

The Benefits of Labor Management and High Jump's Product Plan

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Labor Management

- Labor Management consists of the ability to plan, measure, view and simulate labor activities within an organization.
- Labor Management provides answers!
 - How much time do my employees spend doing unproductive work? How well utilized are they?
 - Why does it take some employees much longer than others to do specific tasks?
 - How long should it take to do a specific task?
 - Where do we need to focus our labor resources today?
 - Why are there quality issues for a specific task or employee?
 - What is the true capacity of my workforce?

Why Labor Management (traditional thinking)?

- Labor Management allows companies to...
 - Increase Efficiency
 - Right person, right place, right time
 - Preferred methods (best way to perform task)
 - Increase Productivity
 - Remove unproductive time
 - Directed activities
 - Goal times (accountability)

Why Labor Management

- However, there are several other reasons to improve operational performance. They are:
 - Improve service and quality levels
 - Improve associate morale
 - Provide management with better tools and metrics
 - Improve capabilities of management
 - Reduce dependence upon temporary labor
 - Enable a self-directed work force

Labor Management Effectiveness

- Traditional Measurement (60-75%)
 - Measuring Lines Per Hour, Cases Per Hours, etc.
 - Does not take into account how long each activity should take
- Standards Creation and Feedback (80-90%)
 - Using a standard, such as a historical standard, does increase effectiveness
 - Limited in the results without preferred methods and discrete standards
- Preferred Methods and Discrete Standards (95-100%)
 - Defining Preferred Methods for each activity
 - Creating an Engineered Standard for each activity
- Incentives (100-125%)
 - Incentives given for performing above 100%

New Terminology

The following terms are new, but will become common language throughout a Labor Management implementation:

- Standard – an objective benchmark created through time study to measure performance
- Element – the smallest measurable step in a job
- 100% Time – the amount of time required for a person to perform a job using best methods, utilizing their time well and working at a motivated pace that is able to be maintained for an entire day.
- Key Variable Indicator – an item that can be tracked that we can pay associates for.
- Standard Allowed Minutes (SAMs) – the amount of time allotted to a particular pay variable.
- On-Standard Time – Time that an associate is being measured and is eligible for bonus.
- Off-Standard Time – Time that an associate is not being measured and is not eligible for bonus.
- Performance - The total number of SAMs earned divided by the total number of minutes on standard.

Example Standard

Elements	100% Time (min)	Pay Variables				
		Case Flow Locations	Case Flow Units	Pallet Flow Locations	Pallet Flow Units	Shipping Cartons
Walk to case flow location	0.10	0.10				
Scan and pick case flow units	0.05		0.05			
Walk to Pallet flow location	0.15			0.15		
Scan and pick pallet flow units	0.12				0.12	
Walk to carton	0.30					0.30
Place units in carton	0.15					0.15
Scan carton and push off	0.05					0.05
Standard Allowable Minutes (SAMs)		0.10	0.05	0.15	0.12	0.50

Example Standard Calculation

Eric is a picker in case flow. He works on-standard for 60 minutes and produces the following pay variables: 200 Case Flow Locations, 400 Case Flow Units, 40 Shipping Cartons. Calculate Eric's performance:

Pay Variables	SAM Values		Qty		Earned Time
Case Flow Locations	0.10	x	200	=	20
Case Flow Units	0.05	x	400	=	20
Pallet Flow Locations	0.15	x	0	=	0
Pallet Flow Units	0.12	x	0	=	0
Shipping Cartons	0.50	x	40	=	20

SAMs Earned 60 minutes

On-Standard 60 minutes

Performance 100 %

UPH 400

Example Standard Calculation

Jim is a picker in pallet flow. He works on-standard for 60 minutes and produces the following pay variables: 150 Pallet Flow Locations, 200 Pallet Flow Units, 40 Shipping Cartons. Calculate Jim's performance:

Pay Variables	SAM Values		Qty		Earned Time
Case Flow Locations	0.10	x	0	=	0
Case Flow Units	0.05	x	0	=	0
Pallet Flow Locations	0.15	x	150	=	22.5
Pallet Flow Units	0.12	x	200	=	24
Shipping Cartons	0.50	x	40	=	20

