How Upfront Labor Costing can affect your ‘Bottom Line’

*John Stern, Pres, Methods Workshop*
How Upfront Labor Costing Can Improve Your Bottom Line

WHAT GETS MEASURED – GETS IMPROVED!
What Is Insanity?

Continuing to do the things the same way we always have … and expecting different results!
Raise your hand if you remember the ‘olden days’

<table>
<thead>
<tr>
<th>Product</th>
<th>SAM (NO Auto)</th>
<th>With Auto</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Panty</td>
<td>2.75</td>
<td>2.50 – 2.66</td>
</tr>
<tr>
<td>Crew Neck Tee</td>
<td>3.26</td>
<td>2.65 – 2.66</td>
</tr>
<tr>
<td>5 Pkt Western Jean</td>
<td>12.5 – 13.2</td>
<td>9.5 – 10.5</td>
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USA Production in 1980’s & 1990’s (close to 100% Efficiency)
What is 100% (Card Dealing)?

Pace Rating Drills – Card Dealing

The person being observed deals 26 cards into 4 neat but not precise stacks by approved method

Results:
.167 Min – 150% .................. .179 Min – 140%
.192 Min – 130% .................. .208 Min – 120 %
.227 Min – 110% .................. **250 Min – 100 %**
.278 Min – 90% .................. .312 Min – 80%
What is 100 % ?

Pace Rating Drills – Card Dealing - Video
What is 100 % (Card Dealing)?

Pace Rating Drills – Card Dealing

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.278 Min – 90% ................. .312 Min – 80%
What is 100 % ? – Walking

Walking Drill – 50 Feet is measured – The person being observed should start walking 10 – 15 ft before starting mark in order to have a ‘steady pace’ established.

Results:
.126 Min – 150% .................. .135 Min – 140%
.145 Min – 130% .................. .158 Min – 120 %
.171 Min – 110% .................. .189 Min – 100 %
.210 Min – 90% .................. .236 Min – 80%
What is 100 % ?

Both of the 100% drills on previous slides are based on MTM 100% values, commonly known as ‘Low Task’. It is important that the person performing the drill be conscious of maintaining the same pace throughout each repeat.
BUT, How do we determine what 100% production is?

When and Where did Standard Data begin and how did it evolve?

Where is it today and how can it help us become more productive /efficient and more predictive of our labor cost.
1940’s There were two major breakthroughs in work measurement and evaluation:

Fredrick W. Taylor
“the father of scientific management”
and
The Gilbreaths
Taylor’s work

Credited with breaking a task into components or elements

Then timing those elements to arrive at the ‘overall’ time for the task or operation
The Gilbreth’s work

Developed the first ‘pre-determined time values’ with any inherent accuracy or consistency
Proper Timestudy

1- The methods and layout have been thought out, AND installed

2- Timestudy Engineer is familiar enough with process to recognize the ‘preferred’ method .... AND
Timestudy (con’t)

3-The timestudy engineer consistently practices pace rating w/ standard drills

Remember...Timestudy-Measurement AND Evaluation of PERFORMANCE
Are TWO separate entities
Then in 1948 ...... MTM was published

Developed by Maynard, Stegemerten and Schwab (now none as MTM-1) while working at Westinghouse.

MTM-1 has become the PMTS by which all others are measured
MTM-1 ....liabilities

1- It is extremely SLOW to use .......

2- The elements are so small that they must usually be grouped to have significant effect on the final time value (especially in apparel)
Proven PMT Systems

Today the use of PROVEN PMTS is the ONLY way to meet the requirements for ‘Right Product’ at the ‘Right Time’ at the ‘Right Price’.

Predictive ‘Global Benchmarked’ engineering systems are the ultimate weapon for success.
Let’s Set a pocket on shirt

Here are the details of the operation in graphic form as seen on a system printout.
Setting a pocket on shirt

P2P- p/u panel & set under foot
P2P – p/u creased pocket & set on panel

MBL – back tack at top

AM1 – adjust corner of pkt to shirt.

S3CH – Sew 3 inches to 1st corner.....
Setting a pocket on shirt
(con’t)

APS – Pivot at Corner ............
AM1 – Adjust to next sew point ..
S1.5CH – Sew 1\textsuperscript{st} Miter ............
APS – Pivot at Corner ............
S1.5CH – Sew 2\textsuperscript{nd} Miter ............
Setting a pocket on shirt

(Con’t)

APS – Pivot at Corner ............
AM1 – Adjust to Top Corner .....  
S3CH – Sew to top of pocket ..... 
MBL – Back Tack at Top .......
F – Auto Trim thread .............
Setting a pocket on shirt

(con’t)

D2E - Aside with Two Hands ....

Total Time with allowances

.85 Minutes
PMTS (Predetermined Motion Time Systems) are frequently referred to as Standard Data Systems

- Team Manufacturing
- Modular Manufacturing
- Unit Production

- All require Predictive SAM Values for Successful Implementation
Computerized Std Data

Naturally, the speed of using a standard data system is further enhanced on a computer ...

ALL of the advantages of the latest programming skills make an engineer's life much easier and more productive
Finally, there is a Standard Data System for non-Engineers
(Manufacturing knowledge required)

Let’s call it ‘Upfront Costing’

It uses the background of MTM and then adds Regression Analysis, Algorithms and Statistics.

Simply identify and count the number of:
Sew Inches, # of Seams, # of Parts, # of Match Points or Alignments, # of Corners, # of Back-Tacks, Buttons, Button-Holes, # of Bar Tacks, # of Grips / Snaps

The Result is Total SAM’s for the Garment
Upfront Costing:
Helps the Merchandizer, Manufacturer, Sourcing Group Enhance their SPEED TO MARKET.
The system is ACCURATE, CONSISTENT and FAST!
Can be used at the DESIGNER LEVEL at the same time the garment is being created.
AND is consistent with other STD DATA Systems that take 10 times as long to complete.
AND, Linkage with ‘Pattern Design’ and ‘Marker Making’ systems for ‘Data Sharing’ is being explored.
Thank You for your attention

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