



Sales And Production Cost Applications At Pt. Semarang Delta

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***Abstract.** In processing sales and production data at PT. Delta, is an important activity, where distributed data processing still uses Microsoft Excel and Microsoft Word. Therefore, to make it easier for employees to enter data and sell goods, the author tries to process the data using a computerized system that is more effective and efficient. Data collection and analysis were carried out in an effort to solve this problem. The research method used in making this system, from data collection, problem analysis, system design to system creation, is the observation method, and directly handling sales at PT. Delta. This application system was created using the PHP programming language and the database was processed using Adobe Dreamweaver, Appserv, and MySQL. By using this system, the distribution of sales and production data processing at PT. Delta will be easier and more detailed, making it very easy for employees.*

***Keywords:** Adobe Dreamweaver, Appserv, and MySQL, Data Processing*

1. INTRODUCTION

In the current era of globalization, information is very much needed for the survival of companies, both state agencies and private agencies, so that information management is very important in a company in increasing productivity, both in obtaining information for the company's own internal interests. Accounting information systems are the main formal systems in most companies. A formal information system is a system that explains in writing the responsibilities for creating information. Financial events that occur are communicated through the accounting information system to interested parties in the form of activity reports. A computerized database accounting information system makes it easier to input data and create reports more quickly, accurately and easily. The aim of the accounting system is to improve internal control and to improve better information, in addition to reducing administrative costs or administrative costs, and to determine the implementation of the production process so that it is easier to carry out planning and prevent unhealthy implementation of company operations. The accounting system is also a company control tool in saving company assets.

Information systems are closely related to trading activities because they are useful for company operational activities, especially sales activities. The company's main activity is selling goods, because sales are the company's main source of income. Sales are an important element in the activities of a company that operates in the trade sector, because with sales the company gets profits that can continue the company's business, therefore it needs service that is as effective as possible. To support these activities, it is necessary to develop a sales system with a computerized database in order to expedite and simplify the transaction data processing process in the company. In order to support sales activities, a leader really needs information

related to sales, to present information about sales so that it can be used to make further decisions. So that sales activities can run effectively, objectives the company can achieve what has been planned, then there is a need for internal control. Controls are established so that activities operations run effectively and efficiently, and guarantee reliability regarding financial statement notes. Internal control is huge its effect on financial statements. With internal control, a means will be created to compile and collect information related to company transactions, which can indirectly be carried out well.

Production costs are the accumulation of all costs required in the production process with the aim of producing a product or item. These costs include raw material costs, labor costs, goods/factory operational costs, and so on. These production costs must be accumulated carefully and then calculated and compared with the company's gross profit. The difference in income minus production costs will be the company's net profit or the total profit earned. These production costs are needed to support the process of processing raw materials into finished products that are ready to be marketed to consumers. Factors that influence production costs include: The influence of management on costs, cost characteristics in relation to output, the effect of changes in the volume of activity on costs.

PT Delta is located at Jalan Sinar Mas Baru No. 3 Tembalang sub-districts, Semarang city. PT. Delta is a company that operates in the digital printing sector, requiring good sales information system processing and production costs, where decisions are taken based on the information obtained which will affect the survival of the company, especially to obtain the maximum possible profit. PT. Delta has 16 employees, including production, finishing, creative design and admin.

To order digital printing, you can come directly to the office or via email. To order, customers must provide personal identification (name, address and telephone number), type of product ordered, product size. The product ordered can be finished within a day or a maximum of 3 days, depending on the complexity of the design and the queue at the digital printing machine. In the sales system and production costs at PT. Delta does not yet have a computerized database so customer order data is still recorded manually using an SO (Order Letter) book and then typed using Ms. Excel, even though it uses a computer, customer order data is not yet saved automatically because there is no data processing and database storage application. , whereas in calculating production costs we still use the manual method, namely by adding up the costs that have been incurred to purchase production materials by looking again at the receipt for purchasing production materials. To find out sales profit, namely the cost of goods sold is the number of products sold multiplied by the selling price per unit, so the way to calculate profit is the difference between sales and the cost of goods sold. To record customer orders, we still use manual notebooks, so it is possible that these notes will be damaged, torn and lost. Obtaining information on sales reports and production costs cannot be made quickly if requested at any time, because you have to calculate manually first and then summarize all the data. To search for sales data, you need to search for printed documents one by one by opening the notes in the SO (Order Letter) book.

