

Joe's Yard

Case study



Joe's Yard

- Joe's builders' suppliers has

a shop

and

a yard.



Joe's Sales technique

- His system is entirely manual. He has a typed stock list on the wall of his shop, complete with prices.
- When a builder wants to buy supplies, he goes into the shop and picks the stock items from the list.

STOCK_CODE	STOCK_DESCRIPTION	PRICE
BRK11	Brick - red, 30x100	\$2.50
A101	Cavity blocks(100)	\$200.00
A111	Red bricks(100)	\$200.00
B101	2"x4" lengths	\$9.50
B111	Window Frames 2'x4'	\$45.00
C101	6" Nails(50)	\$5.95
C121	6" Nails(100)	\$9.95
D101	Workbench	\$250.00
D131	cordless Drill	\$200.00
E101	Cavity blocks(500)	\$1,000.00
E141	Cavity blocks(200)	\$400.00
A642	4"x4" treated timber	\$9.50
J555	Box of 6" screws	\$5.00
J501	Phillips screwdriver	\$8.00
S404	Aluminium Shelving	\$56.49
S405	Aluminium Cupboard	\$99.99
B680	Chain Bicycle Lock	\$25.00
B655	U-lock bicycle Lock	\$19.99

Joe's Sales technique

- The builder writes his order on a duplicate docket and pays Joe.

"If you can't find it, go to Joe!"

Joe's Builders' Supplies				Docket No: 201	
(D.J.) 84370 83 Main St., Walmont, D27.					
Stock code.	Quantity	Description	Unit Price	VAT (20%)	Total Price
A101	1	Box 9"	£3.00	£3.50	£7.50
J333	2	Box of 4" Phillips screws (100)	£5.00	£1.00	£12.00
H422	1	High Nail Gun	£80.00	£16.00	£96.00
J338	2	4" Flat Nail	£5.00	£1.00	£12.00
Total Amount Due:					£191.00
Docket paid signature <u>Mick Murphy</u> (Staff)					
Staff No: 124 Staff Name <u>Mick Murphy</u> Staff Role: Yard foreman					
Items received signature <u>John O'Connell</u> (Customer)					

Taking payment

- Joe, or one of his sales staff, stamps the docket as paid.



Getting the goods!

- The builder takes the duplicate docket and he goes to the yard and hands it to the yard foreman.
- Sometimes Joe works here, but usually it's Fred or Mick.



Exchanging the goods.

- The yard foreman gets the ordered items from the yard and gives them to the builder.



Making the receipt

- The builder signs the duplicate docket and leaves one copy with the foreman and takes one copy as a receipt.



Checking the stock

- Every week, Joe looks around the yard to see if any of his stock is running low.



Reordering

- He rings up the relevant suppliers and reorders stock.
- He records the order in his order book, which is kept in the yard.

23rd September 2007

Order from Buckleys 7 lots of Cavity Blocks (500) and 20 lots of Cavity Blocks (100).

Received 25/9/2007. Cost €12245.00

24th September 2007

Order from Mary O'Brien, 7 x 2L White Emulsion Paint, 7x1L White Gloss Paint.

25th September 2007

Taking delivery from the supplier

- The yard foreman takes delivery of the new stock and checks it against what has been ordered.
- He pays for it on delivery and staples the receipt into the order book.

23rd September 2007

Order from Buckleys 7 lots of Cavity Blocks (500) and 20 lots of Cavity Blocks (100).

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24th September 2007

Order from Mary O'Brien, 7 x 2L White Emulsion Paint, 7x1L White Gloss Paint.

25th September 2007

The shareholders' report

- At the end of every month, Joe goes through all the dockets and the order book and produces a financial report for the shareholders.



Some of Joe's problems

- Sometimes, Joe forgets to order a popular item, because there are none left when he walks around and he can't remember what he had.
- Joe wants to know who his customers are, so that he can see what they bought and tout for business.
- Joe wants to be able to order whenever he runs out of stock — not just weekly.

What data do we need to hold for Joe?

- We have a copy of
 - some of his dockets
 - His order book
- We know who works for him
 - i.e. who will be using the system
- We know he'd like to be able to do *more* than he does now.

"If you can't find it, go to Joe!"

Joe's Builders' Supplies

(01) 8437083 Main St., Malmont, D27.

Docket No: 196

Stock code.	Quantity	Description	Unit Price	VAT (20%)	Total Price
A642	4	4"x4" treated timber	£9.50	£1.90	£45.60
J555	1	Box of 6" phillips screws (100)	£5.00	£1.00	£6.00
J501	1	Phillips head screwdriver	£8.00	£1.60	£9.60

Total Amount Due: £61.20

Docket paid signature Joe Bloggs (Staff)

Staff No: 124 Staff Name Joe Bloggs Staff Role: Yard foreman

Items received signature Andy Handy (Customer)

Joe's Docket

"If you can't find it, go to Joe!"

Joe's Builders' Supplies

/D/J 8437083 Main St., Malmort, D27.

Docket No: 201

Stock code.	Quantity	Description	Unit Price	VAT (10%)	Total Price
A101	4	2x7 9"	£45.00	£45.00	£90.00
B555	2	Box of 1" Phillips screws (100)	£5.00	£5.00	£10.00
E412	1	High Nail Gun	£80.00	£8.00	£88.00
B558	2	1" Flat Nail	£5.00	£5.00	£10.00
Total Amount Due:					£193.00

Docket paid signature /Mark Murphy (Staff)

Staff No: 724 Staff Name /Mark Murphy Staff Role: Yard foreman

Items received signature John O'Connell (Customer)

Another docket

Joe's Yard User Catalogue

- Joe may be working in the shop or in the yard. He also compiles the restocking order.
- Fred works as a foreman in the yard from Monday to Saturday.
- Mick works as a foreman in the yard from Thursday to Saturday.
- Robbie works behind the counter in Joe's.

Joe's Yard new Requirements(1)

- We want Joe to have a stock level on his stock, so that we know what needs to be ordered
- Test to see if stock levels can be viewed and if a warning can be issued to when stock goes low
- Two extra pieces of information are required – a current stock level and a reorder level.

Joe's Yard new Requirements(2)

- We want Joe to know who his customers are, so that he can tout for repeat business.
- Test to see if customer records are being kept for 2 years after their last purchase.
- An extra entity is required to hold customer information and we need to hold docket information for a year.

Deriving the data structure

- We will go through clear guidelines on this later in the Semester.
- For now, let's just look at what we came up with for Joe...

Required new data structure