SAMs Earned 66.5 minutes

On-Standard 60 minutes

Performance 111 %

UPH 200

Performance vs. UPH

- In Example 1, Eric had a UPH of 400. In Example 2, Jim had a UPH of 200. If only piece rate was considered, Eric would have performed twice as well as Jim.
- **However**, when we consider performance as a measurement of level of effort using multiple variables like units, locations and type of pick, a much more accurate and fair representation of performance is generated:

Employee	UPH	Performance
Jim	200	111%
Eric	400	100%

WMS & Labor Management

- The WMS is an important factor in implementing a Labor Management System (LMS)
- WMS provides the LMS with product information, tasks- such as a pick plan, and activities- such as shipping, receiving, etc. – the LMS can then calculate time for each task or activity and provide visibility in actual vs. standard in real time or historically
- Combining WMS and LMS provides a full solution for managing and planning labor activities

Labor Advantage


LA uses the defined standard to track and report on actuals vs. the standard

Standards Defined by:

- Engineered
- Industry
- Historical

Actuals vs Standard

- By function
- By employee
- By time period
- By warehouse
- By zone
- By vehicle
- By item



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Raising the bar on supply chain execution.

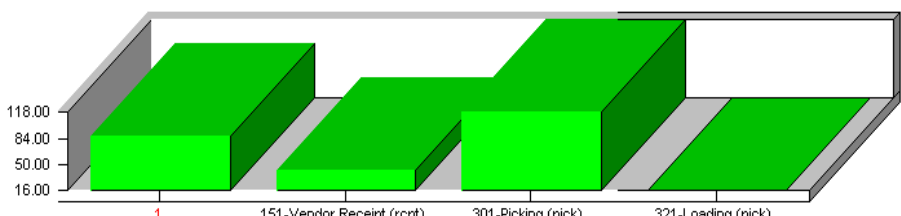
Update Dynamic Work Standards

Labor Management

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- [Update Dynamic Work Standards](#)
- [Picking Work Load Management](#)
- [Work Load Summary](#)
- [Picking Summary](#)
- [Work Queue Summary](#)
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1 151-Vendor Receipt (rcpt) 301-Picking (pick) 321-Loading (pick)

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#	Warehouse ID	Trans Code	Description	Average Seconds	Fixed Std	Delta	Go To	Go To	Go To	Go To	Go To
1	01	111	Production Receipt (rcpt)	87	34	53	By Employee	From Location	To Location	By Item	By M
2	01	151	Vendor Receipt (rcpt)	43	50	-7	By Employee	From Location	To Location	By Item	By M
3	01	301	Picking (pick)	118	25	93	By Employee	From Location	To Location	By Item	By M
4	01	321	Loading (pick)	16	98	-82	By Employee	From Location	To Location	By Item	By M

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Labor Advantage

■ KVI Definition

- LA allows you to define the KVIs pertinent to your organization
- What are you going to measure? Create standard for?

■ Multi-Variable Standards

- LA provides for the creation of variables that impact the time to complete a task or activity
 - By Item
 - Size & Weight (cube)
 - Difficulty of handling
 - By Function
 - Location
 - Preferred method
 - Travel Time (optional)

Labor Advantage

- Indirect Labor
 - LA allows an organization to define and track Indirect Labor activities through RF devices or workstation
 - The identification of Indirect Labor is used to determine what non-productive activities are being performed and to take action to minimize this time
 - Reporting
 - By Reason
 - Breaks, clean-up, meetings, etc.
 - By Employee

- PF&D (Personal Time, Fatigue and Delay)
 - LA provides factoring for PF&D
 - PF&D can vary between job function, activity, or time of day

Labor Advantage

- Visibility
 - HighJump's WebWise visibility tool is used to easily create reports, graphs, and drill down screens in real time
 - Results of actuals vs. standards (KVIs)
 - Labor utilization
 - Individual performance