It is hoped that with the information system, all data will be stored in the database, starting from customer identity, product type, price, design input, production cost calculations to making reports so that they can be created automatically and can be reported at any time. To estimate the auxiliary costs or operational costs here include the costs of electricity, ink and glue, the auxiliary costs are determined at a nominal value of IDR. 5000,- per square meter. This system provides a "Sales Report" facility, making it easier to find out sales profit. To determine the selling price of products in the system, input facilities are provided for "production costs" and input "sales product data" with a calculation of 35% price increase from production costs which are calculated automatically in the system. The aim of creating this system is to make it easier for employees to collect data so that there is no accumulation of

data, errors in inputting data, making it easier to calculate profits and search for data more quickly and efficiently as well as maximizing employee performance in storing data and calculating profits, especially in making reports. Searching for the sales data you need is made easy with the "Search" facility in the system.

2. THEORETICAL FOUNDATION

1. Understanding Systems

A system is a group of elements that are integrated with the same goal to achieve goals (Yakub, 2012).

There are two groups of systems approaches in defining systems, namely the procedures approach where the system is a network of interconnected procedures, collected together to carry out an activity or for a certain purpose, and the components or elements approach, The component approach is considered easier in studying systems for system purposes and design (Yakub, 2012).

In principle, every system always consists of elements:

- a. Objects, which can be parts, elements, or variables. It can be physical, abstract, or both at once; depending on the nature of the system.
- b. Attributes, which determine the quality or properties of the system and its objects. Internal relationships, between the objects in it.
- c. Environment, the place where the system is located.

From the statement above, it can be concluded that something can be said to be a system if there are two or more components or procedures that are interconnected with each other to achieve certain goals.

2. System Classification

A system can be classified as an abstract system versus a physical system, a natural system versus a man-made system, a definite system versus a *probabilistic system*, and a closed system versus a closed system versus an open system (Michael, 1996).

Information systems fall into the classification of physical systems, man-made systems, definite systems and open systems. As a physical system, information systems have physical components. As a man-made system, because it was designed and created by analysts or system users. As a definite system, because the results of this system in the form of information are results that have been designed and determined according to the user. As an open system, because this system is connected to the external environment. The external environment of the information system can be something outside the information system but still within the company environment or something outside the company environment (Amsyah, 1997).

3. Understanding Data

Data is reality that describes the existence of an event, data consists of facts and figures which are relatively meaningless to the user (Yakub, 2012).

Data are raw facts and images that will be processed into information (Williams, 2007).

Data is the most important component in a *database management system* (DBMS), from an *end-user perspective* (Connolly, 2010).

Data are facts collected, recorded, stored and processed by an information system (Purnama, 2016).

4. Understanding Information

Information is the result of processing data so that it becomes an important form for the recipient and is useful as a basis for decision making whose consequences can be felt directly at that time or indirectly in the future (Sutanta, 2011) .

Information is data that is processed into a form that is more useful and more meaningful for those who receive it (Yakub, 2012) .

5. Understanding Information Systems

An information system is a system within an organization that meets the needs for processing daily transaction data, supports operations, is managerial, and strategic activities of an organization and provides certain external parties with the necessary reports (Yakub, 2012) .

6. Understanding Data

Data is reality that describes the existence of an event , data consists of facts *and* figures which are relatively meaningless to the user (Yakub, 2012) .

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3. METHODOLOGY

In collecting data, the author used 3 methods, namely:

a. Observation

Observation is a method of collecting data through direct observation in the field or research location to prove the truth of science. The author made observations to find out PT customer data. Delta.

b. Interview

The interview is a question and answer conducted by the author directly with the leadership because coincidentally the author works at PT. Delta, by asking about a certain topic to find out more in-depth things about the company that cannot be obtained through observation.

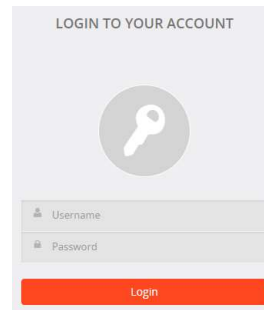
c. Literature Study

Literature Study is a literature study that can be used as a step to obtain information from research related to sales data processing systems.

