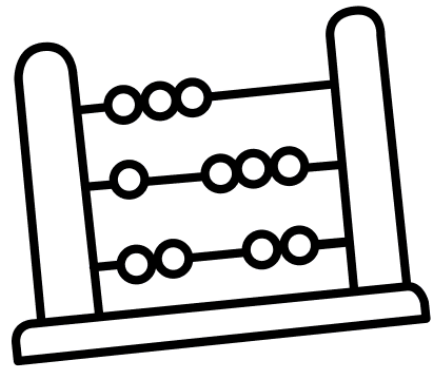


Maareynta ganacsiyar

Maths

Unit Xisaab goobta shaqada



Natiijo

Waxaan fahmi karaa sida xisaabta loogu isticmaalo ganacsatada madaxa-bannaan.

Erayada muhiimka ah

Faa'iidada boqolkiiba (percentage profit) waa korodhka marka la tixraaco shay lagu iibiyo qiime ka badan qiimaha kharashka, oo loo muujiyo boqolkiiba xaddiga asalka ah.

Celcelis (average) waa hal lambar oo muujiya qiimaha dhexe ama caadiga ah ee xogta; mode, median, iyo mean.

Maareynta ganacsi yar



Faa'iido boqolkiiba (percentage profit)

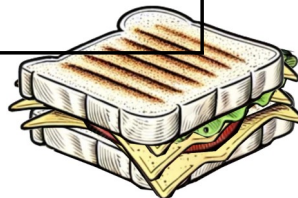
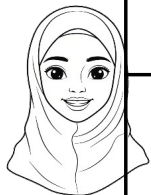


La socodka waxqabadka

Faa'iido boqolkiiba (percentage profit)

Axmed iyo Isra waxay fureen ganacsigoodii ugu horreeyay, kafateeri. Waa kuwan natiijooyinkoodii saddexda sano ee ugu horreeyay.

	Faa'iidada guud (gross profit)	Dakhliga (revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000



Erayo qaar:

	Faa'iidada guud (gross profit)	Dakhliga (revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000

Revenue (Dakhliga) waa dakhliga ganacsiga, tusaale ahaan, lacagta soo gasha sanduuga iibka. Haddii macaamiishu iibsadaan 300 koob oo kafe ah toddobaadkii oo midkiiba £3 yahay, taasi waa £900 oo dakhli (revenue) ah.

Ereyo qaar:

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000

Faa'iidada guud (Gross profit) waa dakhliga guud (total revenue) laga jaray qiimaha badeecadaha iibka. Tusaale: Haddii caanaha iyo bunka loo isticmaalo koob kafe oo kiciya £1, oo aan koobka ku iibinno £3, taasi waa faa'iido guud (gross profit) oo ah £2 koobkii.

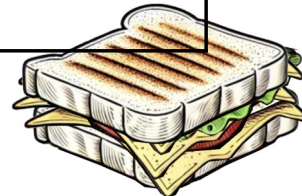
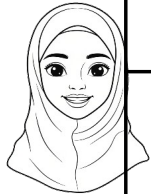
Ereyo qaar:

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000

Faa'iidada guud (Gross profit) waxay ku kooban tahay qiimaha badeecadaha, kharashyada doorsooma (variable costs). Tusaale: Marka tirada koobabka kafadu isbeddesho, xaddiga bunka iyo caanaha loo baahan yahay wuu isbeddelaa. Faa'iidada guud (Gross profit) kuma jiraan kharashyada go'an (fixed costs) sida dhismayaasha iyo biilasha.

Ganacsiga Axmed iyo Isra ma wanaagsan yahay?

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000



Ma ganacsiga Axmed iyo Isra ayaa si fiican u socda?

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000

Faa'iidada guud (Gross profit) iyo dakhliga (Revenue) labaduba way kordheen, marka waxay u egtahay in ganacsigu si fiican u socdo.

Hase yeeshee, saamiga (proportion) wuxuu door muhiim ah ka ciyaaraa fahamka haddii ganacsigu si fiican u socdo; haddii uu yahay mid wax ku ool ah.

Ma ganacsiga Axmed iyo Isra ayaa si fiican u socda?

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)
Sannadka koowaad	£24 000	£60 000
Sannadka labaad	£28 000	£80 000
Sannadka saddexaad	£30 000	£120 000



Si ay uga helaan £60 000 dakhli (revenue) ilaa £120 000, Axmed iyo Isra waxay ahayd inay laba jeer firfircoonaadaan. Waxay ahayd inay sameeyaan laba jeer ka badan oo bun, keeg, iyo sariir ah. Waxaa laga yaabaa inay ahayd inay shaqaaleeyaan dad dheeri ah ama ay maalgashadaan qalab jik oo ka weyn.

Ma ganacsiga Axmed iyo Isra ayaa si fiican u socda?

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	
×1.25	£24 000	£60 000	×2
	£28 000	£80 000	
	£30 000	£120 000	

Kordhinta labanlaabista dadaalka waxay keentay kordho 25% ah oo ku yimid faa'iidada (profit).

Haddii aad shaqo qayb-ku-ool ah ku jirtid oo loo-shaqeeyahaagu yidhi, "Waxaan ku siinayaa 25% in ka badan haddii aad labanlaabato dadaalkaaga." Waxaan u malaynayaa inaad si edeb leh u diidi lahayd.

Si loo fahmo waxtarkooda u dhexeeya dakhliga (Revenue) iyo faa'iidada (profit), ganacsiyadu waxay ku daraan tiir saddexaad natiijooyinkan oo kale.

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	Heerka faa'iidada guud (Gross profit margin)
Sannadka koowaad	£24 000	£60 000	
Sannadka labaad	£28 000	£80 000	
Sannadka saddexaad	£30 000	£120 000	

Heerka faa'iidada guud (Gross profit margin) waxaa lagu xisaabiyaa iyadoo la adeegsanayo qaacidlo (formula):

$$\text{Gross profit margin (\%)} = \frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$

Si loo fahmo waxtarkooda u dhexeeya dakhliga (Revenue) iyo faa'iidada (profit), ganacsiyadu waxay ku daraan tiir saddexaad natiijooyinkan oo kale.