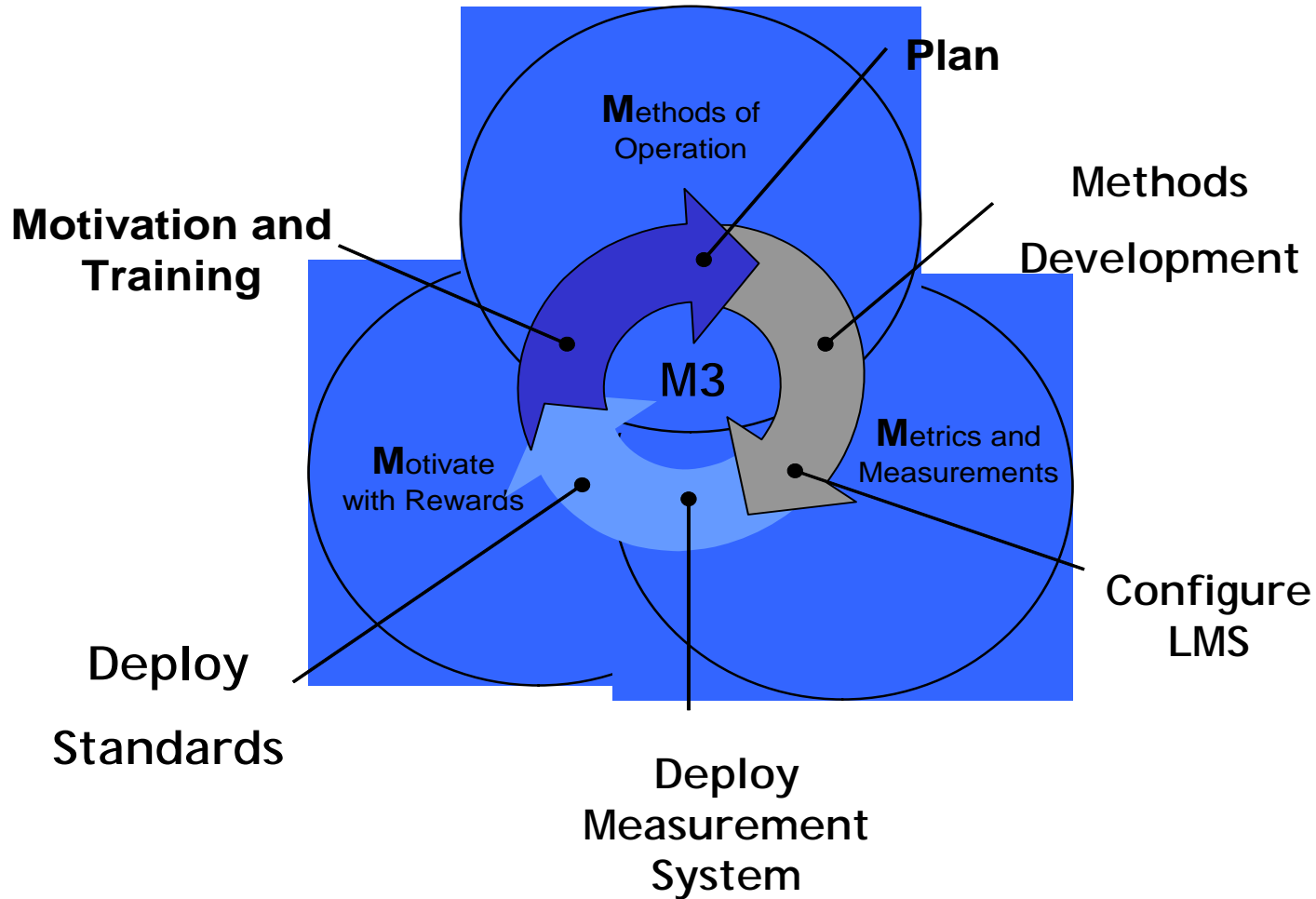
- Forecasting labor requirements
 - LA provides labor forecasting functionality that includes:
 - Inbound labor forecast based on expected receipts
 - Outbound labor forecast based on expected shipments

- RF goal-times and feedback to employees
 - Goal-times and feedback are provided to the employee at an RF device or workstation
 - Allows each employee to understand the expectation and see how they performed against it