4 RESULTS AND DISCUSSION

1. *Login* Form

login form is used to access the use of the sales information system in accordance with the access rights granted, so that each user has their own limitations in using the application.



Picture Admin Login Page Display

How to run:

- a) Enter *your username* and *password*
- b) Click the *Login button*

2. Menu Display

After successfully *logging in*, the user will go to the menu display page. On this menu page there are differences for each account which are determined based on the level of access rights of each account. The admin account has full access rights to all forms, the designer account only has access to view and change images in the order data, while the production account only has access to view images and click the finish button on the order data.



Image of the menu page for the admin account.

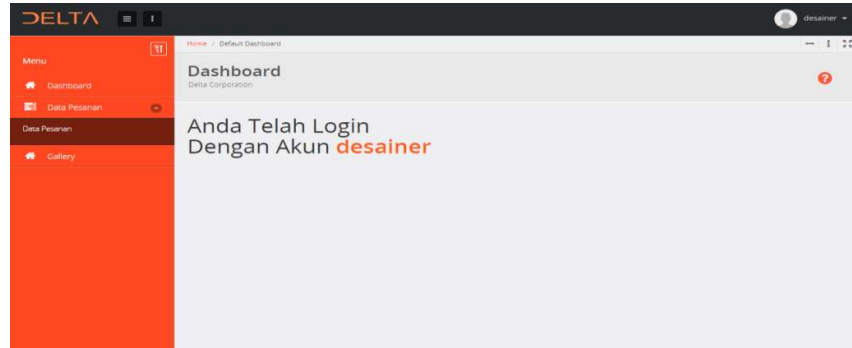


Image of the menu page in the designer & production account

How to run:

- a) Master Data consists of Product Type Data, Product Data, Order Category Data, Admin Data forms. Click to select the form to open and use.
- b) Order Data consists of *Customer Data Form* , Order Data, Invoice Data. Click to select the form to open and use.

3. Product Type Data Form Display

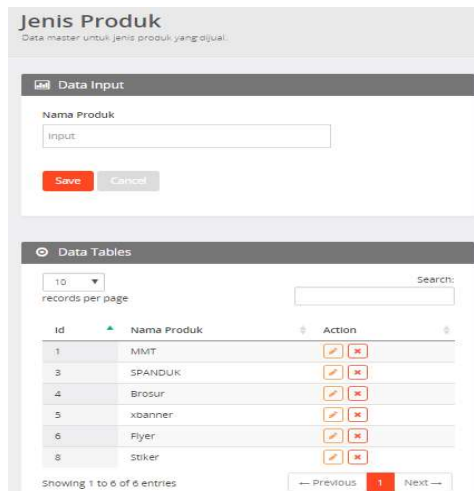


Image of Product Type Data Form Display

How to run:

- a) Type the name of the product type in the *input box*
- b) Click the *Save button*

4. HPP Data Form Display

Id	Jenis Produk	Nama Produk	Satuan	Harga Beli	Harga Operasional	Action
1	MMT	280gr	mg	10.000,00	5.000,00	[✓] [✗]
2	MMT	440	mg	15.000,00	5.000,00	[✓] [✗]
3	Brosur	A4 1 sisi	rm	1.25.000,00	25.000,00	[✓] [✗]
4	Kartu Nama	1 sisi	Box	20.000,00	5.000,00	[✓] [✗]
5	Kartu Nama	2 sisi	Box	25.000,00	5.000,00	[✓] [✗]

Image of HPP Data Form

How to run:

- Click on the product type option list to select the desired product type
- Click in the product name text area and type the name of the product you want to enter
- Enter the unit name
- Enter the purchase price of the material
- Enter the estimated operating price
- Click Save

5. Display of Sales Product Data Form

Id	Jenis Produk	Nama Produk	Satuan	Harga	Action
1	MMT	280gr	mg	13500	[✓] [✗]
2	MMT	440	mg	26250	[✓] [✗]
3	Kartu Nama	1 sisi	Box	27000	[✓] [✗]
4	Kartu Nama	2 sisi	Box	32750	[✓] [✗]
5	Brosur	A4 1 sisi	rm	148750	[✓] [✗]

Image of the Sales Product Data Form Display

How to Run:

- Click on the product type *option list box* and select the desired product type.
- Click on the product name *option list box* and select the desired product name.
- The selling price will be filled automatically with the addition of 35% of the COGS price
- Click save.

