an important role for worker voice in improving job quality and in having workers be engaged in the work they do, which is to the benefit of employers as well. So I do think these new labor movements are pretty powerful, and I have to say, if employers wouldn't fight them so much, they might find some good points for themselves in those movements as well, because they need to have workers who are engaged with their work and who identify with the company. Engagement can reduce turnover and the cost of training.

There are also benefits for employees when you feel that you're really a part of a company and that you're going to bring that to the customer base, in any industry.

There are so many different ways to have a voice—there's the app way, just to have a say in your schedule, but there are also workers' councils and other kinds of exchange, so that people feel as though they're being heard. There are so many methods that have been tried in the past, like in the 1970s with quality circles, that have kind of fallen out of favor or there's not enough time to do them, but it feels like those methods could be brought back now.

Q: With the way the technology around scheduling is changing, do you think there are benefits springing from the newer or revamped technology options?

A: Technology that helps put the control of people's schedules more in their hands—literally, in the case of the apps—is good for workers and also good for managers. In the two randomized studies that I've done, we do a series of in-depth interviews with managers about how they spend their time, and there's so much time that managers spend calling in other workers to fill in for someone who's out that it's just ridiculous. These apps solve that problem—employees themselves just go on the app, and if they want the hours, they claim them.

Now, the complicating feature, where what works best for business doesn't always work well for employees and vice versa—and I really want to highlight this—is that in the U.S., managers tend to over-hire for jobs, especially in part-time positions, so that you have really too many workers, given the number of hours that you're likely to divvy up. That means that some workers are going to get very few hours from week to week, and you're probably going to have this kind of workforce that turns over really fast; but it also means that you've got this staff who are really hungry for hours because they are such a scarce resource, and they're competing with each other for hours by making themselves as available as possible for work, to be as flexible as possible. What happens in that situation with these apps is that sure, everyone's picking up hours, but it doesn't translate into the kind of real flexibility and adequate hours that we would hope to see on the employee side. Instead it feels like people are kind of scrambling and fighting over the scraps, and they're also at risk of not getting enough hours, all the time. I think if businesses did a better job of thinking through how many workers they really need and didn't over-hire, those apps would work better for employees and for managers.

Q: Do you think policy or regulations that set some kind of limits or rules for scheduling can be an effective solution? Do you think there are any concerns or challenges around that approach?

A: I think it's important that we have some new labor standards for the century we're in, you know? We have the 1938 Fair Labor Standards Act that was updated some in the 1970s—mostly, though, it took away some of the protections—and the risks are very different today. We still need the old protections that are in there from the past, but there are some new ones that are needed, and a lot of it is around work hours: the number of hours you work, and how far in advance you're supposed to know when you work. So I think that there are important standards on that front that we need to put in place to help ensure that all jobs in this country meet at least a minimum standard of quality.

Right now, different municipalities are coalescing around a core set of dimensions that they're trying to improve. Those include posting schedules two weeks in advance; putting in place a predictability premium that's paid when changes are made to workers' schedules; offering access to open shift hours to your existing employees before you hire new ones; giving workers the right to request particular schedules without any kind of retaliation; and requiring spacing between shifts to allow people to rest.

But each municipality right now is making some little changes to each one, which if you're a national company makes it challenging to comply because it's slightly different in San Francisco than it is in Seattle or it's going to be in Oregon, which just passed the first statewide law. If you're one of these scheduling vendors—and we would like for them to invest in their systems to help businesses implement these laws—well, that's a lot of investment, and they have to be tweaked somewhat differently. So one of the challenges is that it makes it difficult, especially for these national employers, to implement and comply with new rules when they're somewhat different from municipality to municipality. But we're talking multi-million-dollar companies, for the most part. Adjustments can certainly be made, and it seems worth the investment.

The other issue is that some of the policies end up affecting businesses that may not have the capacity to implement them in the ways that are intended by the law, such as in the case of some franchises. They get certain types of support from the company that they're franchising from, but they don't necessarily get the scheduling tools or the forecast, whatever the larger firms have, and it can be just that single place that has to comply with these laws, even though the laws right now are targeted at larger employers.

