

Digitization Project Rubric

University of North Texas Digital Libraries

Marcia McIntosh and Derek Rankins

“How long will it take to digitize _____?”

How can we accurately provide estimates for the digitization of items?

Bottom-Up

Top-Down

Three-Point



Estimation Methods

Material Type by Equipment and File Size

<i>Material Type</i>	<i>Unit</i>	<i>Equipment</i>	<i>File Size in TB</i>	<i>Total Hours</i>
Bound books	1 book	CopiBook	0.00579357147 (20.25MB/page as average of rgb/bw; 300 pages)	7
Disbound books	1 book	HighSpeed	0.00579357147	2
archival/photos	1 page	Flatbed	0.0000193119049072265625	0.09
large format	1 page	large format	0.0002384185791015625	2.5
print newspapers	1 page	CopiBook	0.00006103515625	0.025
vended digitization, newspapers on microfilm, NDNP-compliant	1 reel (1,000 pages)	workstation- only	0.00006103515625	5
vended digitization, newspapers on microfilm, non-compliant	1 reel (1,000 pages)	workstation- only	0.00006103515625	34.5

How can we accurately provide estimates for the digitization of items?

What types of items do we digitize?

How do we digitize them? (resolution, type of scanner, etc.)

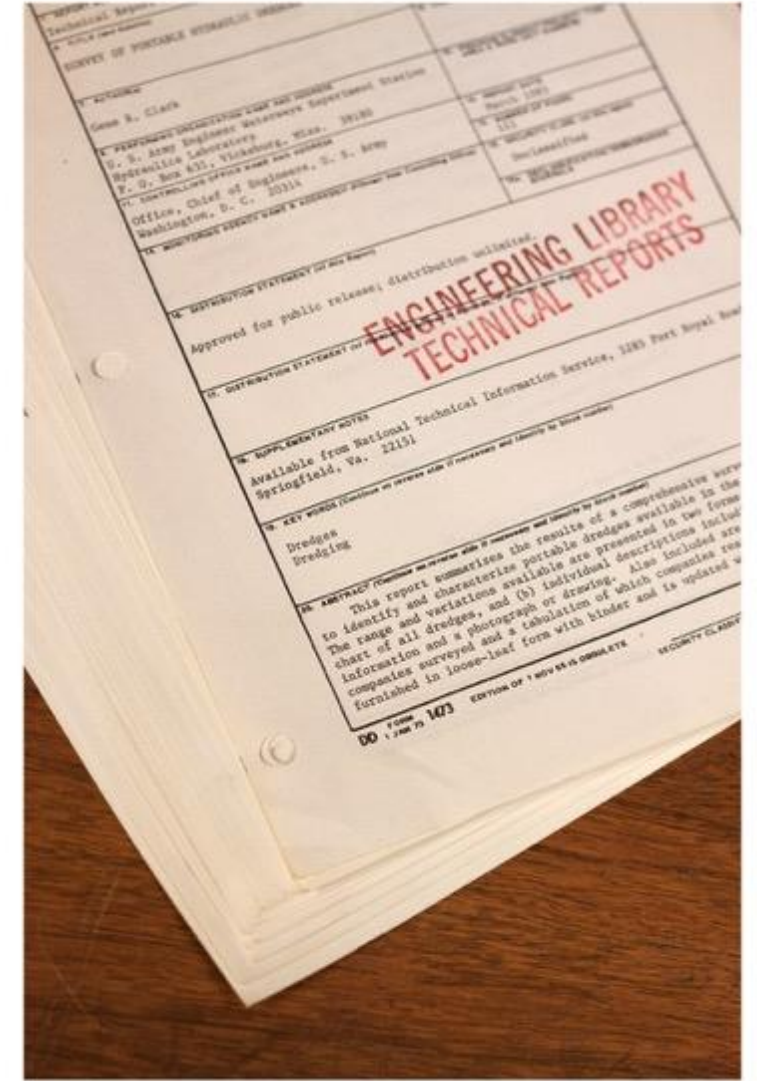
10 different types of materials

10 units of each type of items

5 different types of scanners

3 students for each item

1 trustworthy timer



Scrapbooks and Documents

AUGUST/SEPTEMBER 2012

-TEXAS LOTTERY- **FREE**

WINNING!

News about Texas Lottery® winners, scratch-off prizes, new games and more!

New All or Nothing™ Game Begins in September!

When sales begin on Sept. 9 for Texas Lottery's newest draw game, *All or Nothing*, some lottery players may begin to wish that their numbers are not drawn. With the revolutionary new \$2 game, not having your numbers drawn could result in a top prize of **\$250,000!**

The object of the game is to either select as many or as few numbers that match the 12 numbers drawn. If a player matches more than seven or fewer than five numbers drawn, the player wins a prize. If the player matches all 12 numbers drawn **or does not match any numbers drawn**, the player wins the top prize of \$250,000. If more than one ticket has been sold in which a player has matched all or none of the numbers drawn, each player possessing such a ticket will win the top prize of \$250,000.



