



## Order Fulfillment Value Stream Mapping

- SOHO Office Retailer -

*The Current State*

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### Legend



**Customers, Manufacturers, Suppliers, & Sub-contractors** (Processes External to Our Business)



**Process**



**Document**



**Delay**



**Alternate Process**



**Decision**



**Manual Input**



**Collate**



**Sort**

15

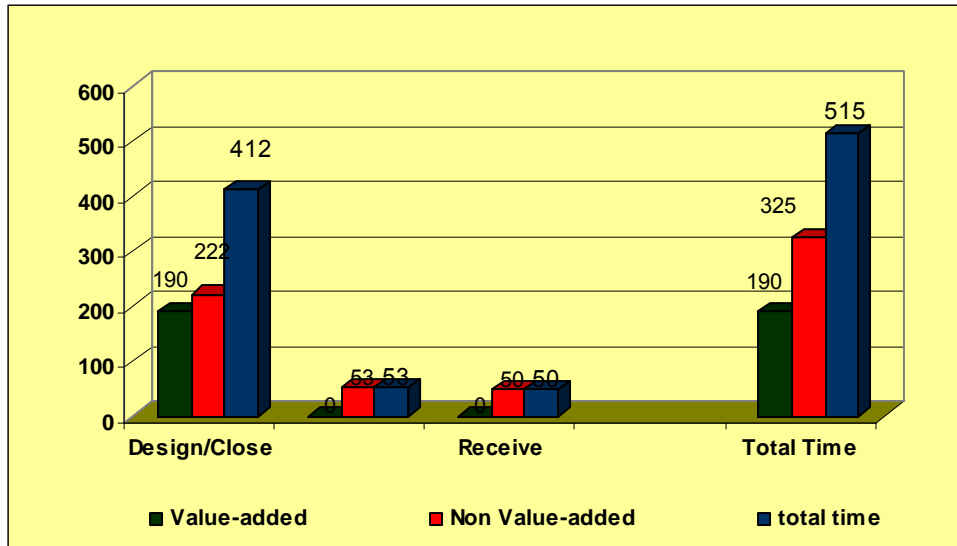
**Value added Process Time**

15

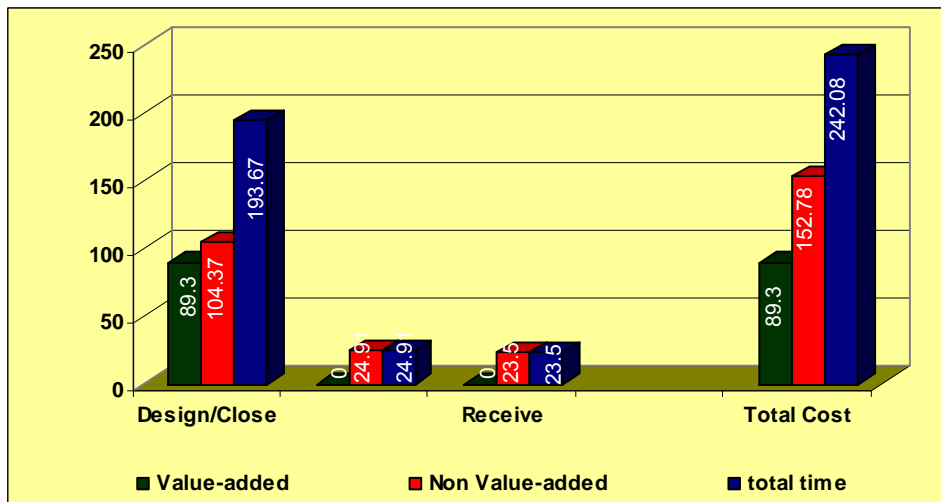
**Non Value-added Process Time**

## Process Summary

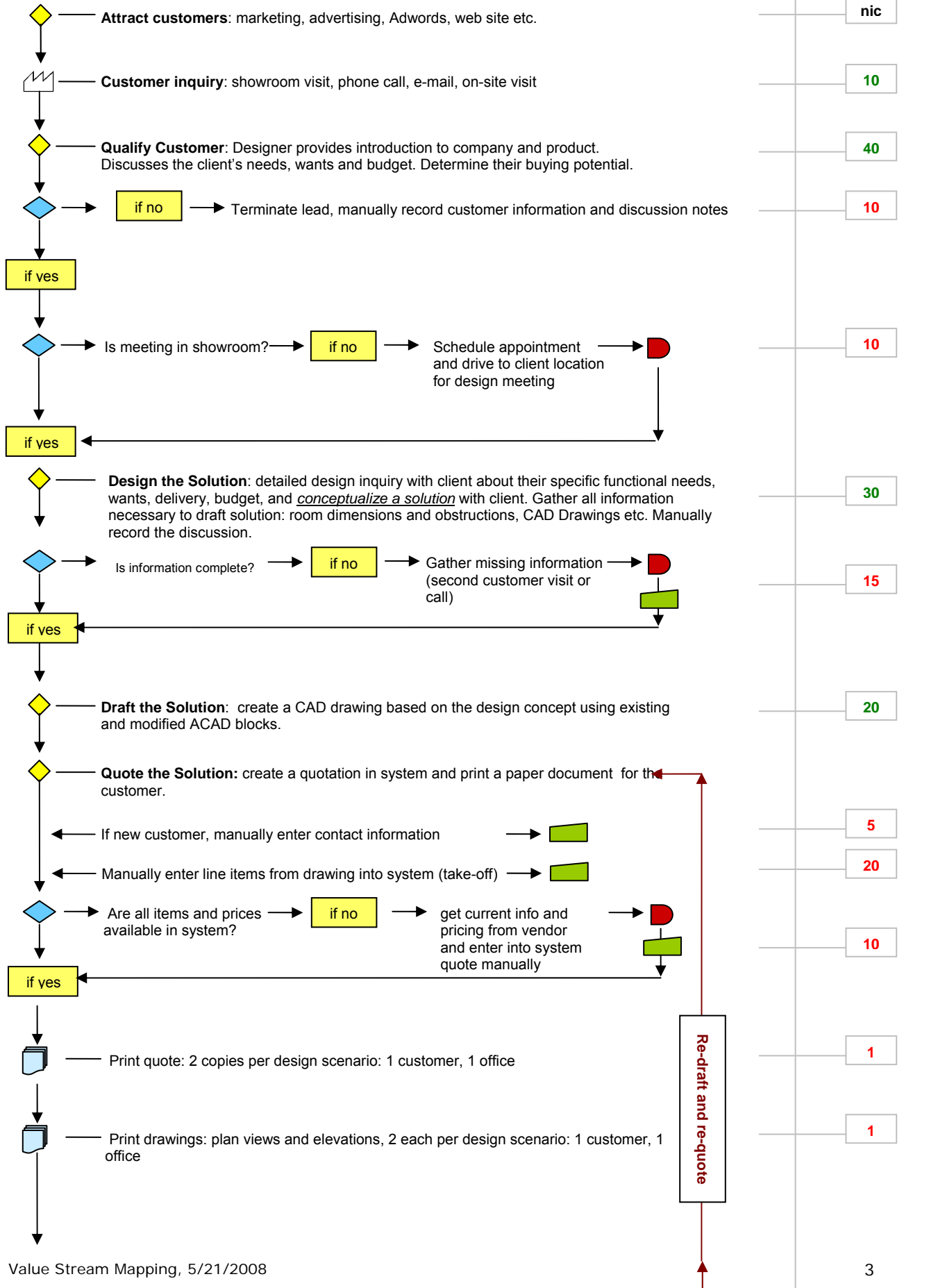
**Total Time** (in minutes)