I think that just like with the minimum wage, we need to have some minimum scheduling standards at a federal level and then localities can go up from there if they want to do so. And there are lots of carve-outs—whether good or bad, depending on the type or size of business—so municipalities can think through that in terms of what would work best for their area. But if there's this basic foundation—first of all, we know that everyone in the United States who's in the wage and salary workforce can count on these basic protections in their jobs. Second, we know it will level the playing ground for all employers if they know what basics they have to do, and then municipalities and states can decide whether to raise that, just like minimum wage. So I think there's a lot of merit there.

These local and state policies are exactly the way, though, that we typically get to federal legislation. If we look back at the history of the Fair Labor Standards Act and major components of it, like getting rid of child labor, state after state passed child labor laws before that—Illinois being one of the key ones. So there was all this experimentation in the state around the different individual provisions of the Fair Labor Standards Act, and that's kind of what's happening with the scheduling legislation.

Q: What aspect of this issue are you still studying?

A: Right now I'm part of the evaluation team for Seattle's new scheduling ordinance, and my part, with my colleague Anna Haley-Lock, is the employer part. We just completed our baseline data and we'll be releasing our report in the fall. We've gone in to talk to the frontline managers in terms of how they do scheduling from a sample of the many different types of firms that are going to be covered by that ordinance that just went into effect in July, and we'll go back next year in July to see what their experience has been. A lot of that is the nuts and bolts—what resources do they have, the tools that they have available to implement it, where they're at right now in terms of what they do—so some firms have a lot further to go than other firms at the beginning of this. We'll be looking at that process of implementation.

My view is that if businesses are making a good-faith effort, that's good. It's going to take some time for them to be able to do this, and you need to be partners with them. Moving forward, this is all new for most businesses, and some are better placed than others in terms of technical assistance. It shouldn't be an ultimatum kind of thing; it has to be a partnership.

"It's all about employee engagement and meeting your employees where they are when they're not at work, which is on their phones."

Austin Vedder is the cofounder and CEO of Shift Messenger, a start-up that created a workforce management app. He is based in San Francisco. This interview was conducted on August 31, 2017, and has been lightly edited.

Q: What is the Shift Messenger app, and what do people use it for?

A: Shift Messenger is a mobile app that hourly employees use every day for things like seeing their schedule, swapping shifts, and reaching their managers.

Q: What inspired you to build the app? What problems were you hoping to solve?

A: My cofounders and I were early employees at a start-up that got acquired by a major retailer, and as tech workers we had several tools that enabled us to communicate with our coworkers: Gchat, Asana, Slack—we probably had five of them in all. Working closely with the store employees after the acquisition, we found this was definitely not the case out in the field for hourly employees. One issue we saw over and over was that if a retail employee wanted to do something very basic like get a shift covered, they were often dependent on whichever two or three work friends happened to be in their phone's contact list. And even if they were lucky enough to find someone, they had to fill out multiple forms and get multiple signatures to make things official. So, really, we observed the problem firsthand.

Q: Do you think it's important for workers to have more control over their shift schedules?

A: Absolutely, this kind of control is hugely important for hourly employees. Most of them have something else really important going on in their lives, whether it's childcare, school, or even another job, and access to reliable transportation is often an issue as well, so an erratic work schedule can really disrupt a whole bunch of things. We're finding that providing this sort of flexibility is equally important for businesses employing these hourly workers, as well. In retail, for example, one of the hardest parts about managing a store is employee absences and turnover. We've been working with some retailers for over two years now, and using the app, they've been able to reduce employee absences by about 60 percent and turnover by 6 percent.

Q: What are the main advantages of using an app for scheduling instead of, say, a spreadsheet or a calendar on the wall in an office somewhere?

A: It's all about employee engagement and meeting your employees where they are when they're not at work, which is on their phones, so we focus very hard on an experience that's easy for retail employees to adopt and start using every day. So, for some context, retailers implementing our solution see around 90 percent of their employees adopt the app, and daily engagement that's comparable to apps like Snapchat or Instagram. We've found that retailers love that they can get this level of engagement from a solution that they can manage.

Q: Is an app better suited to certain types of businesses or workers?