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	Saamiga faa'iidada guud (Gross profit margin)
Sannadka koowaad	£24 000	£60 000	40%
Sannadka labaad	£28 000	£80 000	35%
Sannadka saddexaad	£30 000	£120 000	25%

Sannadka koowaad:
$$\text{Gross profit margin (\%)} = \frac{24\,000}{60\,000} \times 100 = 40\%$$

$$\text{Gross profit margin (\%)} = \frac{28\,000}{80\,000} \times 100 = 35\%$$

$$\text{Gross profit margin (\%)} = \frac{30\,000}{120\,000} \times 100 = 25\%$$

Haddii qaabkani sii socdo, saamiyadu (margins) waxay noqon karaan kuwo aad u cidhiidhi ah oo ganacsigoodu aanu sii shaqeyn karin.

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	Saamiga faa'iidada guud (Gross profit margin)
Sannadka koowaad	£24 000	£60 000	40%
Sannadka labaad	£28 000	£80 000	35%
Sannadka saddexaad	£30 000	£120 000	25%

Sannadkoodii ganacsi ee koowaad, 40% dakhligoodu wuxuu ahaa faa'iidada guud (gross profit).

Sannadkoodii ganacsi ee saddexaad, kaliya 25% dakhligoodu wuxuu ahaa faa'iidada guud (gross profit).

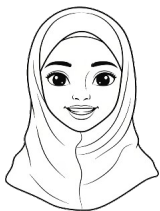
Waa kuwan natiijooyinka sannadka afraad iyo shanaad. Xisaabi qiime (value) faa'iidada guud ee labada sannadood.

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	Sannadka afraad (Gross profit margin)
Sannadka koowaad	£24 000	£60 000	40%
Sannadka labaad	£28 000	£80 000	35%
Sannadka saddexaad	£30 000	£120 000	25%
Sannadka afraad	£33 000	£110 000	30%
Sannadka shanaad	£40 000	£120 000	33.3% (ilaa 1 d.p.)

$$\text{Gross profit margin (\%)} = \frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$

Si loo hubiyo in qiime (value) faa'iidada (profit margin) dhammaadka sannadku uu yahay mid caafimaad qaba, ganacsiyadu waxay dejistaan qiimaha (prices) alaabta gaarka ah iyagoo ku talo jira qiime (value) faa'iidada (profit margin) la doonayo.

Isra, ma aanan hagaajin qiimahayaga sannadaha saddexda ah ee ugu horreeya. Waxaan hoos u dhigay qiimahayaga, waxaan iibinnay wax badan, laakiin waxay dhimisay qiime (value) faa'iidada (profit margin).



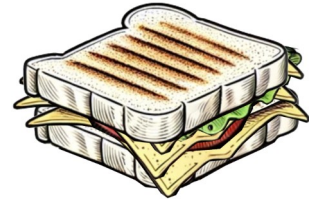
Taasi ma aha dhibaato Axmed. Hadda waan ognahay. Laga bilaabo hadda, ma iibin doonno alaab kasta oo gaar ah qiimo ka hooseeya 40% qiime (value) faa'iidada (profit margin).



Qiime (value) faa'iidada guud (Gross profit margin) alaab kasta waxaa lagu xisaabin karaa qaacidada (formula).

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

Axmed iyo Isra waxay iibiyaan rooti iyo yaanyo (cheese and tomato sandwich) £4. Qiimaha alaabta (ingredients) waa £2.20



$$\text{Gross profit margin (\%)} = \frac{£4 - £2.20}{£4} \times 100 = \frac{£1.80}{£4} \times 100 = 45\%$$

£1.80 waa qiime (value) faa'iidada guud ee lacagta ah ee ay ka helaan sandwiih kasta, 45% waa saamiga (proportion) qiimaha (value) iibka.

Xisaabi farqiga faa'iidada guud (gross profit margin) shay kasta.

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

Flapjack: Qiimaha (value) iibka £2, qiimaha (value) kharashka £0.90

Kafe: Qiimaha (value) iibka £3, qiimaha (value) kharashka £0.30

Sandwii jiis riyaha: Qiimaha (value) iibka £4.50, qiimaha (value) kharashka £3

Talo sii Axmed iyo Isra shay kasta oo aan gaareyn 40% bartilmaameedka farqiga faa'iidada guud (gross profit margin).

Xisaabi farqiga faa'iidada guud (gross profit margin) shay kasta.

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

Flapjack: Qiimaha (value) iibka £2, qiimaha (value) kharashka £0.90

$$\frac{£2 - £0.90}{£2} \times 100 = \frac{£1.10}{£2} \times 100 = 55\%$$

Kafe: Qiimaha (value) iibka £3, qiimaha (value) kharashka £0.30

$$\frac{£3 - £0.30}{£3} \times 100 = \frac{£2.70}{£3} \times 100 = 90\%$$

Kafe wuxuu leeyahay farqi faa'iido (profit margin) aad u sarreeya. Axmed iyo Isra waxay doonayaan inay ka iibiyaan kafe shay kasta oo kale!

Xisaabi farqiga faa'iidada guud (gross profit margin) shay kasta.

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

Sandwii jiis riyaha: Qiimaha (value) iibka £4.50, qiimaha (value) kharashka £3

$$\frac{£4.50 - £3.00}{£4.50} \times 100 = \frac{£1.50}{£4.50} \times 100 = \underline{33.3\%}$$

Sandwiiyada jiiska riyaha (Goats' cheese sandwiches) kama qancayaan 40% bartilmaameedka farqiga faa'iidada (profit margin). Axmed iyo Isra waa inay kordhiyaan qiimaha (value) iibka, helaan hab lagu yareeyo qiimaha (value) kharashka, ama joojiyaan iibinta sandwiiyadan.

Faa'iidada boqolleyda (Profit in percentages)

Xisaabaadka boqolleyda (Percentage calculations) waxay u sahlayaan ganacsiyada yaryar inay go'aamiyaan sida loo qiimeeyo (value) alaabtooda.



£5 waa qiimaha iibka (selling price) ugu yar ee Axmed iyo Isra ay tahay inay ku iibiyaan sandwich-ka jiiska riyaha (goats' cheese sandwich).

Dakhli (profit) boqolleyda (percentages)



Axmed iyo Isra waa inay sameeyaan ugu yaraan 40% dakhli (profit margin) saafi ah (gross) alaabtan. Xisaabi qiimaha iibka (selling price) ugu yar.