HighJump Advantages

- Integrated WMS and LMS (same tools)
- Support for multiple standards in generating goal times
- Comprehensive set of LMS functionality
- Visibility tools that provides real-time data on actuals vs. standard, KVIs and utilization
- RF and workstation support for inputs and providing feedback

Performance Management Road Map

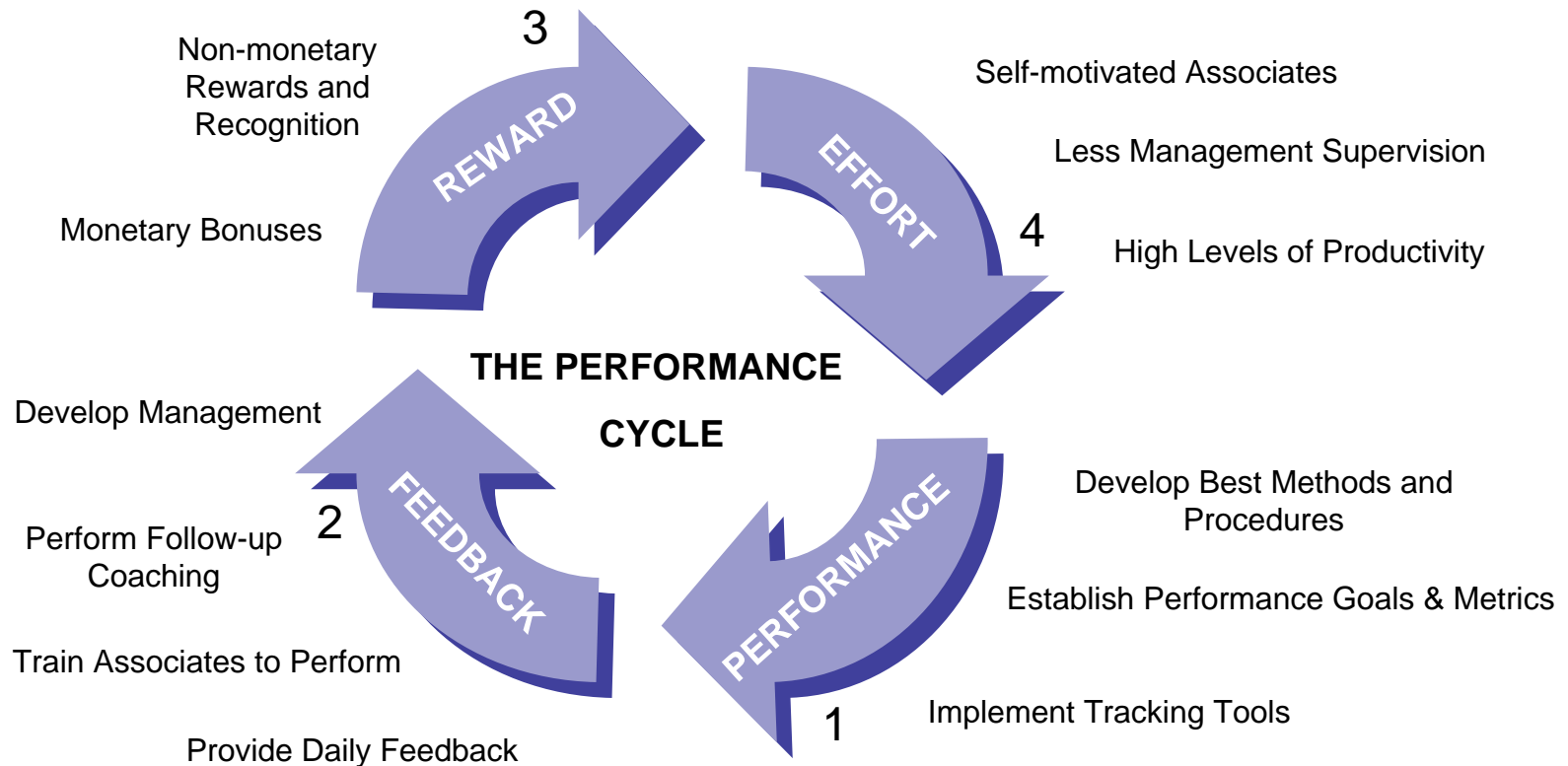


Performance Road Map

- ***METHODS OF OPERATION*** – Methods improvement is a process rooted in understanding. Examining all aspects of the job process, from inception to completion, and questioning every step after full understanding is gained. Our approach is to work intimately with the associates “on the floor” and their immediate supervisors to learn the process and earn the respect of those whose jobs are being examined.
- ***METRICS AND MEASUREMENTS*** – End goal is to develop a yardstick that measures how much time associates are spending performing various tasks throughout the shift. Proper time utilization is the most important aspect of maintaining high productivity.