A: We're working with all kinds of businesses with hourly employees—retail, restaurants, warehouses, you name it. The main thing that's important is a meaningful group size of an individual team. So if your business typically has just two to three employees, it might not be for you, since text messaging works pretty well in that case.

Q: When you were developing the app, did you consult any of the workers that you were already working with? What kind of input did they provide and how did you use that?

A: Absolutely. Retail employees using the app can message our customer support team right through the app just as if they were messaging a coworker, so that's a huge feedback channel for us. And one request that we got from employees at several different retailers was the ability to see open shifts available not just at their home store, but at nearby stores as well. So we built in the ability for store managers at understaffed stores to do what we call broadcasting an open shift—and this is super powerful, because an open shift can now go out to hundreds or even thousands of employees at once if a retailer has lots of stores in close proximity. That opens an opportunity for a worker to gain more hours and more income, because they're seeing these options that they wouldn't have otherwise seen.

Q: Did you also speak with employers as you were developing the app? How are you incorporating their feedback?

A: Yes. At first, our workflow for approving shift swaps made one manager responsible for approving a given shift swap. We found that that put all of the burden on one manager's shoulders, when in fact there are oftentimes four or five managers involved with scheduling who can approve shift swaps. So we changed it so that multiple managers can be kept in the loop for a given shift swap. That turned out to be great for making sure managers can get a break on their days off.

Q: Are there things about a scheduling app that would be helpful for lower-income hourly workers and working parents if they're on a really tight budget or trying to make ends meet?

A: Yeah, so when you have responsibilities like childcare or another hourly job and you might lack reliable transportation, one little thing like your kid getting sick can totally wreck your schedule. So the ability to get a shift covered in under 10 minutes in a way that's sanctioned by your employer and approved by your manager is absolutely huge.

Q: Are there particular benefits for small businesses or businesses that are working on a tight margin, if they have enough staff to make it worth it?

A: What we're seeing nationally is retailers needing to make their payroll spending more and more efficient every year just to keep up, and one huge obstacle to this is employee absences. We typically see retail absence rates ranging from 8 to 12 percent. What that means is that your schedule optimization software told you that an employee needed to be there at a specific time based on historical customer traffic trends, but even though that system did its work, 8 to 12 percent of the time, nobody's showing up. We can help by significantly reducing employee absences, which means that your store can stay staffed to help customers and drive business.

Q: As you probably know, there are legislative efforts under way around scheduling in different states, different localities, and at the federal level. Are you thinking about how the app might accommodate that or help employers deal with those changes if they occur?

A: Yes. We're already working with customers who came to us because they were impacted by the new regulations in places like San Francisco and Seattle. Now, in a lot of cases, schedules need to be posted further in advance and that means there's simply more time before shifts are worked for the schedule to become out of date. Also, now retailers who might have relied on a pool of on-call employees in the past can't do that anymore in some cities and states. So what they really need are real-time communications solutions if they want to stay fully staffed, and our solution offers that. Ordinances in these cities also often have pretty specific record-keeping instructions, and we help with those as well.

Q: What aspects of this app are you still working on, and how are you hoping to expand it?

A: At the end of the day, we're helping retailers make sure they have employees in the store at the right times to help customers, so streamlining communication around scheduling and shift swaps is just the beginning. One example of something we are working on is helping retailers identify where they are understaffed so they can recruit new employees more easily to help fill those gaps. Turnover is often north of 60 percent annually in a retail environment, and it costs retailers around $2,000 in direct and indirect costs to recruit a new employee, so that's a real drag on payroll efficiency and labor markets more generally. We're uniquely positioned with our data and with our level of engagement to help employers there.

"We knew we wanted to build something on mobile for shift workers to help make their lives easier. There weren't many tools that were built for them yet. So we actually let users design this app."

Brett Patrontasch is the CEO of the Shyft, a start-up that created a workforce management app, and is based in Seattle. The following interview was conducted on July 23, 2017, and has been lightly edited.

Q: What is the Shyft app and how does it work?

A: Shyft is an app that helps shift workers swap shifts and message each other. It's pretty simple: employees download the app, select their store or location, and then the next time they need to trade a shift—if they have a car broken down or they have a sick child at home, for example—they post their shift on our app and it sends a push notification to all of their other coworkers. Then, another coworker can open that notification and ask questions about the shift or just click the "cover" button to notify their fellow employee that they can cover that shift for them.