Chicken mayo s'wich:

Qiimaha kharashka (cost price) £2.40

Qiimaha kharashka (cost price) £1.50

Qiimaha kharashka (cost price) £1.15

Jawaabaha:

Shakes:

Croissants:

Axmed iyo Isra waa inay sameeyaan ugu yaraan 40% dakhli (profit margin) saafi ah (gross) alaabtan. Xisaabi qiimaha iibka (selling price) ugu yar.

Chicken mayo s'wich:	Qiimaha kharashka (cost price) £2.40	$£2.40 \div 0.6 = £4$
Croissants:	Qiimaha kharashka (cost price) £1.50	$£1.50 \div 0.6 = £2.50$
Shakes:	Qiimaha kharashka (Cost price) £1.15	$£1.15 \div 0.6 = £1.92$

Axmed iyo Isra waxay doonayaan inay sameeyaan ugu yaraan 75% faa'iidada saafiga ah (gross profit margin) ee keega. Xisaabi qiimaha iibinta ugu hooseeya (minimum selling price).

Lemon drizzle:	Qiimaha kharashka (Cost price) £0.30
Keega karootada (Carrot cake):	Qiimaha kharashka (Cost price) £0.45

75% faa'iidada saafiga ah (gross profit) macneheedu waa 25% waa qiimaha kharashka (cost price) sidaas darteed...

Chicken mayo s'wich:

Qiimaha kharashka (Cost price) £2.40

Qiimaha kharashka (Cost price) £1.50

Qiimaha kharashka (Cost price) £1.15

Lemon drizzle:

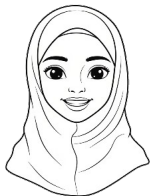
Qiimaha kharashka (Cost price) £0.30

Keega karootada (Carrot cake):

Qiimaha kharashka (Cost price) £0.45

Waan jeclahay xisaabta (maths) laakiin waxaan iibineynaa ku dhawaad boqol alaab. Xisaabinta qiimaha ugu hooseeya (minimum pricing) waxay qaadanaysaa saacado!

Taasi waa sababta ganacsiyada yaryar u isticmaalaan spreadsheets. Annaguna waa inaan isticmaalno!



Jawaabaha:

$$£2.40 \div 0.6 = £4$$

$$£1.50 \div 0.6 = £2.50$$

Croissants:



A1	▼ fx Product		
	A	B	C
1	Product	Cost price	Min. selling price
2	Coffees (min 40% g.p.)		
3	Cappuccino	0.3	
4	Latte	0.35	
5	Americano	0.12	
6	Espresso	0.1	
7	Sandwiches (min 40% g.p.)		
8	Chicken mayo	2.4	
9	Cheese and tomato	2.2	
10	Goats cheese	3	
11	Plant based filling	2.5	
12	Pastries (min 50% g.p.)		
13	Croissants	1.5	
14	Brioche	1.65	

Axmed iyo Isra waxay bilaabeen iyagoo sameynaya liis alaabta iyo qiimaha (value) kharashka (cost price) ee ay leeyihiin.

Faa'iido (Profit) boqolleyda (percentages)

C3 ▼ *fx*

	A	B	C
1	Product	Cost price	Min. selling price
2	Coffees (min 40% g.p.)		
3	Cappuccino	0.3	
4	Latte	0.35	
5	Americano	0.12	
6	Espresso	0.1	
7	Sandwiches (min 40% g.p.)		
8	Chicken mayo	2.4	
9	Cheese and tomato	2.2	
10	Goats cheese	3	
11	Plant based filling	2.5	
12	Pastries (min 50% g.p.)		
13	Croissants	1.5	
14	Brioche	1.65	

Hadda waxay qori karaan qaacidada (formula) si ay u xisaabiyaan dhammaan qiimaha (value) iibka ugu yar si toos ah.

Waxay ku qoraan qaacidada (formula) =B3/0.6 halkan.

B3 waa unugga (cell) ka kooban qiimaha (value) kharashka (cost price) ee alaabtan, /0.6 macneheedu waa ÷ 0.6

Faa'iido (Profit) boqolleyda (percentages)

C3 $\text{fx} = \text{B3}/0.6$

	A	B	C
1	Product	Cost price	Min. selling price
2	Coffees (min 40% g.p.)		
3	Cappuccino	0.3	0.5
4	Latte	0.35	
5	Americano	0.12	
6	Espresso	0.1	
7	Sandwiches (min 40% g.p.)		
8	Chicken mayo	2.4	
9	Cheese and tomato	2.2	
10	Goats cheese	3	
11	Plant based filling	2.5	
12	Pastries (min 50% g.p.)		
13	Croissants	1.5	
14	Brioche	1.65	

Qaacidada (formula) $=\text{B3}/0.6$ ma muuqato, natiijada xisaabinta ayaa muuqata. Xaashida (spreadsheet) waxay xisaabisaa qiimaha (value) iibka ugu yar ee cappuccino inuu yahay £0.50

Waxay qoraan qaacido (formula) $=\text{B3}/0.6$ halkii ay ka qori lahaayeen xisaabta gaarka ah $=0.3/0.6$ sababtoo ah waxaan rabnaa inaan ku koobiyeyno dhammaan alaabta.

Faa'iido (Profit) boqolleyda (percentages)

C14 | $\text{fx} = \text{B14}/0.6$

	A	B	C
1	Product	Cost price	Min. selling price
2	Coffees (min 40% g.p.)		
3	Cappuccino	£0.30	£0.50
4	Latte	£0.35	£0.58
5	Americano	£0.12	£0.20
6	Espresso	£0.10	£0.17
7	Sandwiches (min 40% g.p.)		
8	Chicken mayo	£2.40	£4.00
9	Cheese and tomato	£2.20	£3.67
10	Goats cheese	£3.00	£5.00
11	Plant based filling	£2.50	£4.17
12	Pastries (min 50% g.p.)		
13	Croissants	£1.50	£2.50
14	Brioche	£1.65	£2.75

Waxay tirtiri karaan safafka (rows) aan loo baahnayn, ka dibna guji Format/Number/Currency iyo natiijooyinka waxay u muuqdaan qaab lacageed (currency).

Jiidista qaacidada (formula) hoos waxay ka dhigan tahay in lagu celiyo saf kasta.