6. Display of Order Category Data Form

Id	Nama Kategori	Action
1	Holiday3	[edit] [delete]
2	Cristmass	[edit] [delete]
3	Idul Fitri	[edit] [delete]
4	Promosi	[edit] [delete]

Image of Order Category Data Form Display

How to Run:

- Type the order category name in the *input box*
- Click the *Save button*

7. Admin Data Form Display

Field	Value
Username	Input
Password	Input
Level	Silahkan Pilih

Image of Admin Data Form Display

How to Run:

- Type and enter *your username* in the *input box username*.
- Type and enter *the password* in the *input box password*.
- Click on the *option list box* and select the level based on the desired access rights.
- Click *save*.

8. Display Customer Data Form

Id	Nama	Alamat	Telp	Email	Action
4	Devy Ayu Indriyani	Jl Bukit Kencana	085546275465	devyayundriyani@gmail.com	[Edit] [Delete]
5	Akhmad Hernowo	Jl Teratai Timur	08999323225	akhmad.hernowo@gmail.com	[Edit] [Delete]

Image of Customer Data Form Display

How to Run:

- Type and enter the customer's name in the full name *input box* .
- Type and enter the address in the address *input box* .
- Type and enter the telephone number in the telephone *input box* .
- Type and enter *email* in the *email input box* .
- Click *Save* .

9. Display Order Data Form

Image of Order Data Form Display

How to Run:

- In the textbox input, the date is automatically filled with the date on the server and cannot be changed.
- Click on the customer data *list option* to select the customer name.
- Click on the *make new button* to create a new *invoice number* or click on the *list option* , select the *previous invoice number* to add order data to the existing *invoice number* .
- Click on the product type *option list* to select the desired product type.
- Click on the product type *option list* to select the desired product type.
- Click on the category *list option* to determine the category of printed images to be produced.
- Enter the number of units to be produced.
- Enter the length and width of the unit to be produced if there are any, if not then leave the number 0.
- Enter information about the unit to be produced, such as a brief description of the design request or other things.
- Select the image to produce if it already exists.
- Click the *Save button* .

No	Pelanggan	KodeInvoice	Jenis Produk	Type Produk	Tanggal	Qty	Ukuran	Harga dibayar	Images	Keterangan	Status	Action
2	Devy Ayu Indriyani	INV241	Kartu Nama	1 Sisi	2018-11-21	2	-	Rp. 54.000,00			Done [Picked Up]	
1	Akhmad Hernowo	INV151	Kartu Nama	1 Sisi	2018-11-21	2	-	Rp. 54.000,00			Finish [Ready to pickup]	
9	Devy Ayu Indriyani	INV941	MMT	280gr	2018-11-22	2	3 x 2	Rp. 162.000,00			Booking [.]	
10	Akhmad Hernowo	INV1051	MMT	280gr	2018-11-22	3	3 x 1	Rp. 121.500,00			Booking [.]	
11	Derry	INV1161	MMT	280gr	2018-11-22	1	5 x 1	Rp. 67.500,00			Booking [.]	
3	Devy Ayu Indriyani	INV341	MMT	280gr	2018-11-21	1	1 x 1	Rp. 13.500,00			Waiting List [Paid]	

Image of Order Table Data List Display in the admin account

How to Run:

- The admin account has full access rights to the *images column* to view *design images* , in the *action column* you can edit the order contents or delete the order contents and you can click the *finish button* when the product has been printed.
- In the Booking Status column it means the order has not been paid, Waiting List[*paid*] means the order has been paid and is in the production queue, Finish[*Ready to pickup*] means the order has been paid for and is ready to be given to the consumer, Done[*Picked up*] means the ordered item has been taken by the customer.