If they want to have a bit more control over the process, managers can also approve or reject shift swaps. But the app is intended mainly to equip workers with communication tools they can use to manage the flux in real-life schedules and work environments and have more autonomy over their shifts.

Q: What problems were you hoping to solve with Shyft and how has it evolved?

A: We had been looking at this issue for a while, and we knew we wanted to build something on mobile for shift workers to help make their lives easier. There weren't many tools that were built for them yet. So we actually let users design this app. We went out to shopping malls and spoke with over 3,500 retail workers and asked them what challenges they had around scheduling via cell phones and how they communicate with each other. The workers we spoke with really zoned in on scheduling as the big issue, saying that they use a scattered collection of all these different tools—Post-it notes and all these different strategies to try to get their shifts covered.

That's when we started building the app, looking to build the user experience around how we can help workers get their shifts covered. And the more and more we dug, the more and more we uncovered that what I like to call "supply-side scheduling" is kind of broken. It seems that for the last 30 years, all the shift scheduling has been top-down from a demand-side system, where employers say, "This is when we need employees to work." But we saw that employees will get those schedules and then immediately start swapping shifts in real time to try to meet that demand curve. Given that reality, we think that what we need to start focusing on is how best to build a supply-side scheduling system, where real-time updates help to create more fluid schedules that keep businesses staffed and that work for everyone.

Q: Depending on how employees use Shyft, their managers may or may not have to be involved in shift swaps. When employees just swap shifts among themselves, is that because their managers don't mind or because they don't know it's happening? Are businesses ever concerned about that?

A: So what happens in practice right now is that tons of shift swaps happen without a manager being involved. Whether that's done by text message or through a Facebook group or something like that, employees have ways of contacting each other when they need to get a shift covered. Once they find someone who can switch with them, they go into whatever scheduling system the company is using to make the switch or they report it to their manager. So what we find is we get a lot of organic adoption among workers with the app and then from there, sometimes people don't want to bring their manager into it and sometimes they do. Many of our app users start using it on their own, but then their manager finds out about it, one way or another. At that point, the manager might say, "No, you can't use that, we're already using this other company system." Or they might say, "This is great, and a much more convenient way to make sure my stores get staffed." So, whether managers choose to get on board with the app or not, there are workers already using it to get their shifts covered.

Q: You mentioned that you had spoken with workers as you were developing the app. How did you get that worker input, what kinds of things were you asking about, and what did you hear back?

A: We did speak with workers as we were developing the app, and we actually still reach out to users to ask for their feedback—what they like and what they don't like and how we can make it better. When we initially spoke with workers in the malls, we showed them a beta, or trial, version of our product and asked what they thought of it and how we could improve it from there.

So what type of feedback did I hear? The same feedback you hear in the app right now about people having challenges—but there was just no solution for them. People told us, for example, "Sometimes I only have three or four other coworkers' phone numbers in my phone book, so I can't get my shift covered" or "It's 30 minutes before my shift, I can't get there, and there's just no way I can find someone else to cover for me in time." Some people would complain that they weren't getting equal opportunities. If they're new at work, for instance, then they're not part of any existing social circle of coworker friends, so they don't have the same access to the more coveted shift times.

Q: Did you also speak with businesses and employers when you were putting the app together to get feedback from them?

A: We did speak with businesses and we still do, but as we were building out the app, to be honest, our process was user-focused—it was much more focused on the employees and solving the problems they were experiencing. We figured that since so many other existing software solutions for scheduling were focused on solving problems for employers, we wanted to build something that worked for employees. So, at the beginning, we didn't really communicate with employers too much.

Now that we have a pretty active user base, we're starting to speak with businesses more. And the industries have changed a lot in the last six to 12 months. We are really starting to see employers waking up to this problem of employee-friendly shift scheduling, whereas 18, 24 months ago, a lot of employers were ignoring this problem and saying, "Well, that's not really a problem; we use this software or this system." And our response was, "Okay, you use that, but do your employees ever log in to it?" Employers told us yes, their employees used the system already in place, but then you'd ask employees, and they'd say, "No, I never use that, so it doesn't help me solve my problem."