- ***MOTIVATION AND TRAINING*** – Supervisors are trained to motivate their associates “on-the-fly” through constant feedback and training. Feedback typically centers on the employees pace (how fast they are working) and their methods (how “smart” they are working).

Performance Cycle

The Performance Cycle (Performance, Feedback, Reward and Effort) explains why incentive programs enable companies to significantly improve performance.



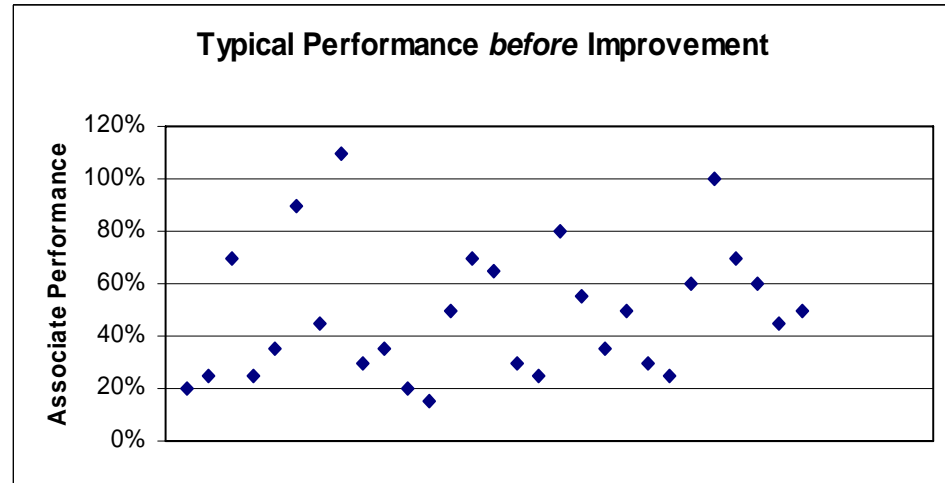
Performance Management

- Generally, there are four factors that affect an associate's level of performance. A "STAR" performer will excel in all four areas.
 - Skill** – talent and proficiency
 - Technique** – efficiency and effectiveness of methods
 - Activity** – time spent staying on task
 - Rate** – level of effort expended

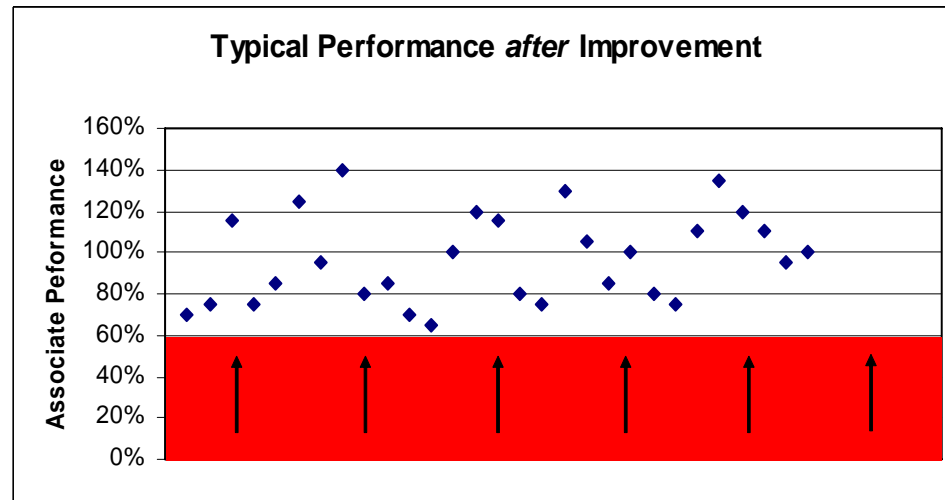


Performance Management

The majority of the productivity gains comes from performance improvement in the lower performing associates. This group of associates tends to be the largest.