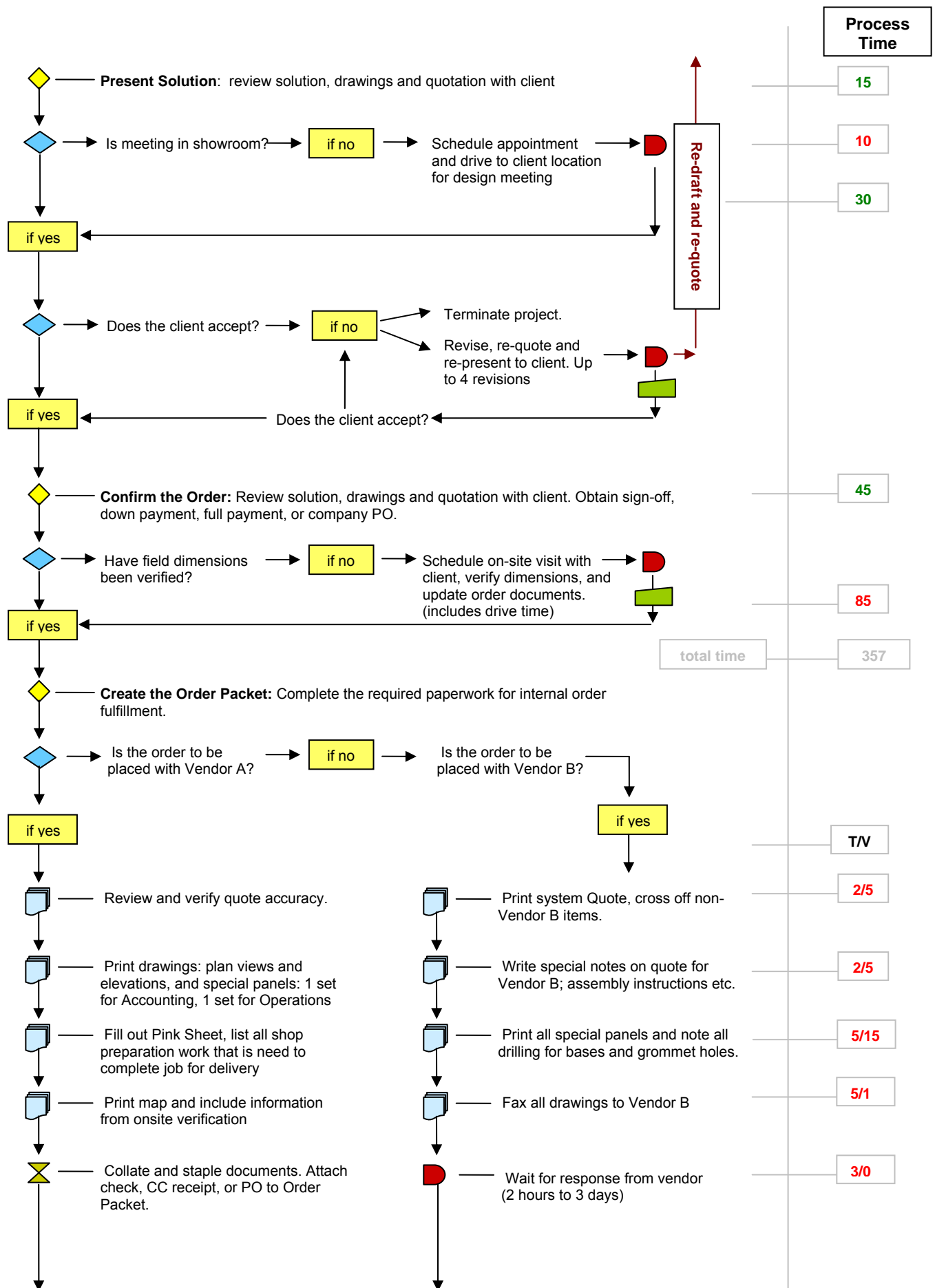


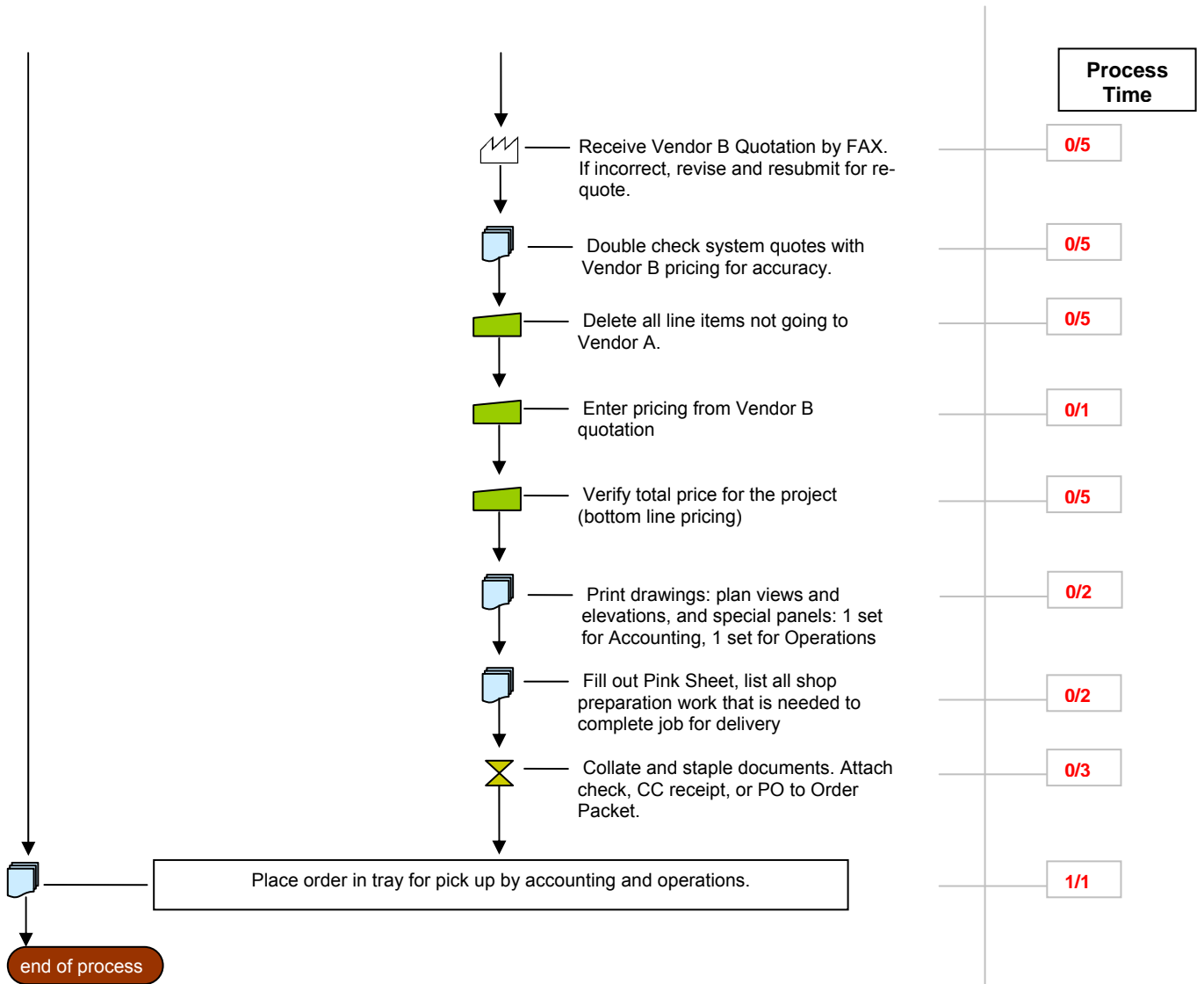
**Total Direct Cost**



## The Current Front End Processes: Design to Order Confirmation







**Analysis:**

Total Process Time in Minutes:

▫ Vendor A Order.....	373
▫ Vendor B Order.....	412

Total Process Cost (at \$0.47/minute)

▫ Vendor A Order.....	\$175.31
▫ Vendor B Order.....	\$193.64

Total Value-added Time: (based on Vendor B Order Time).....

190

Total Non value-added Time: .....

222

Non Value-added as Percent of Process.....

53.9%

Cost of Non Value-added per order.....