What I've seen is that in the last six to 12 months you have employers that are really starting to wake up and say, "Woah, what's happening here? There's legislation getting passed, employees have this problem, and we want to be a good employer and solve it, so how do we start talking about how this kind of app-based solution could work for us?"

Q: Right. As you mention, a lot of states and localities are starting to think about how to approach this issue from a legislative perspective. How is your team working with or around that? Are you monitoring that legislation and thinking about how to adjust to it?

A: Absolutely. We're about to launch a new website that has a resource center dedicated to managing and monitoring this legislation that's happening at all levels. We think that through Shyft we can help employers, managers, and employees all work through any changes that come about from legislation.

We are based in Seattle, which is pretty great in this respect, because we've been able to follow the whole legislative process around the recent Oregon scheduling bill, from stakeholders' meetings all the way to the bill being passed and to rules meetings afterwards with stakeholders to discuss how to adjust to the new legislation. There have been a lot of meetings here, and just sitting in those meetings as a technology vendor has allowed us to keep an eye on things. It was a cool experience because we were one of the only technology vendors in the room. We had all these really proactive store managers and corporate offices come to these meetings, along with all the worker advocate groups, and you get to hear both sides going back and forth. We would sit in the middle and just watch like a fly on the wall, and then we could say, okay, these are all the problems that workers and employers have, so how do we make our product better to solve that? So I think those meetings really helped us keep a pulse on it.

It's hard to be at those meetings nationally, though. I know it's all starting to unfold in New York now, as their city council scheduling bill has passed. It's starting everywhere now. So I think what we're going to do is keep the resource center on our website with local links to stories and updates as to how managers and employees can stay up to date on what's happening in their area.

Q: A lot of hourly workers who are affected by these scheduling issues are low income and many are also parents. Are there things about using this app that you think would be particularly useful or appealing to those workers?

A: Absolutely—for one thing, the app could help low-income workers make more money. There's a lot of waste right now in the shift economy, in the sense that there are a lot of shifts that go unfilled, either because an employee might not show up for their scheduled shift or a manager can't get an open shift filled at the last minute. There are working people who want—but often don't know about or can't access—those shifts. Our app helps those lower-income workers access more income-earning opportunities. We've helped workers to earn thousands of extra dollars by picking up all these extra shifts that they wouldn't have heard about otherwise.

Q: As you think about how people use the app, do you think there might be particular benefits for small businesses or businesses working on a tight budget to use something like this or to encourage their workers to use it?

A: Well, we help optimize labor schedules, and small businesses—especially in certain industries—operate so close to the margin; for them, every dollar saved is a dollar earned. When you have customers lined up out the door and they're not being served because you have two people who weren't able to make it into work that day, it really costs businesses a lot of money. For example, picture a fast-food restaurant that's supposed to have three people serving sandwiches during lunch, but now they only have one person in there because two people had things come up and couldn't make it in. That is a significantly reduced operational ability to make a profit. So I think that we can help small businesses and large corporations alike to really reduce this waste in the industry and keep their stores properly staffed in real time, so that they can earn more income as well.

Some of these business owners aren't very wealthy individuals either. A lot of these business owners are just really hardworking people trying to make it, trying to make their business work, and I think there's a little bit of fear around how some of this legislation may affect their ability to manage schedules. So we're keeping an eye on that as well, and our view is that it's about helping low-income workers, but it's also about helping small-business owners who have challenges and don't want to see their operational costs double over stuff like this.

Q: What aspects of the app are you still working on? What's next for the app?

A: We're always working on the app. I think we lead a very design- and user experience-focused culture at Shyft, so we're focused on making the workplace fun. There are a lot of apps out there that are doing the same old thing, and we're really trying to bring some excitement and mirror what cool social media brands have done, but bring that to the workplace to make it fun.

I think what's up next for us is to take on larger workforce-management systems. We focused a lot on mobile over the last two years, so we've done supply-side scheduling—which is focused on real-time input on real-time schedules—and that's allowed us to build up a wealth of data that larger scheduling vendors don't have. People who are building demand-side systems for employers with a mobile app extension don't have real-time data points over thousands of employees: when employees can work and can't work, when they call out for work, and how fast those shifts get covered.

