



Investigation of Outsourcing Usage Rates in the Production Processes of Apparel Companies

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HIGHLIGHTS

- > This study provides information about outsourcing and outsourcing usage rates in the production processes of apparel companies.
- > Apparel companies use outsourcing in almost all production processes. In this study, outsourcing usage rates of garment companies on the basis of processes were investigated. Research results have shown that apparel companies use a high rate of outsourcing especially for printing and embroidering, piece dyeing and washing processes.

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ABSTRACT

Outsourcing is one of the methods frequently used by labor-intensive sectors such as the garment industry and has many advantages for companies. There are many reasons leading companies to use outsourcing such as "focusing on basic skills, reducing cost, increasing flexibility". Outsourcing was a method used by the companies primarily for the purpose of carrying out the activities which are out of their specialty. Later, companies started to use outsourcing for their all processes, especially because of their cost advantage. In this study, a survey was conducted to investigate the outsourcing usage rates in the production processes of apparel companies and the data obtained were evaluated. Research results have shown that apparel companies are still using outsourcing more intensively in processes related to outside their specialties.

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1. Introduction

In general, production can be defined as bringing together the production factors to produce goods or services for human needs [1]. In other definition, production is to make unused raw materials or semi-products usable by doing value-increasing activities on a physical asset [2].

Outsourcing is defined as the procurement of products or services from sources that are external to the organization [3]. In other definition, outsourcing is to make all or a part of the production of the main company according to the main company's priority and principals [4].

Apparel companies produce clothes by processing fabrics and auxiliary materials. Figure 1 shows the garment production flow in general [5].

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The long and complex process of ready-wear production drives apparel companies to use outsourcing. [2].

Apparel companies can carry out each or all of the aforementioned processes via outsourcing method.

The types of outsourcing preferred by apparel companies are given below.

- Using outsourcing for materials testing
- Using outsourcing for pattern making
- Using outsourcing for fabric cutting
- Using outsourcing for only sewing
- Using outsourcing for buttonhole and placement button
- Using outsourcing for sewing and ironing-packaging
- Using outsourcing for pressing and packaging
- Using outsourcing for printing-embroidering/piece dyeing/washing
- Using outsourcing for all processes [6, 7].

Outsourcing was a method used by the companies primarily to carry out the activities which are out of their specialty but today the primary target is to reduce costs [4].

Cost is one of the most important factors in making product decisions and the main subject for companies. All companies want to obtain maximum profit with minimum input. Because the savings in production without compromising on quality will positively influence costs. Thus, the production cost of the companies will decrease and their competitiveness will increase [8, 9].

One of the reasons that push companies which has high sales volumes and high product range to use outsourcing is to increase flexibility. Thus, companies make more production through outsourcing instead of investing [10].

In addition to focusing on basic abilities, reducing cost and increasing flexibility, outsourcing has many advantages for companies. The advantages of outsourcing can be listed as follows;

- Increasing flexibility
- Focusing on basic abilities (Core activities)
- Reducing risks
- Increasing quality
- Downsizing of organization
- Reducing cost
- Increasing product range
- Uncontrollable functions
- Saving time
- Increasing productivity
- Being involved in successful enterprises
- Renewing process

- Wide and flexible resource pool
- Redistributing resources
- Resource transfer
- Following technological innovations
- Overcoming the demands beyond capacity [10–14].

The main purpose of this study is to examine outsourcing usage rates of garment companies on a department basis. In this way, to reveal which processes are performed through outsourcing and to examine the purposes of companies in parallel with outsourcing usage rate.

In general, production can be defined as bringing together the production factors to produce goods or services for human needs [1].

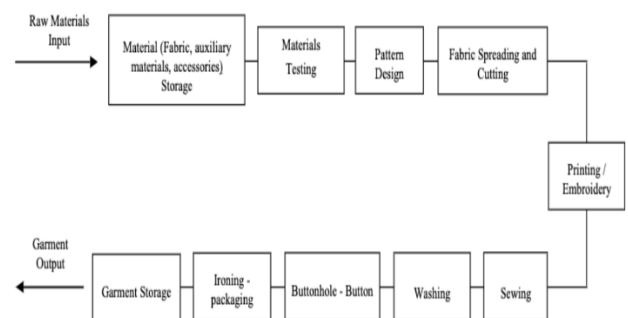


Figure 1. Flow chart of Apparel Production

2. Material and Method

In this research, a survey is conducted among the first 500 companies in the garment industry which are determined each year by Istanbul Chamber of Commerce. Survey results analyzed and evaluated with SPSS Version 16 program and frequency analysis was performed.

In the scope of the research, 15 apparel companies that use outsourcing were asked questions on outsourcing usage rates in the production processes and obtained data were evaluated.

3. Results

Following are the frequency tables (Table 1 – Table 9) of the answers given by the apparel companies to the question “What is the outsourcing usage percentage in your company’s production process for each process?”, which was addressed to the apparel companies within the scope of the study.