No	Pelanggan	KodeInvoice	Jenis Produk	Type Produk	Tanggal	Qty	Ukuran	Harga dibayar	Images	Keterangan	Status	Action
9	Devy Ayu Indriyani	INV941	MMT	280gr	2018-11-22	2	3 x 2	Rp. 162.000,00			Booking [.]	
10	Akhmad Hernowo	INV1051	MMT	280gr	2018-11-22	3	3 x 1	Rp. 121.500,00			Booking [.]	
11	Derry	INV1161	MMT	280gr	2018-11-22	1	5 x 1	Rp. 67.500,00			Booking [.]	
2	Devy Ayu Indriyani	INV241	Kartu Nama	1 Sisi	2018-11-21	2	-	Rp. 54.000,00			Done [Picked Up]	
1	Akhmad Hernowo	INV151	Kartu Nama	1 Sisi	2018-11-21	2	-	Rp. 54.000,00			Finish [Ready to pickup]	
3	Devy Ayu Indriyani	INV341	MMT	280gr	2018-11-21	1	1 x 1	Rp. 13.500,00			Waiting List [Paid]	

Image of the Order Table Data List Display in the designer account

How to Run:

- In a designer account, users only have access to view order data, view images, edit images and descriptions.

No	Pelanggan	KodeInvoice	Jenis Produk	Type Produk	Tanggal	Qty	Ukuran	Harga dibayar	Images	Keterangan	Status	Action
9	Devy Ayu Indriyani	INV941	MMT	280gr	2018-11-22	2	3 x 2	Rp. 162.000,00			Booking [.]	
10	Akhmad Hernowo	INV1051	MMT	280gr	2018-11-22	3	3 x 1	Rp. 121.500,00			Booking [.]	
11	Derry	INV1161	MMT	280gr	2018-11-22	1	5 x 1	Rp. 67.500,00			Booking [.]	
2	Devy Ayu Indriyani	INV241	Kartu Nama	1 Sisi	2018-11-21	2	-	Rp. 54.000,00			Done [Picked Up]	
1	Akhmad Hernowo	INV151	Kartu Nama	1 Sisi	2018-11-21	2	-	Rp. 54.000,00			Finish [Ready to pickup]	
3	Devy Ayu Indriyani	INV341	MMT	280gr	2018-11-21	1	1 x 1	Rp. 13.500,00			Waiting List [Paid]	

Image of the Order Table Data List Display on the production account

How to Run:

- In a production account, users only have access rights to view order data, view *design images* and click the *finish button* when the product has been printed.

10. Invoice Data Form Display

No	Tanggal	Pelanggan	Kode Invoice	Status	Action
4	2018-11-21	Akhmad Hernowo	INV151	Lunas [Finish]	Pick-Up
8	2018-11-22	Devy Ayu Indriyani	INV941	Belum dibayar	Payment
9	2018-11-22	Akhmad Hernowo	INV1051	Belum dibayar	Payment
10	2018-11-22	Derry	INV1161	Belum dibayar	Payment
1	2018-11-21	Devy Ayu Indriyani	INV241	Lunas [Done]	

Figure 4.15: Invoice Data Form Display

DELTA
 Jl. Sinar Mas Baru No. 3
 Semarang 50232
 Telepon : (024) 76740550
 Kasir: admin

INVOICE
 Invoice No. : INV2261
 Tanggal : 28 September 2018
 Customer : Derry

Jumlah	Keterangan	Harga	TOTAL
10	[MMT] 250 gr [ukuran : 3 x 1]	11.000,00/m2	330.000,00
10	[Brosur] A4 [ukuran :]	400.000,00/rim	4.000.000,00
Note: Periksa barang pesanan anda.		Sub Total	4.330.000,00
Thank you for your orders.		Total	4.330.000,00

Picture Printed Invoice Note Display

How to Run:

- invoice* data form there is information in the status column which indicates the status of the invoice . Unpaid means the customer has not paid the total price of the desired order, Paid (*waiting list*) means the order has been paid but is waiting for the production print queue, Paid (*finish*) means the order on the invoice number has been paid and has been produced and Paid (*Done*) means the product has been taken by the customer.
- action* column there is an icon with an eye which, when clicked, functions to view the order total and print an invoice.
- payment* button will appear next to the eye icon. The function of this button, when clicked, will change the unpaid status to paid.
- If the product has been produced and the production department clicks the finish button on the order and then hands over the goods to the admin pick-up counter, a *pickup button will appear* in the action column which functions to verify the customer's invoice number when picking up the order.