What we want to start doing is to marry that data set we have that's unique with building out a demand-side schedule and helping larger corporations match their real-time supply with their demand requirements. This is a unique opportunity that Shyft is positioned to take on that we feel others are not able to do right now. Without getting too deep into everything, it comes down to creating the world's perfect schedules in real time for everyone. That's the goal of where we want to go with the product.

Q: Is there anything else you want to tell us about your work on Shyft?

A: No matter what, it's about always building for the end user first. We can never lose sight of that, so I think we're going to keep focusing on helping low-income earners make more money and pick up more shifts. You always have to build software that people want to use—not just software that sounds good on paper.

"This perception that absence, overtime, and turnover were fixed costs that employers could not manage started to come apart, and we're starting to disrupt that idea that labor is a one-sided equation."

Lisa Disselkamp is a managing director in the HR Transformation practice of Deloitte Consulting LLP, and the author of three books on workforce management business practices and systems. This interview was conducted on September 12, 2017 and has been lightly edited.

Q: What is the field of workforce management? What do professionals in workforce management do, and why are they important for a business?

A: You can break the workforce management field down into four components. First would be timekeeping—managing methods of time capture—and the focus there generally starts with the hourly employee population, people who have to record their actual time at work and time off. The next thing is scheduling: creating and assigning schedules day to day. You also manage budgets, workload, and employee satisfaction through the schedule process. Through the combination of those two components, you get workforce asset management. When you can compare the schedule to the actual time worked, then you can manage unplanned work time, sick days, vacation time, and any other time worker time varies from the budget and schedule. Finally, as the field has evolved, we've really gotten into analytics. So today we're talking to employers about complex issues such as productivity, cost reduction, and compliance, and we get questions like, do I have the right mix of full-time and part-time people? What's happening in my business around e-commerce? How do I manage people working remotely from home? So now we're asked to manage all kinds of things.

The big change is that, when I started in this business, it was very transactional: collect data, do the math, and send it to payroll. That was it. It is now very outcomes-centered and considers what the business is driving toward: high productivity, cost efficiency, process efficiency, and all those kinds of things.

Q: Is it fairly common for most businesses to have a workforce management team? Does it vary by industry or the size of the business?

A: The largest departments and areas with workforce management professionals are typically in the following industries: healthcare, manufacturing, retail, services, hospitality, travel, oil and gas, and multinationals. Think of any organization that has a large, complicated hourly workforce, and that also includes franchises.

Q: You have worked with the Association for Workforce Asset Management (AWAM), which offers a certification for workforce management professionals. Why are certifications important for workforce management professionals?

A: The certification came out of self-awareness in the industry that we needed to be able to distinguish between who is a professional and who is not. We also needed to build recognition within any given company that this is a discipline. I think one of the biggest issues is that workforce activity goes undermanaged in many companies. Labor is probably one of their biggest expenses, but they often don't have anybody dedicated to it.

The association was really grassroots, and came out of all these individual professionals deciding that we needed to have an agreed upon set of principles, a book to work from, academics and institutions teaching workforce management, and people who understood this holistic viewpoint. AWAM started out with the mantra of inform, educate, certify, and lead—lead ourselves, our employers, and the industry as a whole.

Q: One of the things we've been looking at is how much control employees have over both their schedule and how scheduling is done in their organizations. Why did the association seek input from employees in developing the certification? Is their input important and helpful as you're developing these certifications and shared principles?

A: Well, I think this type of input has been missing from this area of management for a long time. Employment was thought of as a transaction—it was the old mantra of "people just come to work to get paid and that's all it's about." There was too much emphasis in workforce management on the employer.

I think now we have a more sophisticated understanding that people come to work with a lot more expectations than just getting paid, and there's this idea of a social contract, so that when I take a job today, I come with an expectation of what that job will be in terms of the work itself but also in terms of when I work, where I work, what my career opportunities are, and whether I'm going to be fairly and adequately compensated.