ALL or nothing
TEXAS LOTTERY

All or Nothing drawings will be held four times a day, at 10:00 a.m., 12:27 p.m., 6:00 p.m., and 10:12 p.m. CT, six days a week, Monday through Saturday. *All or Nothing* will join the Texas Lottery's entertaining lineup of draw games including *Powerball*®, *Mega Millions*®, *Lotto Texas*®, *Texas Two Step*®, *Pick 3*™, *Daily 4*™ and *Cash 5*®.

OVER 37 MILLION WINNERS
IN APRIL/MAY 2012



Pamphlets and Books



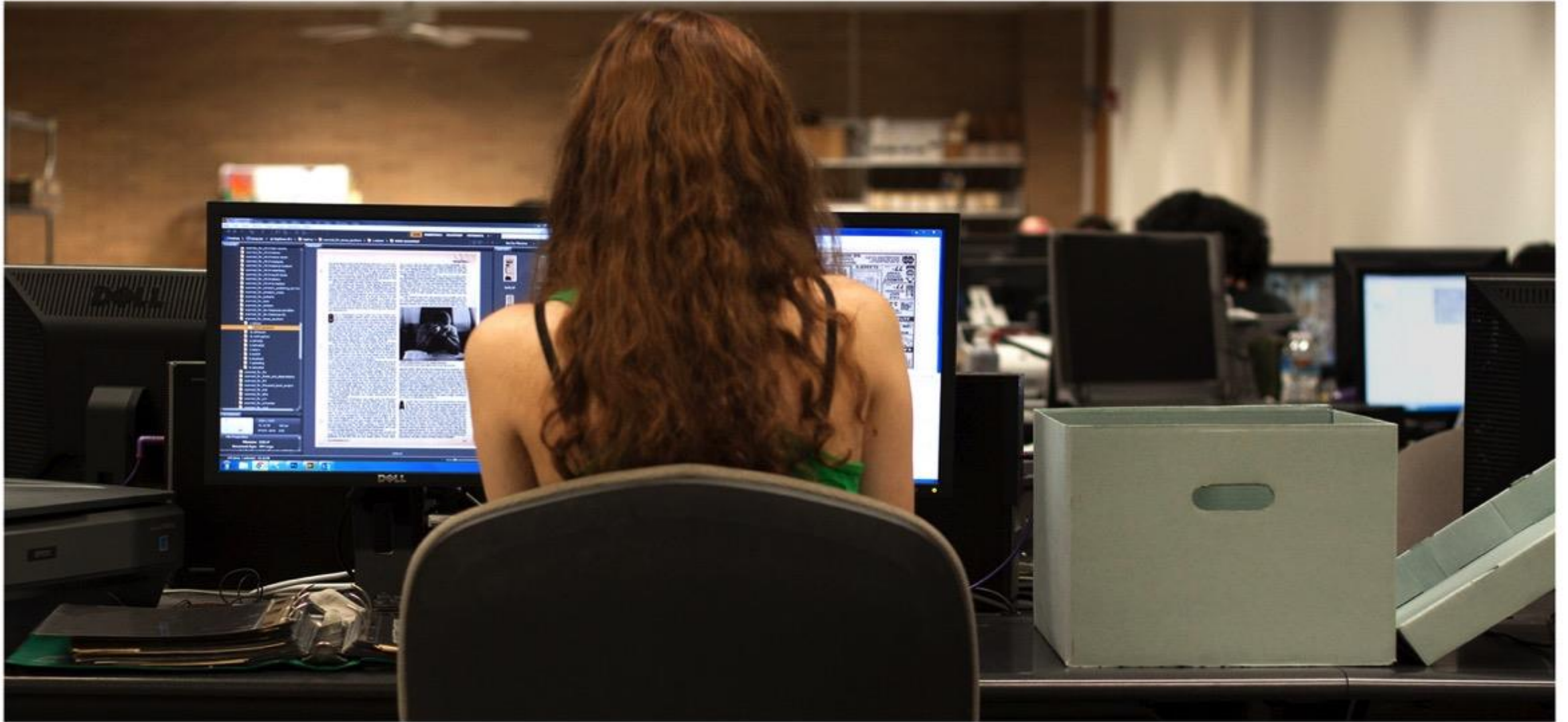
Photographic Negatives and Prints

ID	Material Type	Unit	Equipment	Est. Total Time	Est. Time/Item
01	Scrapbooks (12x12)	10	Zeutschel	40-50 min	4-5 min
02	Documents (8.5 x 11)	10	Large Epson	40-50 min	4-5 min
03	Documents (8.5 x 11)	10	Duplex	10-15 min	1-1.5 min
04	Pamphlets bi-fold	10	Large Epson	60-70 min	6-7 min
05	Pamphlet tri-fold	10	Large Epson	70-80 min	7-8 min
06	Book bound	10	Book edge	20-30 min	2-3min
07	Book unbound	10	Duplex	10-15 min	1-1.5 min