Table 1 The frequency table of the question “What is the outsourcing usage percentage in your company’s production process for pattern making?”

What is the outsourcing usage percentage in your company's production process for each process? (Pattern making - PM)	Frequency	Percent	Valid Percent
0	1	6.7	6.7
1 – 20	12	80.0	80.0
41 – 60	1	6.7	6.7
81 – 100	1	6.7	6.7
Total	15	100.0	100.0

When Table 1 examined, all of the companies participated in the study answered that question. Considering the answers given to the question; according to 12 companies constituting 80% of the companies have made the pattern making process by outsourcing at the rate of 1 – 20%, according to every one of the companies constituting 6,7% of the companies has made the pattern making process by outsourcing respectively at the rate of 41 – 60% and 81 – 100%.

Table 2 The frequency table of the question “What is the outsourcing usage percentage in your company’s production process for fabric cutting?”

What is the outsourcing usage percentage in your company’s production process for each process? (Fabric Cutting - FC)	Frequency	Percent	Valid Percent
1 – 20	5	33.3	33.3
21 – 40	2	13.3	13.3
41 – 60	5	33.3	33.3
61 – 80	1	6.7	6.7
81 – 100	2	13.3	13.3
Total	15	100.0	100.0

All of the companies participated in the study answered that question. Considering the answers given to the question; according to every 5 of the companies constituting 33.3% of the companies have made the fabric cutting process by outsourcing respectively at the rate of 1 – 20% and 40-59%, according to every 2 of the companies constituting 13.3% of the companies have made the fabric cutting process by outsourcing respectively at the rate of 21 – 40% and 81 – 100%, according to 1 company constituting 6.7% of the companies has made the fabric cutting process by outsourcing at the rate of 61 – 80%.

Table 3 The frequency table of the question “What is the outsourcing usage percentage in your company’s production process for sewing?”

What is the outsourcing usage percentage in your company’s production process for each process? (Sewing - S)	Frequency	Percent	Valid Percent
1 – 20	1	6.7	6.7
21 – 40	3	20.0	20.0
41 – 60	6	40.0	40.0
61 – 80	2	13.3	13.3
81 – 100	3	20.0	20.0
Total	15	100.0	100.0

When Table 3 examined it is seen that all of the companies answered that question. Considering the answers given to the question; according to 6 companies constituting 40% of the companies have made the sewing process by outsourcing at the rate of 41 – 60%, according to every 3 of the companies constituting 20% of the companies have made the sewing process by outsourcing respectively at the rate of 21 – 40% and 81 – 100%, according to 2 companies constituting 13.3% of the companies have made the sewing process by outsourcing at the rate of 61 – 80%, according to 1 company constituting 6.7% of the companies has made the sewing process by outsourcing at the rate of 1 – 20%.

Table 4 The frequency table of the question “What is the outsourcing usage percentage in your company’s production process for buttonhole and placement button?”

What is the outsourcing usage percentage in your company’s production process for each process? (Buttonhole and Placement button - BPB)	Frequency	Percent	Valid Percent
1 – 20	4	26.7	26.7
21 – 40	2	13.3	13.3
41 – 60	5	33.3	33.3
61 – 80	1	6.7	6.7
81 – 100	3	20.0	20.0
Total	15	100.0	100.0

According to the Table 4, all of the companies participated in the study answered that question. Considering the answers given to the question; according to 5 companies constituting 33.3% of the companies have made the buttonhole and placement button process by outsourcing at the rate of 41 – 60%, according to 4 companies constituting 26.7% of the companies have made the process by outsourcing at the rate of 1 – 20%, according to 3 companies constituting 20% of the companies have made the process by outsourcing at the rate of 81 – 100%, according to 2 companies constituting 13.3% of the companies have made the process by outsourcing at the rate of 21 – 40%, according to 1 company constituting 6.7% of the companies has made the process by outsourcing at the rate of 1 – 80%.

Table 5 The frequency table of the question “What is the outsourcing usage percentage in your company’s production process for pressing and packaging?”

What is the outsourcing usage percentage in your company’s production process for each process? (Pressing and Packaging - PP)	Frequency	Percent	Valid Percent
1 – 20	1	6.7	6.7
21 – 40	2	13.3	13.3
41 – 60	5	33.3	33.3
61 – 80	3	20.0	20.0
81 – 100	4	26.7	26.7
Total	15	100.0	100.0

When Table 5 examined, all of the companies participated in the study answered that question. Considering the answers given to the question; according to 5 companies constituting 33.3% of the companies have made the pressing and packaging process by outsourcing at the rate of 41 – 60%, according to 4 companies constituting 26.7% of the companies have made the pressing and packaging process by outsourcing at the rate of 81 – 100%, according to 3 companies constituting 20% of the companies have made the pressing and packaging process by outsourcing at the rate of 61 – 80%, according to 2 companies constituting 13.3% of the companies have made the pressing and packaging process by outsourcing at the rate of 21 – 40%, according to 1 company constituting 6.7% of the companies has made the pressing and packaging process by outsourcing at the rate of 1 – 20%.