Add to that the fact that the technology started to evolve, and who was asking for the technology? The employer. So most of it was all built around demand and unbalanced away from the supply side, which resulted in all the optimization focus in the scheduling technology being about demand—such as, "I think we can get a schedule down to 15 minute increments, and really optimize this." Well, who wants to work a three-hour-and-15 minute shift, right? Or come in for two hours, be asked to go home for two hours, and then come back to work again?

With this disproportionate emphasis on the employer, we started to see other costs. You might have saved money in labor spending, but there was also an increase in employee absenteeism, turnover, dissatisfaction, and then brand impact. Two years ago we started to see the articles about companies that were managing schedules so poorly that the bad practices started getting nicknames, like "clopening," where an employee has back-to-back shifts that require them to close the business late at night and then open it early the next morning, as well. Incidents like that really started to bring home to employers, "Wow, this is impacting something my shareholders care about: our brand and our reputation in the market."

This perception that absence, overtime, and turnover were fixed costs that employers could not manage started to come apart, and we're starting to disrupt that idea that labor is a one-sided equation. Employees are more empowered because they're now encouraged to talk with one another and the public about employers.

Think about what social media has done: you can talk about your employer, how you get treated, what you get paid, and so on, and a large audience will see that. And employees started to say more and more, “You know what? If I can make a quarter more an hour going across the street, I will.” Employers also started to realize that it was often more competitive to keep employees, and employees could see that they could be more empowered in certain workplaces but not in others, and they’ve been demanding more autonomy, control, empowerment, and flexibility.

The other major dynamic is something that Joan Williams has been studying at the Center for Work Life Law at the University of California Hastings College of the Law: the workforce is moving away from the model of a two-parent family where the dad works, and he can work overtime and it’s no problem because mom’s home when the kids get off the bus. Joan points out in her work that the shift in who the worker is and the constraints they bring to the workplace mean that as an employer, you should start paying attention to the employee side. They have just as many constraints on when work needs to happen as the employer.

Q: So if we think about the workforce management professional in the middle of this conversation, how is their role in an organization relevant to making this balance a little bit more equitable between employees and employers and making it work better for both sides?

A: Well, first of all, in many cases if they are a professional with the designation of a certification, they are more likely to be at the table with the ear of the executives. And once they have that opportunity to be listened to and to inform and educate, they can build the business case. One of the things I learned early on was that the nitty gritty of what goes on day to day in time and labor management is typically not what leadership cares about. But for a long time, I heard a lot of workforce management professionals *only* talk about the nitty gritty, and they didn’t talk about the strategic issues that an organization and leaders are interested in. You know, 15 years ago, I wasn’t talking to executives about time and labor management. Today, though, I spend all my time talking to executives and leadership, because increasingly they understand that they *don’t* understand the details, but they *need* to—in order to be able to succeed, they should connect the dots between the specific things that go on day to day and what they’re mandated to deliver for the business. So it takes that ability to translate the nitty gritty of day-to-day workforce management into strategic outcomes for the business – that’s how the modern workforce management professional can start to play an important role and can be helpful in making schedules more equitable.

We also have to define what a good schedule is. There’s a schedule-equilibrium equation that’s based on predictability, stability, and adequacy, which can all be measured mathematically, resulting in a ratio. What a “good” ratio looks like for a given organization should be based on the way that business works, because, for example, if I’m in a hospital, the schedule’s naturally going to be a lot more volatile than if I’m at a reception desk in an office park. It’s not a one-size-fits-all kind of thing.

Where we’ve seen many organizations trying to make this attempt to find a truly good schedule is in retail. Some employers have started experimenting; those that were willing to take a leap of faith and say, okay, on principle I understand what we’re trying to achieve and I agree that there’s value in balancing this equation, but I don’t know how to get there. This is where they begin to need some outside help. Today the organizations and workforce management professionals that have taken that step, that have been given permission to experiment and tried out these new principles and used data to support it, those are the ones most likely to be successful.

Q: Workforce management technology has changed a lot since it came into being a few decades ago. Now we have apps and software that facilitate increased worker participation in scheduling decisions.
Do you think that shift in the technology has helped to make this kind of balanced scheduling easier or more effective?