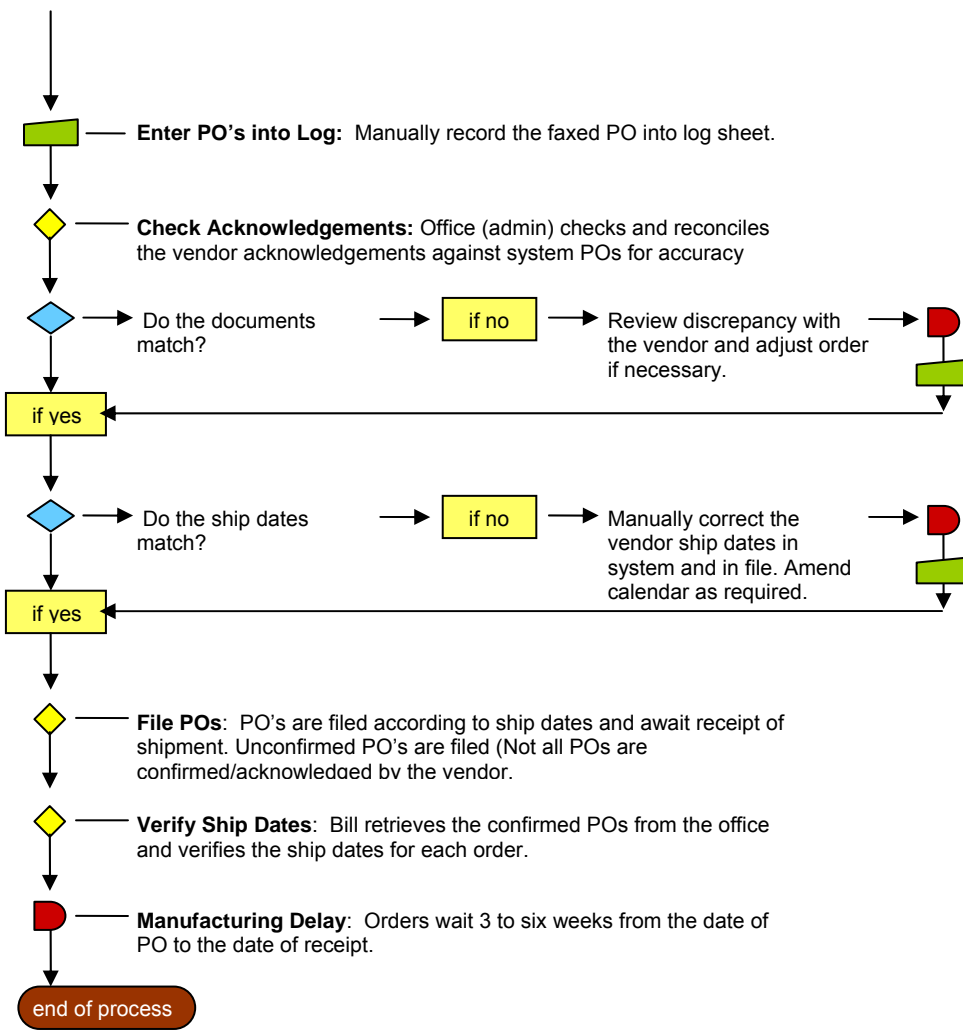
\$104.37

## **Comments and Observations:**

1. This Value Steam Map is based on a \$5000 ~ \$7000 office typically designed and sold by Designer 1.
2. The Analysis does not account for time spent on terminated opportunities or lost orders.
3. The Analysis considers only those activities that do not add value to our products and services in the minds of the customer. It does not account for inherent waste in manual processes.
4. Some of the non value-added activities are required for order fulfillment and therefore cannot be eliminated. However, we should look for ways to reduce the time spent on them, such as with process automation.
5. The Analysis does not account for errors and omissions that result in result in additional process time, especially downstream.
6. If we are incurring 222 minutes of non value-added time per order per designer, that would suggest there is considerable amount of additional design and selling capacity pent-up in our current process. Consider the value of this opportunity if each designer is writing 1 order per week on average:
  - $\$2 \text{ million in annual sales} \div 3 \text{ designers} = \$667\text{K in revenue per designer}$
  - $\$667\text{K} \div 2080 \text{ hours worked per year per designer} = \$321 \text{ per hour of revenue}$
  - $\$321.00 \div 60 \text{ minutes} = \$5.35 \text{ revenue value per minute.}$
  - $\$5.35 \text{ revenue value per minute} \times 222 \text{ minutes} = \$1188 \text{ of opportunity value}$
  - $\$1188 \times 3 \text{ designers} = \$3564.00/\text{week}$
  - $\$3564.00 \times 50 \text{ weeks} = \$178,000 \text{ per year}$
  - $\$178,200 \div \$2 \text{ million} = 9\% \text{ growth with the same staff and cost structure}$
7. In actuality, the real waste, when adding in errors, emissions, and resulting downstream waste, would be greater than 222 minutes of non value-added.
8. Furthermore, the pent-up revenue opportunity, when considered along with the productivity gains from automating upfront process such as the refinement, consolidation, and integration of the quoting process to design, is probably significantly greater.
9. Therefore, increasing annual sales revenues by 10% through front end process improvement should be realistically attainable.
10. Additional design and selling capacities may also be achieved through changes in organization structure and responsibilities.
11. All reduction in non-value added activities drop straight to the bottom line as activities on new sales opportunities increase.
12. Finally, this value stream analysis does not yet include the conversion of a quote to sales order, purchasing, receiving, delivery and installation. That analysis is to follow within several days of this document.