Faa'iido (Profit) boqolleyda (percentages)

C14 | fx =B14/0.6

	A	B	C
1	Product	Cost price	Min. selling price
2	Coffees (min 40% g.p.)		
3	Cappuccino	£0.30	£0.50
4	Latte	£0.35	£0.58
5	Americano	£0.12	£0.20
6	Espresso	£0.10	£0.17
7	Sandwiches (min 40% g.p.)		
8	Chicken mayo	£2.40	£4.00
9	Cheese and tomato	£2.20	£3.67
10	Goats cheese	£3.00	£5.00
11	Plant based filling	£2.50	
12	Pastries (min 50% g.p.)		=B13/0.5
13	Croissants	£1.50	
14	Brioche	£1.65	£2.75

Beddel 0.6 ilaa 0.5 si ay u muujiso G.P. (target) kan, oo koobiye qaacidada (formula) hoos.

Waxay u baahan yihiin inay hagaajiyaan qaacidada (formula) alaab kasta oo G.P. (target) aanu ahayn 40%

Faa'iido (Profit) boqolleyda (percentages)



Sharaxaad

F13	▼	fx	
	A	B	C
1	Product	Cost price	Min. selling price
2	Coffees (min 40% g.p.)		
3	Cappuccino	£0.30	£0.50
4	Latte	£0.35	£0.58
5	Americano	£0.12	£0.20
6	Espresso	£0.10	£0.17
7	Sandwiches (min 40% g.p.)		
8	Chicken mayo	£2.40	£4.00
9	Cheese and tomato	£2.20	£3.67
10	Goats cheese	£3.00	£5.00
11	Plant based filling	£2.50	£4.17
12	Pastries (min 50% g.p.)		
13	Croissants	£1.50	£3.00
14	Brioche	£1.65	£3.30

Daqiiqado gudahood Axmed iyo Isra waxay xisaabin karaan qiimaha (value) iibka ugu yar noocyo badan oo alaab ah iyagoo isticmaalaya xaashida (spreadsheet) iyo qaacidada (formula).

Faa'iido (Profit) boqolleyda (percentages)

A1 ▼ | fx Product

	A	B	C	D	E
1	Product	Cost price	Min. selling price	Actual selling price	Gross profit %
2	Coffees (min 40% g.p.)				
3	Cappuccino	£0.30	£0.50	£3.00	
4	Latte	£0.35	£0.58	£3.00	
5	Americano	£0.12	£0.20	£2.50	
6	Espresso	£0.10	£0.17	£2.00	

Ganacsi yar ma iibin doono dhammaan alaabtiisa qiimaha (value) ugu yar ee la xisaabiyay. Waxay eegi doonaan suuqa (market) si ay u fahmaan waxa ay kuwa la tartamaya (competitors) ku dallaca iyo waxa macaamiishoodu diyaar u yihiin inay bixiyaan ka hor inta aanay go'aamin qiimaha (value) iibka.

Faa'iido (Profit) boqolleyda (percentages)

E6 $\text{fx} = (D6 - B6) / D6 * 100$

	A	B	C	D	E
1	Product	Cost price	Min. selling price	Actual selling price	Gross profit %
2	Coffees (min 40% g.p.)				
3	Cappuccino	£0.30	£0.50	£3.00	90
4	Latte	£0.35	£0.58	£3.00	88
5	Americano	£0.12	£0.20	£2.50	95
6	Espresso	£0.10	£0.17	£2.00	95

$B3) / D3 * 100$

Ka dib go'aaminta qiimaha (value) iibka, qaacido (formula) kale ayaa lagu qori karaa tiirka 'Gross profit %' si ay si toos ah ugu xisaabiso taas alaab kasta.

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

Faa'iido (Profit) boqolleyda (percentages)

E14 $\downarrow$ | $fx = (D14 - B14) / D14 * 100$

	A	B	C	D	E
1	Product	Cost price	Min. selling price	Actual selling price	Gross profit %
2	Coffees (min 40% g.p.)				
3	Cappuccino	£0.30	£0.50	£3.00	90
4	Latte	£0.35	£0.58	£3.00	88
5	Americano	£0.12	£0.20	£2.50	95
6	Espresso	£0.10	£0.17	£2.00	95
7	Sandwiches (min 40% g.p.)				
8	Chicken mayo	£2.40	£4.00	£4.50	47
9	Cheese and tomato	£2.20	£3.67	£4.00	45
10	Goats cheese	£3.00	£5.00	£5.00	40
11	Plant based filling	£2.50	£4.17	£4.50	44
12	Pastries (min 50% g.p.)				
13	Croissants	£1.50	£3.00	£3.50	57
14	Brioche	£1.65	£3.30	£3.50	53

Axmed iyo Isra hadda way fahmi karaan waxa alaabtooda ugu faa'iidada badan (most profitable).

Shaxdan (spreadsheet) qaaciddada (formula) noocee ah ayaa loo qorayaa unugga (cell) C3?

a

$=B3/0.6$

Bartilmaameedka (Target)
G.P. waa 75%, ma aha 40%

b

$=B3/0.25$



c

$B3/0.25$

Qaaciddada (Formula) waa inay ku jirtaa calaamadda '='.

C3	A	B	C
1	Product	Cost price	Min. selling price
2	Cakes (min 75% g.p.)		
3	Lemon drizzle	£0.30	
4	Carrot cake	£0.45	
5	Chocolate brownie	£0.60	
6	Vegan	£0.60	
7	Shakes (min 60% g.p.)		
8	Strawberry	£0.80	
9	Banana	£0.80	
10	Chocolate	£0.95	

E3	A	B	C	D	E
1	Product	Cost price	Min. selling price	Actual selling price	Gross profit %
2	Cakes (min 75% g.p.)				
3	Lemon drizzle	£0.30	£0.50	£2.25	
4	Carrot cake	£0.45	£0.75	£2.25	
5	Chocolate brownie	£0.60	£1.00	£2.50	
6	Vegan	£0.60	£1.00	£2.50	
7	Shakes (min 60% g.p.)				
8	Strawberry	£0.80	£1.33	£3.00	
9	Banana	£0.80	£1.33	£3.00	
10	Chocolate	£0.95	£1.58	£3.00	