A: That's a big question. There are a number of key technological changes that are shaping workforce management today. And in no particular order, I would say mobile access is one. It's incredible how many people have cell phones now, and pushing workforce management down to that technology is one of the most important things we can do, because no other system touches every person every day and ends up affecting their pocketbook as well as their employer's. Now I can get the modern version of a paper time sheet in real time. I can look at my schedule without having to physically go into my workplace and look at the bulletin board to make a change. I don't even have to call my supervisor anymore to request a change, because it's right here on this thing that I look at hundreds of times a day. So mobile is definitely one of the big ones.

Another key change is the ability of scheduling systems to now bring in business data in real time. You can monitor things like whether floor traffic is increasing, patient volume is increasing, a manufacturing production line has gone down, a big truck just came into my store and I need to unload it, or there's a promotion at the bank and we expect higher customer traffic. These technologies that bring customer and business data into workforce management, that's a significant change.

Another evolution is the ability of the system to bring in my individual needs and preferences. So, as an employee, do I have a day care where I need to be at pick-up by a certain time? Do I have after work classes? Do I have a transportation limitation, whether it's a bus or a carpool or a train—something I need that limits my schedule? Do I want to work from home three days a week? All those things are also making where and when I might be working less important than the work that I do.

Q: Are there any surprising or helpful things you've learned from all of your conversations with employers, employees, and time-management professionals about how they see and understand scheduling and time management?

A: I'm surprised that many organizations don't have real measurements of time-management success. They can't even define what success is. By default, it seems like success to them is just basically that the system doesn't go down, or that people get paid on time. To me, that's just table stakes, that's not success.

I have found that many employers also overlook where optimization takes a toll on people, and that's a big surprise. When the clopening conversation came out, we began to talk to employers about their scheduling and staffing practices. It was a surprise to hear executives say, "We think people want the kinds of schedules we offer," or, "Part-timers don't want jobs for very long anyway." I sat in these meetings and we talked to executives about their perceptions of who a part-time employee is, or even a full-time person, and it was clear that it's been a long time since some of them had worked or managed hourly jobs, and they don't necessarily see that hourly jobs have changed—the jobs, the work, and the workers are not what they were 20 or 30 years ago.

Another surprising thing is that many organizations have been slow to see the impact of poor or lacking workforce management practices on their brand. They're too reactionary, and change on their part too often only comes when they are regulated rather than when they move more intentionally towards adoption.

Q: What's next for the workforce management field and how those professionals are contributing to change in scheduling? What changes are you excited about for the field?

A: I think we're going to see more certified professionals, and that means people are going to be talking differently about workforce management, and they're going to be talking about it at the senior level of the organization rather than at the system or project level. We are seeing more and more people now in the role of vice president or director of workforce management and 10 or 15 years ago, I didn't see that much at all. So I think if you're in an organization that doesn't have an effective director or vice president of workforce management, then that's likely a competitive disadvantage.

Another thing I think is interesting is this high-road employer aspiration. We should watch what is going on with the researchers, nonprofits, and social advocates pushing employers to aspire to these more equitable metrics around how they operate.

And then one other thing that's going to disrupt business is robotic process automation—which may eliminate manual processes we see today in workforce management like timecard review, or maybe even making an informed, proactive change to a schedule—and the role of artificial intelligence, or "AI." When artificial intelligence enters the workplace, it's going to replace much of the human activity, but not entirely replace workers. Do you remember the Peter Principle in economics, which says that managers may be promoted to the level of their incompetence? Well, what sometimes happens with automation is that the system is sort of a manager promoted to the level of its incompetence, because things start being robotic instead of doing what a human does, which is to say, wait, that doesn't look right to me. So we will not leave everything to robotics and artificial intelligence. There will be new jobs for the workforce that work alongside that technology—some of those jobs are bot managers and other jobs will focus on bridging the space between man and machines and involve listening, oral communication, problem sensitivity and collaboration skills. Even in the age of AI, people will play an important part in the process. So when we talk today about schedule equilibrium and factoring in the needs and lives of employees, that may very well be part of the role: keeping things human and putting a worker-centric component into how labor is managed. And wouldn't that be a fascinating job, to be the person who's there to be sure the workplace doesn't become robotic and who keeps the human interaction and consideration in this process?