Hypothesis Chart

ID	Material Type	Unit	Equipment	Est. Total Time	Est. Time/Item
08	Negatives 120 mm	10	Epson	50-80 min	5-8 min
09	Negatives 4x5	10	Epson	50-80 min	5-8 min
10	Negatives 4x5	10	Phase 1	20-30 min	2-3 min
11	Photographic Prints (4 x 6)	10	Large Epson	30-40 min	3-4 min
12	Photographic Prints (8 x 10)	10	Large Epson	50-60 min	5-6 min

Hypothesis Chart



Test Scanning Documents on Epson 11000XL



Test Scanning 120mm negatives on Epson V700

ID	Material Type	Equipment	Hypothesis	Total Time	Time/Object
01	Scrapbooks (12x12)	Zeutschel	4-5 min	0:16:53	0:01:41
02	Documents (8.5 x 11)	Large Epson	4-5 min	0:51:17	0:05:08
03	Documents (8.5 x 11)	Duplex	1-1.5 min	0:06:31	0:00:39
04	Pamphlets bi-fold	Large Epson	6-7 min	1:25:47	0:08:35
05	Pamphlet tri-fold	Large Epson	7-8 min	1:27:24	0:08:44
06	Book bound	Book edge	2-3min	0:21:07	0:2:06
07	Book unbound	Duplex	1-1.5 min	0:14:10	0:01:25

Data Chart

ID	Material Type	Equipment	Hypothesis	Total Time	Time/Object
08	Negatives 120 mm	Epson	5-8 min	0:26:00	0:02:36
09	Negatives 4x5	Epson	5-8 min	0:50:09	0:05:01
10	Negatives 4x5	Phase 1	2-3 min	0:14:07	0:01:25
11	Photographic Prints (4 x 6)	Large Epson	3-4 min	0:54:24	0:05:26
12	Photographic Prints (8 x 10)	Large Epson	5-6 min	1:10:50	0:07:05

Data Chart

PERT Equation

$$\begin{aligned} & \text{Pessimistic} \\ & + 4 \times \text{most likely} \\ & + \text{Optimistic} \\ & \hline & 6 \end{aligned}$$

ID	Material Type	Equipment	Hypothesis	Time/ Object	PERT Time/object
01	Scrapbooks (12x12)	Zeutschel	4-5 min	0:01:41	0:03:00
02	Documents (8.5 x 11)	Large Epson	4-5 min	0:05:08	0:05:18
03	Documents (8.5 x 11)	Duplex	1-1.5 min	0:00:39	0:00:57
04	Pamphlets bi-fold	Large Epson	6-7 min	0:08:35	0:08:26
05	Pamphlet tri-fold	Large Epson	7-8 min	0:08:44	0:08:57
06	Book bound	Book edge	2-3 min	0:02:06	0:02:27
07	Book unbound	Duplex	1-1.5 min	0:01:25	0:01:28

ID	Material Type	Equipment	Hypothesis	Time/ Object	PERT Time/object
08	Negatives 120 mm	Epson	5-8 min	0:02:36	0:04:27
09	Negatives 4x5	Epson	5-8 min	0:05:01	0:06:03
10	Negatives 4x5	Phase 1	2-3 min	0:01:25	0:01:59
11	Photographic Prints (4 x 6)	Large Epson	3-4 min	0:05:26	0:05:05
12	Photographic Prints (8 x 10)	Large Epson	5-6 min	0:07:05	0:06:31

ID	Material Type	Equipment	Time/Object
01	Scrapbooks (12x12)	Zeutschel	0:03:00
02	Documents (8.5 x 11)	Large Epson	0:05:30
03	Documents (8.5 x 11)	Duplex	0:01:00
04	Pamphlets bi-fold	Large Epson	0:08:30
05	Pamphlet tri-fold	Large Epson	0:09:00
06	Book bound	Book edge	0:02:30
07	Book unbound	Duplex	0:01:30

Final Estimate

ID	Material Type	Equipment	Time/Object
08	Negatives 120 mm	Epson	0:04:30
09	Negatives 4x5	Epson	0:06:00
10	Negatives 4x5	Phase 1	0:02:00
11	Photographic Prints (4 x 6)	Large Epson	0:05:00
12	Photographic Prints (8 x 10)	Large Epson	0:06:30

Final Estimate

Now we have estimates

They are accurate and based on actual data

We are now working to assess other parts of our digitization lab

Thank you for your time!