Table 6 The frequency table of the question "What is the outsourcing usage percentage in your company's production process for printing and embroidering?"

What is the outsourcing usage percentage in your company's production process for each process? (Printing and embroidering - PE)	Frequency	Percent	Valid Percent
1 – 20	2	13.3	13.3
41 – 60	2	13.3	13.3
61 – 80	1	6.7	6.7
81 – 100	10	66.7	66.7
Total	15	100.0	100.0

All of the companies participated in the study answered that question. Considering the answers given to the question; according to 10 companies constituting 66.7% of the companies have made the printing and embroidering process by outsourcing at the rate of 81-100%, according to every 2 of the companies constituting 13.3% of the companies have made the printing and embroidering process by outsourcing respectively at the rate of 1 – 20% and 41–60%, according to 1 company constituting 6.7% of the companies has made the printing and embroidering process by outsourcing at the rate of 61-80%.

Table 7 The frequency table of the question "What is the outsourcing usage percentage in your company's production process for piece dying?"

What is the outsourcing usage percentage in your company's production process for each process? (Piece dying PD)	Frequency	Percent	Valid Percent
1 – 20	3	20.0	20.0
61 – 80	1	6.7	6.7
81 – 100	11	73.3	73.3
Total	15	100.0	100.0

All of the companies answered that question. Considering the answers given to the question; according to 11 companies constituting 73.3% of the companies have made the piece dying process by outsourcing at the rate of 81-100%, according to 3 companies constituting 20% of the companies have made the piece dying process by outsourcing at the rate of 1-20%, according to 1 company constituting 6.7% of the companies has made the piece dying process by outsourcing at the rate of 61-80%.

Table 8 The frequency table of the question "What is the outsourcing usage percentage in your company's production process for washing?"

What is the outsourcing usage percentage in your company's production process for each process? (Washing - W)	Frequency	Percent	Valid Percent
1 – 20	3	20.0	20.0
21 – 40	1	6.7	6.7
61 – 80	1	6.7	6.7
81 – 100	10	66.7	66.7
Total	15	100.0	100.0

All of the companies participated in the study answered that question. Considering the answers given to the question; according to 10 companies constituting 66.7% of the companies have made the washing process by outsourcing at the rate of 81-100%, according to 3 companies constituting

20% of the companies have made the washing process by outsourcing at the rate of 1-20%, according to every 1 of the companies constituting 6.7% of the companies has made the washing process by outsourcing respectively at the rate of 21 – 40% and 61–80%.

Table 9 The frequency table of the question "What is the outsourcing usage percentage in your company's production process for hand-made?"

What is the outsourcing usage percentage in your company's production process for each process? (Hand-made - HM)	Frequency	Percent	Valid Percent
0	14	93.3	93.3
81 – 100	1	6.7	6.7
Total	15	100	100

According to the Table 9, all of the companies participated in the study answered that question. Considering the answers given to the question; according to 1 company constituting 6.7% of the companies has made the hand-made process by outsourcing at the rate of 81-100%.

When the above tables are analyzed, it is seen that all the companies participating in the study answered the question. Table 10 shows all the results collectively.

Table 10 Outsourcing usage percentages for each process

Percent	PM	FC	S	BPB	PP	PE	PD	W	HM
0	1	-	-	-	-	-	-	-	14
1-20	12	5	1	4	1	2	3	3	-
21-40	-	2	3	2	2	-	-	1	-
41-60	1	5	6	5	5	2	-	-	-
61-80	-	1	2	1	3	1	1	1	-
81-100	1	2	3	3	4	10	11	10	1

4. Conclusion

A questionnaire was applied to 15 apparel companies concerning the "outsourcing usage percentage in your company's production process for each process" and their results were evaluated.

In the light of the findings acquired, it has been observed that the companies;

- have made the pattern making process in the company at a high rate,
- generally have made the fabric cutting process in the company,
- generally have made the sewing process by outsourcing,
- generally have made the buttonhole and placement button process in the company,
- generally have made the pressing and packaging process by outsourcing,
- have made the printing and embroidering process by outsourcing at a high rate,
- have made the piece dying process by outsourcing at a high rate,
- have made the washing process by outsourcing at a high rate,

- have made the hand-made process in the company at a high rate.

Among the operations shown in Table 10, while pattern making, fabric cutting, sewing, buttonhole and placement button, pressing and packaging and hand-made processes are the main activities of garment companies, printing and embroidering, piece dyeing and washing operations are not the main activities of garment companies.

These results show that ready-made garment companies use outsourcing for operations which belong to different specialties.

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