## The Current Back End Processes: Customer Order Processing



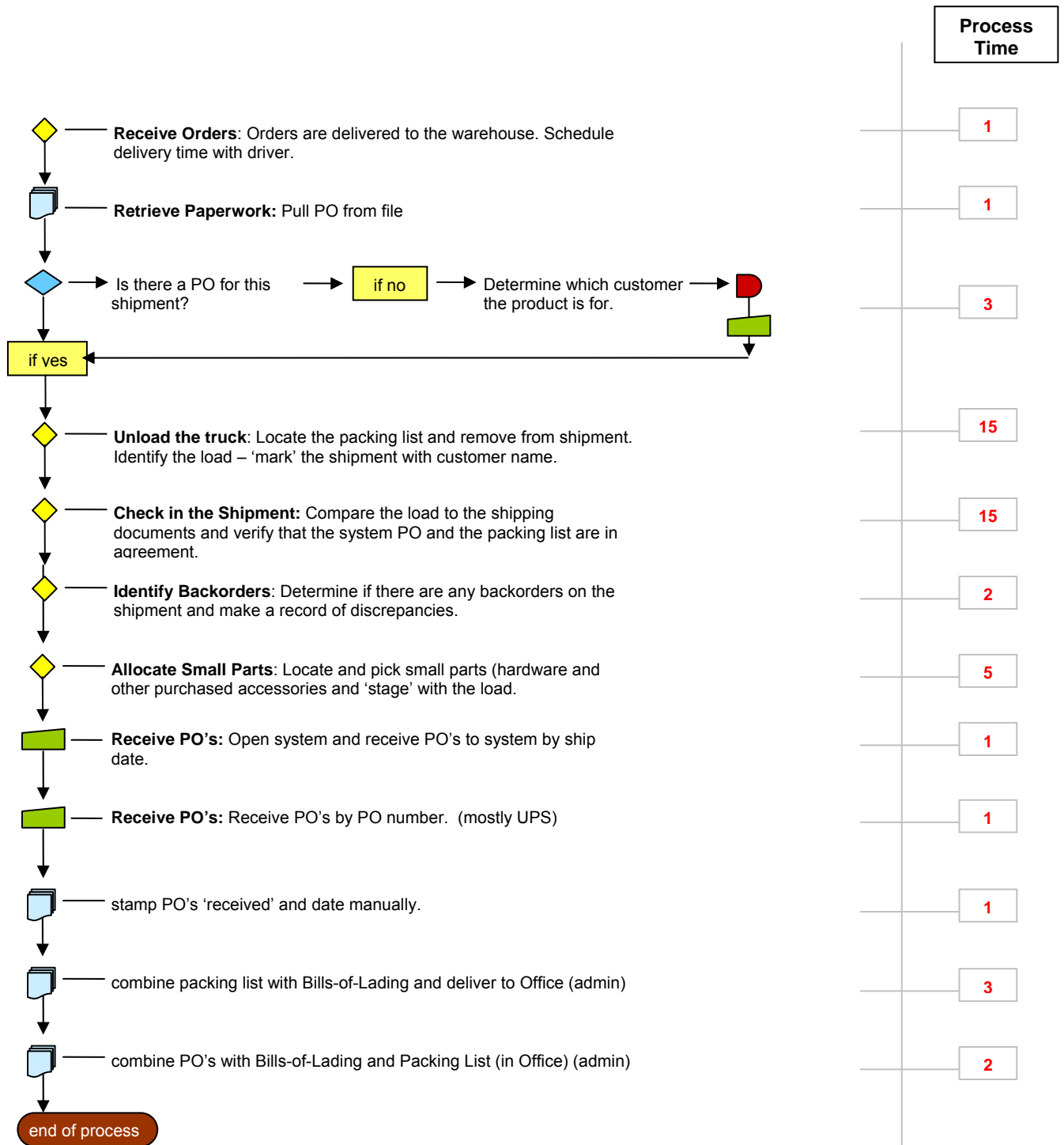


**Process Time**

1
1
1
1
1
1
nic

**Analysis:**

Total Process Time in Minutes .....	53
Total Process Cost (at \$0.47/minute).....	\$24.91
Total Value-added Time.....	0
Total Non value-added Time: .....	53
Non Value-added as Percent of Process.....	100%
Cost of Non Value-added per order.....	\$24.91



**Analysis:**

Total Process Time in Minutes .....	50
Total Process Cost (at \$0.47/minute).....	\$23.50
Total Value-added Time.....	0
Total Non value-added Time: .....	50
Non Value-added as Percent of Process.....	100%
Cost of Non Value-added per order.....	\$23.50

**Comments and Observations:**

1. This analysis does not account for anytime spend spent to backtrack order errors and omissions that occur as part of the quoting process.
2. Not all vendors product can be order through the system; therefore there are duplicate processes that are not measured in this map.
3. The times included above are estimated and not measured.
4. The Analysis does not include the time spent transporting paperwork between the office and the warehouse.
5. The Analysis does not account for system lag time (system response)
6. Several Process steps, such as inventory check and Ship check-in are not currently being adequately followed and therefore, these times may be understated.