Marka la go'aamiyo qiimaha (value) iibka (selling prices), waa maxay qaaciddada (formula) loo qoray unugga (cell) E3?

a $= (D3 - B3) / D3 * 100$



b $= D3 - B3 / D3 * 100$

c $= B3 - D3 / B3 * 100$

Product	Cost price	Min. selling price	Actual selling price	Gross profit %
Cakes (min 75% g.p.)				
Lemon drizzle	£0.30	£0.50	£2.25	87
Carrot cake	£0.45	£0.75	£2.25	80
Chocolate brownie	£0.60	£1.00	£2.50	76
Vegan	£0.60	£1.00	£2.50	76
Shakes (min 60% g.p.)				
Strawberry	£0.80	£1.33	£3.00	73
Banana	£0.80	£1.33	£3.00	73
Chocolate	£0.95	£1.58	£3.00	68

Shaxda (spreadsheet) oo dhamaystiran, maxay alaabta (product) aad u malaynaysaa in Axmed iyo Isra ay dhigi doonaan meesha ugu caansan (most prominent) ee kafaatiga (cafe)?

Keega (cake) liinta (lemon drizzle) sababtoo ah waxay leedahay G.P. % ugu sarreeya (highest).

1) Buuxi meelaha bannaan (blanks) ee natiijooyinka (results) sanadaha ugu horreeya ee ganacsigan yar (small business) oo faallo ka bixi sida faa'iidadooda (profit margin) u isbeddeleysa.

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	Faa'iidada guud ee boqolleyda (Gross profit margin)
Sannadka koowaad (Year one)	£0	£12 000	0%
Sannadka labaad (Year two)	£1000	£20 000	
Sannadka saddexaad (Year three)		£48 000	12.5%
Sannadka afraad (Year four)	£20 000		40%
Sannadka shanaad (Year five)	£24 500	£56 000	

$$\text{Gross profit margin (\%)} = \frac{\text{Gross profit}}{\text{Sales revenue}} \times 100$$

2) Xisaabi faa'iidada guud ee boqolleyda (gross profit margin) shay kasta oo ka mid ah dukaankan paddleboard-ka cusub.

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

a) Paddleboard 10 ft: Qiimaha iibka £575, qiimaha kharashka £373.75

b) Paddleboard 12 ft: Qiimaha iibka £650, qiimaha kharashka £390

c) Carbon paddle: Qiimaha iibka £110, qiimaha kharashka £82.50

d) Buoyancy aid: Qiimaha iibka £60, qiimaha kharashka £34.50

e) Ka faallo bixi waxa aan gaareynin 30% faa'iidada guud ee boqolleyda (gross profit margin) oo kula tali waxay tahay inay sameeyaan.

3) a) Adigoo buuxinaya spreadsheet (spreadsheet) ama si kale, xisaabi qiimaha ugu yar ee iibka iyo faa'iidada guud ee boqolleyda (gross profit margins) alaabta dukaanka baaskiilkaan.

Product	Cost price	Min. selling price	Actual selling price	Gross profit %
Tyres (min 20% g.p.)				
Road bike tyre	£14.00		£19.50	
Mountain bike tyre	£16.00		£22.00	
Mountain bike (extra wide)	£19.00		£25.00	
Anti-puncture tyre	£21.00		£25.00	
Pedals (min 30% g.p.)				
Studded road bike (pair)	£26.00		£38.00	
Studded mountain bike (pair)	£28.00		£40.00	
Cleated road bike (single)	£18.00		£26.00	
Cleated road bike (pair)	£34.50		£48.00	
Brakes (min 45% g.p.)				
Pads (pair)	£4.20		£13.00	
Cable (single)	£1.20		£4.75	

b) Ka faallo bixi wax alaabo ah oo aan gaareynin faa'iidada guud ee boqolleyda (gross profit margins) ugu yar.

c) Kula tali ganacsiga alaabta ay tahay inay si weyn u soo bandhigaan dukaankooda.

1) Buuxi meelaha bannaan ee natiijooyinka sannadaha ugu horreeya ee ganacsigan yar, oo faallo ka bixi sida faa'iidada (profit margin) u isweydaarto.

	Faa'iidada guud (Gross profit)	Dakhliga (Revenue)	Faa'iidada guud ee boqolleyda (Gross profit margin)
Sannadka koowaad	£0	£12 000	0%
Sannadka labaad	£1000	£20 000	5%
Sannadka saddexaad	£6000	£48 000	12.5%
Sannadka afraad	£20 000	£50 000	40%
Sannadka shanaad	£24 500	£56 000	43.75%

Waxaa laga yaabaa inaad soo sheegtay, "Inkasta oo kororka dakhliga (revenue) uu hoos u dhacayo, faa'iidada guud (gross profit margins) ayaa kor u kacday heer caafimaad leh."

2) Xisaabi faa'iidada guud (gross profit margin) ee shay kasta oo ka mid ah dukaankan cusub ee looxaasha (paddleboard).

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

a) Loox 10 ft (paddleboard): Qiimaha iibka (selling price) £575, qiimaha kharashka (cost price) £373.75

b) Loox 12 ft (paddleboard): Qiimaha iibka (selling price) £650, qiimaha kharashka (cost price) £390

c) Carbon paddle: Qiimaha iibka (selling price) £110, qiimaha kharashka (cost price) £82.50

d) Buoyancy aid: Qiimaha iibka (selling price) £60, qiimaha kharashka (cost price) £34.50

e) Faallo ka bixi alaabta aan gaareyn bartilmaameedkooda 30% ee faa'iidada guud (gross profit margin), oo ku talo waxay tahay inay sameeyaan.

2) Xisaabi faa'iidada guud (gross profit margin) ee shay kasta oo ka mid ah dukaankan cusub ee looxaasha (paddleboard).

$$\text{Gross profit margin (\%)} = \frac{\text{Selling price} - \text{Cost price}}{\text{Selling price}} \times 100$$

e) Carbon paddle ma gaareyn 30% G.P. Ganacsigu waa inuu helo alaab jaban (cheaper supplier), kordhiyo qiimaha iibka (selling price), ama joojiyo iibinta alaabtani.

c) Carbon paddle: Qiimaha iibka (selling price) £110, qiimaha kharashka (cost price) £82.50

e) Faallo ka bixi alaabta aan gaareyn bartilmaameedkooda 30% ee faa'iidada guud (gross profit margin), oo ku talo waxay tahay inay sameeyaan.