11. Report Data View

Picture Report Data Date Input Form Display

Laporan Periode
 21 November 2018 s/d 22 November 2018

No	Tanggal	Pelanggan	Kode Invoice	Jenis	Produk	Ukuran	Jumlah	Nominal
1	21 November 2018	Akhmad Hernowo	INV151	Kartu Nama	1 Sisi	1 Box	2	54.000,00
2	21 November 2018	Devy Ayu Indriyani	INV241	Kartu Nama	1 Sisi	1 Box	2	54.000,00
3	21 November 2018	Devy Ayu Indriyani	INV341	MMT	280gr	1 m2	1	13.500,00
4	21 November 2018	Derry	INV461	MMT	280gr	1 m2	1	13.500,00
5	21 November 2018	Derry	INV561	MMT	280gr	1 m2	5	67.500,00
6	21 November 2018	Devy Ayu Indriyani	INV641	MMT	280gr	3 m2	10	405.000,00
7	21 November 2018	Akhmad Hernowo	INV751	MMT	440	3 m2	1	60.750,00
8	21 November 2018	Akhmad Hernowo	INV751	Brosur	A4 1 sisi	1 rim	1	168.750,00
							TOTAL	837.000,00

Tanggal Cetak 22 November 2018 by admin

Laporan Penjualan Periode
22 November 2018 s/d 22 November 2018

No	Jenis	Produk	Satuan	Harga HPP	Harga Jual	Ukuran Terjual	Total Penjualan	Laba
1	MMT	280gr	m2	10.000,00	13.500,00	0 m2	0,00	0,00
2	MMT	440	m2	15.000,00	20.250,00	0 m2	0,00	0,00
3	Kartu Nama	1 Sisi	Box	20.000,00	27.000,00	0 Box	0,00	0,00
4	Kartu Nama	2 sisi	Box	25.000,00	33.750,00	0 Box	0,00	0,00
5	Brosur	A4 1 sisi	rim	125.000,00	168.750,00	0 rim	0,00	0,00
TOTAL							0,00	0,00

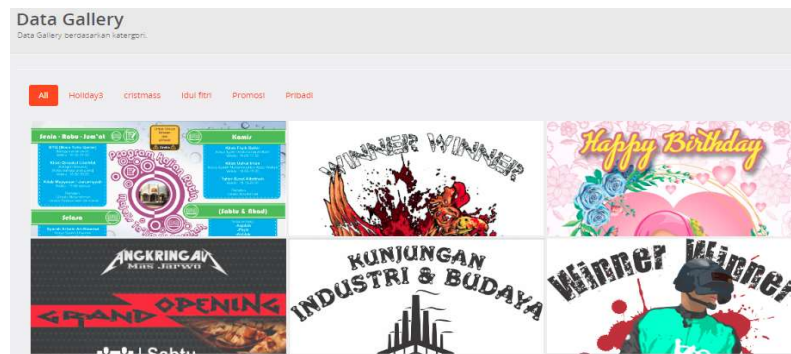
Tanggal Cetak 22 November 2018 by admin

Picture Display Report Data Search Results

How to Run:

- a) Enter the start and end date period for which you want to print the report.
- b) Click search to display the data in the table below.
- c) Or click print to display the report data ready to be printed.

12. Gallery View



ImageView Data Gallery

How to Run:

- a) The data gallery functions to display all images that have been printed according to their theme / category.
- b) Click on the category column to sort the images.
- c) Click on the image to see the original size.
- d) To download an image, right click on the desired image, click *open in new tab*, open the image tab, then right click and select *save picture as*, then select the place where you want to save the image.

5. CONCLUSION

Based on the analysis and discussion carried out in the previous chapter, the following conclusions can be drawn:

1. A computerized *database accounting information system* makes it easier to input data and create reports more quickly and accurately.
2. With an information system, all data is stored in a *database*.
3. Reports can be created automatically and can be reported at any time.
4. Make it easier for employees to collect data so that there is no accumulation of data, errors in data input, thus making data searches and service systems faster and more efficient and maximizing employee performance in data storage, especially in making reports.

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