

Industrial Engineering

Improving the Scheduling of Protection Services Staff by Creating a Microsoft Excel Application and Exploring Shiftboard's Full Functionality

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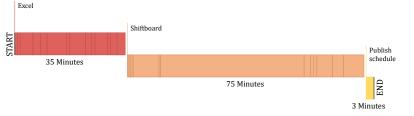
Crystal Bridges Museum of American Arts - Protection Services

Crystal Bridges Museum of American Art is a non-profit charitable organization that celebrates the American spirit and unites the power of art with the beauty of nature. Our interest in is the Protection Services department which works to provide a safe environment for employees and guests while also protecting museum art.



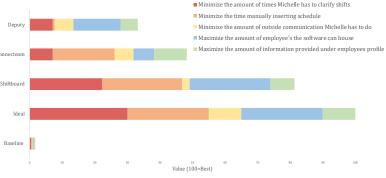
Evaluated Concerns with Current Process

Shiftboard is the software Protection Services uses to distribute the completed schedules to the employees. The administrative assistant takes approximately 2 hours to create the schedules, with 66% of time spent transferring the completed schedule into Shiftboard.



Investigated Shiftboard and Offered Suggestions

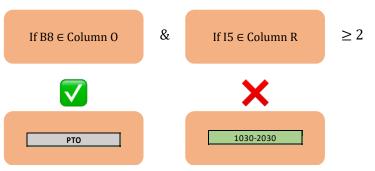
To justify the continuance with Shiftboard, we conducted a MODA comparison for key administration capabilities. Then, we mastered Shiftboard's functions, provided documentation of the software's applicable tools, and connected the administrative assistant with the relevant features.



Improved Current Scheduling Practices

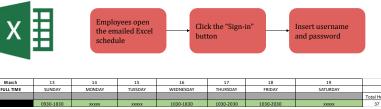
We created a time-saving algorithm to automatically calculate the total hours worked weekly, and we also automated the process of integrating Paycom's approved PTO into schedule creation.

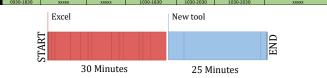
=IF(COUNTIFS(\$0\$6:\$0\$300,\$B8,\$R\$6:\$R\$300,I\$5)>=2, "PTO", "1030-2030")



Expedited Current Process by Creation of New Tools

As an alternative to Shiftboard, we created two Microsoft Excel tools. For the first tool, employees will open the emailed Excel schedule and sign-in with their username and password to reveal the corresponding schedule.





For the second tool, employees will simply open their email to see a PDF version of their individual weekly schedule.



9	10	11	12	13	14	15
SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
0930-1830	xxxxx	ххххх	1030-1830	1030-2030	1030-2030	ххххх
Excel			New tool			
	START			END		
•			30 Minutes	6 Minutes		