3) a) Adigoo buuxinaya xaashi xisaabeed (spreadsheet) ama si kale, xisaabi qiimaha iibka ugu yar (minimum selling price) iyo faa'iidada guud (gross profit margins) ee alaabta dukaankan baaskiilka.

Product	Cost price	Min. selling price	Actual selling price	Gross profit %
Tyres (min 20% g.p.)				
Road bike tyre	£14.00	£17.50	£19.50	28
Mountain bike tyre	£16.00	£20.00	£22.00	27
Mountain bike (extra wide)	£19.00	£23.75	£25.00	24
Anti-puncture tyre	£21.00	£26.25	£25.00	16
Pedals (min 30% g.p.)				
Studded road bike (pair)	£26.00	£37.14	£38.00	32
Studded mountain bike (pair)	£28.00	£40.00	£40.00	30
Cleated road bike (single)	£18.00	£25.71	£26.00	31
Cleated road bike (pair)	£34.50	£49.29	£48.00	28
Brakes (min 45% g.p.)				
Pads (pair)	£4.20	£7.64	£13.00	68
Cable (single)	£1.20	£2.18	£4.75	75

b) Ka faallo bixi waxyaabaha aan gaareyn heerka ugu yar ee faa'iidada (gross profit margins).

c) Ku talo ganacsiga alaabta ay tahay inay si weyn u soo bandhigaan dukaankooda.

3) a) Adigoo buuxinaya spreadsheet ama si kale, xisaabi qiimaha ugu yar ee iibka iyo faa'iidada (gross profit margins) ee alaabta dukaankan baaskiilka.

Product	Cost price	Min. selling price	Actual selling price	Gross profit %
Tyres (min 20% g.p.)				
Road bike tyre	£14.00	£17.50	£19.50	28
Mountain bike tyre	£16.00	£20.00	£22.00	27
Mountain bike (extra wide)	£19.00	£23.75	£25.00	24
Anti-puncture tyre	£21.00	£26.25	£25.00	16
Pedals (min 30% g.p.)				
Studded road bike (pair)	£26.00	£37.14	£38.00	32
Studded mountain bike (pair)	£28.00	£40.00	£40.00	30
Cleated road bike (single)	£18.00	£25.71	£26.00	31
Cleated road bike (pair)	£34.50	£49.29	£48.00	28
Brakes (min 45% g.p.)				
Pads (pair)	£4.20	£7.64	£13.00	68
Cable (single)	£1.20	£2.18	£4.75	75

b)

Taayirada ka hortaga daloolinta iyo baedalka (cleated pedals) ma gaareyn heerka ugu yar ee G.P. (gross profit margins).

c)

Waa inay dhigaan fiilooyinka bareegyada (brake cables) meesha ugu muuqata dukaankooda.

Maaraynta ganacsi yar (Running a small business)



Faa'iido boqolkiiba (Profit in percentages)



La socodka waxqabadka (Tracking performance)

La socodka waxqabadka (Tracking performance)

Inta badan ganacsiyada yaryar waxay isticmaalaan spreadsheets si ay ula socdaan waxqabadkooda.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revenue (000's)	11.0	12.1	11.6	12.8	11.8	13.7	16.5	21.3	12.2	11.3	12.5	14.2

Waa maxay dakhliga ugu weyn ee ganacsigan soo galay bishii sannadkan?

Waa maxay dakhligoodii ugu yaraa bishii sannadkan?

Waa maxay celceliska bisha ee ganacsigan?

Celceliska (Mean average): $\text{£}161\,000 \div 12 = \text{£}13\,417$

La socodka waxqabadka (Tracking performance)

Inta badan ganacsiyada yaryar waxay isticmaalaan spreadsheets si ay ula socdaan waxqabadkooda.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revenue (000's)	11.0	12.1	11.6	12.8	11.8	13.7	16.5	21.3	12.2	11.3	12.5	14.2

Dakhliga bisha ugu sarreeya: £21 300

Dakhliga bisha ugu hooseeya: £11 000

Celcelis dhexe (Mean average): $£161\,000 \div 12 = £13\,417$

Celcelis dhexe (Median average): £12 350

Fahamka celcelisyada (averages) iyo faafinta (spread) xogta waxqabadkoodu waxay ka caawisaa ganacsigu qorsheynta. Ganacsi kastaa wuxuu u baahan yahay inuu saadaaliyo iibkiisa si uu u hubiyo inuu haysto alaabta diyaarka u ah macaamiishiisa.

Raadraaca waxqabadka (Tracking performance)



Soo hel kala duwanaanshaha (range) iyo celceliska (average) iibka sanadka labaad ee isla ganacsiga.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y2 revenue (000's)	11.6	12.4	12.1	13.3	12.3	14.6	18.1	23.5	14.0	12.1	13.8	16.5

Celcelis dhexe (Mean average): $\text{£}174\,300 \div 12 = \text{£}14\,525$

Raadraaca waxqabadka (Tracking performance)

Sanadka koowaad:

Kala duwanaansho (Range): £10
300

Celcelis dhexe (Mean average): £13 417

Sanadka labaad:

Kala duwanaansho (Range): £11
900

Celcelis dhexe (Mean average): £14 525

Isbarbardhigga celcelisyada (averages) iyo faafinta (spread) sanadba sanadka ka dambeeya wuxuu u sheegaa mulkiilaha ganacsiga caafimaadka ganacsigiisa.

Mulkiiluhu wuxuu soo gabagabeyn karaa, “Celceliska dhexe (mean average) wuu ka sarreeyaa sidaas darteed waxaan ka iibinay wax badan sanadka labaad”.

“Kala duwanaanshuhu (range) wuu ka sarreeyaa sidaas darteed iibka bishu waa mid isbeddel badan, oo aan la saadaalin karin”.

Raadraaca waxqabadka (Tracking performance)



Sannadka koowaad:

Kala-duwanaansho (Range): £36
100

Celcelis (Mean average): £145 000

Sannadka labaad:

Kala-duwanaansho (Range): £17
500

Celcelis (Mean average): £139 000

Samee laba isbarbardhig oo ku saabsan waxqabadka sannadka ee ganacsigan.