Median: 45%



Median: 95%

Management

How will standards and incentives impact Management?

1. Management will have an objective tool with which to measure performance.
2. Management will have the ability to better plan production based on accurate labor planning models.
3. Management will have objective tools to discipline associates based on performance.
4. Management will shift into more of a “coaching” role with more effective tools to improve methods and productivity.
5. Management will have reporting tools that will give them a “snapshot” of their operations for the day and week at the individual level.

Personnel

How will standards and incentives impact associates?

1. Associates are guaranteed their current base wage.
2. Objective measurements for productivity will be developed based on level of effort.
3. Bonus will be paid based on level of effort.
4. Moral will increase due to management's willingness to invest in associates' performance through coaching and follow-up.
5. Attainable goals will be established for achievement.
6. Individual, team and area achievements will be recognized and rewarded.
7. Associates unwilling to perform will be identified and dealt with.
8. Quality will be measured and maintained.
9. Quality associates will be maintained due to a more positive working environment.

High Jump Savings Calculator

Projected Savings	Actual	Projected				
	Past Year	Year One	Year Two	Year Three	Year Four	Year Five
Current Conditions						
Units Shipped	10,000,000	11,000,000	12,100,000	13,310,000	14,641,000	16,105,100
Total Labor Hours	300,000	330,000	363,000	399,300	439,230	483,153
FTE's Utilized	145	159	175	192	212	233
Units Per Hour	33.3	33.3	33.3	33.3	33.3	33.3
Base Wage w/ Fringe, Overtime and Temp's	\$ 13.33	\$ 13.73	\$ 14.15	\$ 14.57	\$ 15.01	\$ 15.46
Total Payroll with Fringe and Temporary Labor	\$ 4,000,000	\$ 4,532,000	\$ 5,135,000	\$ 5,818,000	\$ 6,591,000	\$ 7,468,000
Cost per Unit	\$ 0.40	\$ 0.41	\$ 0.42	\$ 0.44	\$ 0.45	\$ 0.46
Current Payroll	\$ 4,000,000	\$ 4,532,000	\$ 5,135,000	\$ 5,818,000	\$ 6,591,000	\$ 7,468,000
With Performance Improvement						
Increase in Productivity from Baseline		11%	13%	15%	15%	15%
Units per Hour		37.00	37.67	38.33	38.33	38.33
Total Labor Hours		297,297	321,239	347,217	381,939	420,133
F.T.E.'s		143	155	167	184	202
Base Wage w/ Fringe, Overtime, Bonus		\$ 14.42	\$ 14.85	\$ 16.03	\$ 16.51	\$ 17.00
Projected Payroll		\$ 4,287,027	\$ 4,771,233	\$ 5,564,736	\$ 6,304,846	\$ 7,143,390
Cost Per Unit		\$ 0.39	\$ 0.39	\$ 0.42	\$ 0.43	\$ 0.44
		Year One	Year Two	Year Three	Year Four	Year Five
Annual Savings (including bonus payments)		\$ 244,972.97	\$ 363,766.55	\$ 253,264.00	\$ 286,154.11	\$ 324,609.61
Cumulative Savings		\$ 244,972.97	\$ 608,739.52	\$ 862,003.52	\$ 1,148,157.63	\$ 1,472,767.23
Additional Associate Earnings		\$ 175,564	\$ 195,393	\$ 435,061	\$ 492,924	\$ 558,483
Additional Associate Earnings/Hour		\$ 0.59	\$ 0.61	\$ 1.25	\$ 1.29	\$ 1.33

11% Increase in Productivity equates 6% Reduction in Total Payroll