Waxaa laga yaabaa inaad tidhi, “Celcelisku (Mean average) wuu hooseeyaa sidaas darteed waxay ku iibeen wax ka yar sannadka labaad”.

“Kala-duwanaanshuhu (Range) wuu hooseeyaa sidaas darteed iibka bishii waa joogto, waa la saadaalin karaa.”

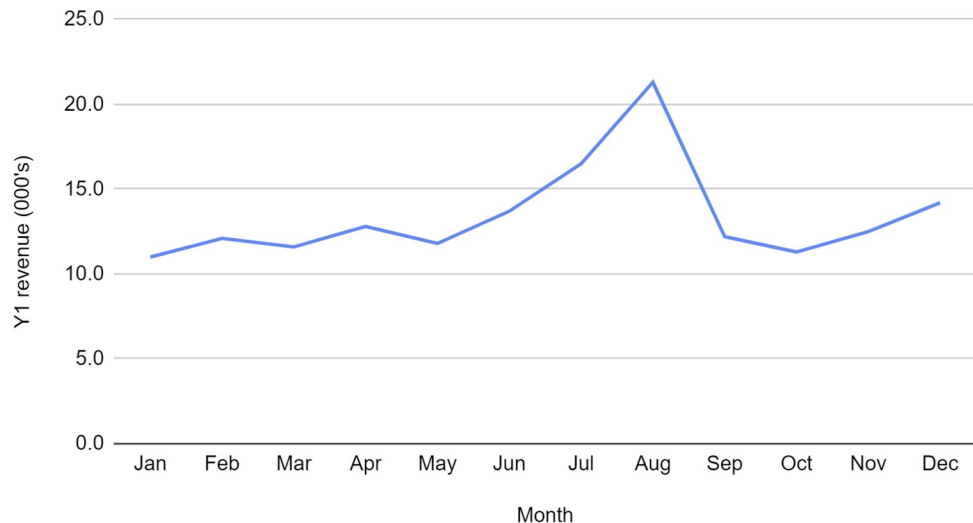
La socodka waxqabadka (Tracking performance)

Faaidada ugu muhiimsan ee isticmaalka xaashida (spreadsheet) waa in milkiilayaasha ganacsiyada yaryar ay si fudud u soo saari karaan garaafyada si ay u arkaan isbeddellada (trends).

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	11.0	12.1	11.6	12.8	11.8	13.7	16.5	21.3	12.2	11.3	12.5	14.2

Isticmaalka shaqada insert/chart, milkiiluhu wuxuu arki karaa...

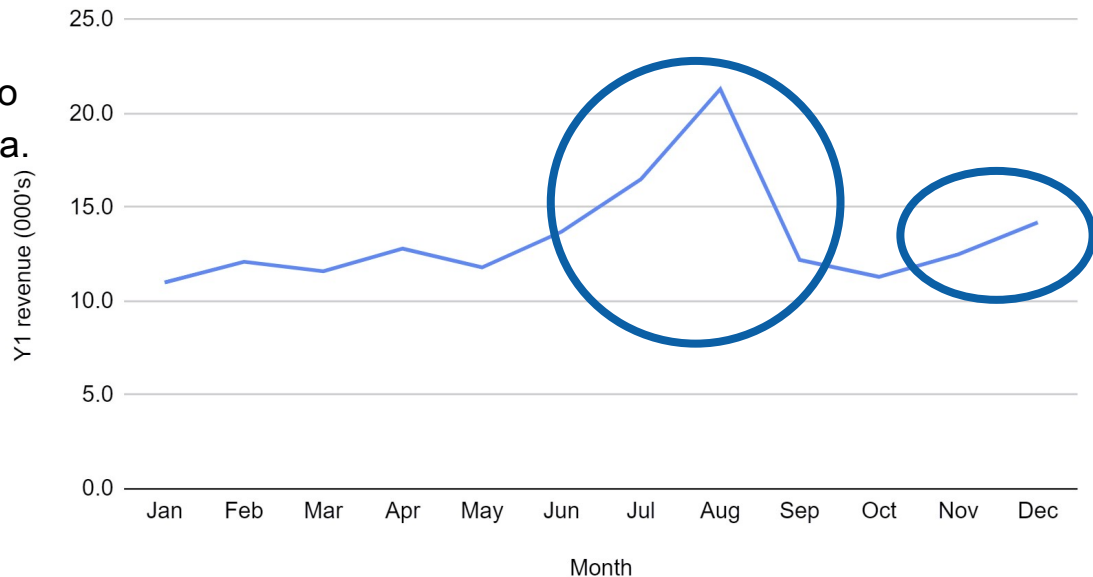
Waa maxay qaabka (pattern) aad hadda si fudud u arki karto?



La socodka waxqabadka (Tracking performance)

Sawirka garaafka (graphical representation) wuxuu inoo tusinayaa in ganacsigan uu la kulmo isbeddel xilliyeed (seasonal trends).

Shirkaddan waxay iibin kartaa badeecad dadku inta badan isticmaalaan xagaaga, oo hadiyad ahaan la bixiyo waqtiga Kirismaska.

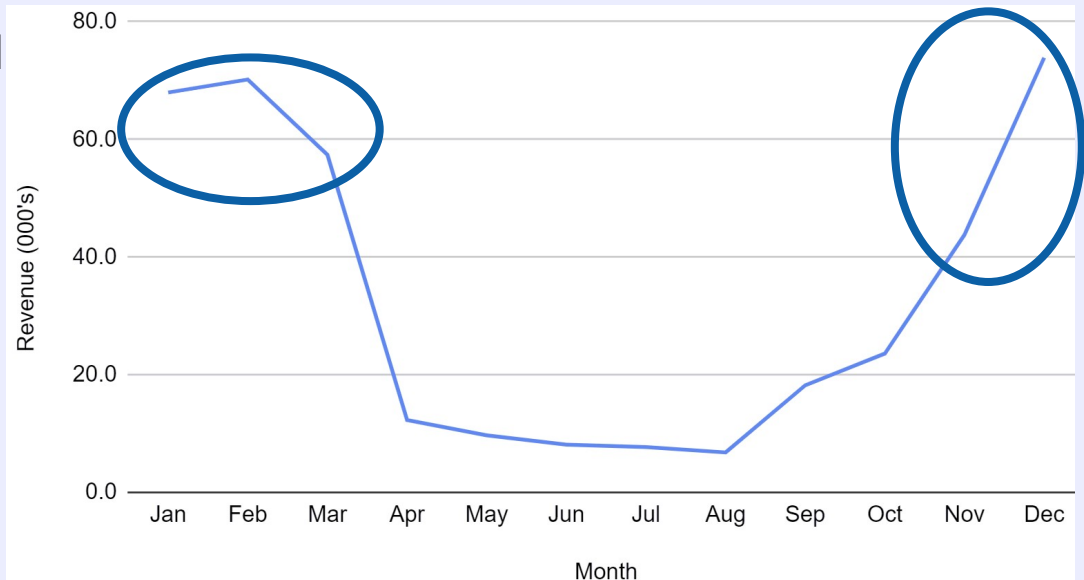


La socodka waxqabadka (Tracking performance)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Revenue (000's)	68.0	70.2	57.4	12.3	9.7	8.1	7.7	6.8	18.2	23.6	43.8	73.9

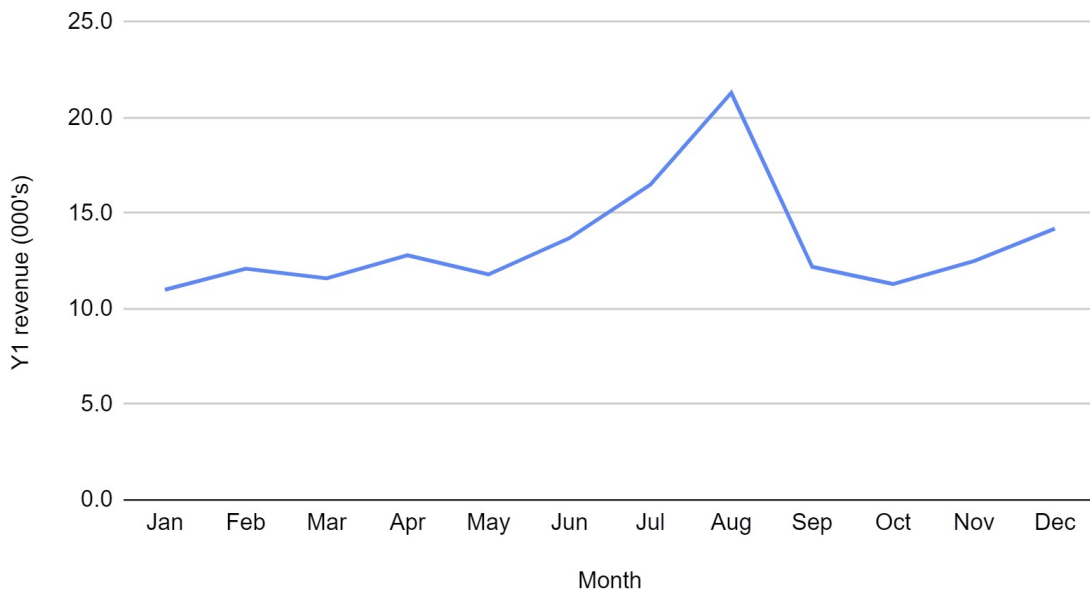
Waa maxay qaabka (pattern) aad ka arki karto garaafka xogta iibka ganacsigan yar?

Waxaa laga yaabaa inaad tidhi, “Isbeddel xilliyeed (seasonal variation) oo weyn oo leh iib sare bilaha qabow”.



La socodka waxqabadka (Tracking performance)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	11.0	12.1	11.6	12.8	11.8	13.7	16.5	21.3	12.2	11.3	12.5	14.2

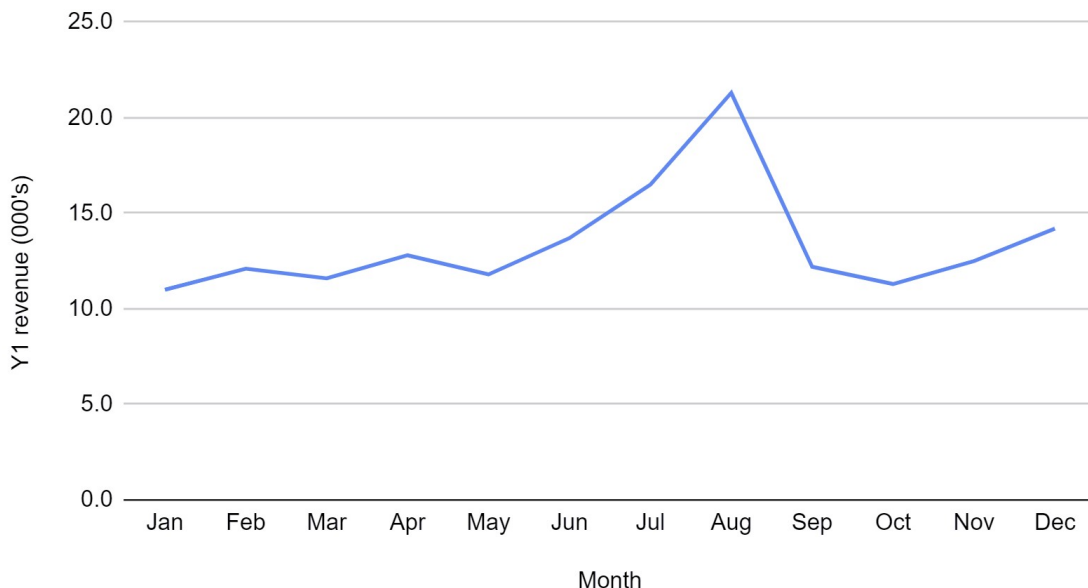


Ganacsiyo badan oo yaryar ayaa la kulma isbeddel xilliyeed (seasonal variation). Kala-duwanaanshaha garaafka ayaa adkeynaya in la arko haddii iibku soo hagaagayo.

libintani miyay kor u socdaan ama hoos?
Ma saadaalin kartaa waxa dhici doona?

Raadinta waxqabadka (Tracking performance)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	11.0	12.1	11.6	12.8	11.8	13.7	16.5	21.3	12.2	11.3	12.5	14.2
Y2 revenue (000's)	11.6	12.4	12.1	13.3	12.3	14.6	18.1	23.5	14.0	12.1	13.8	16.5

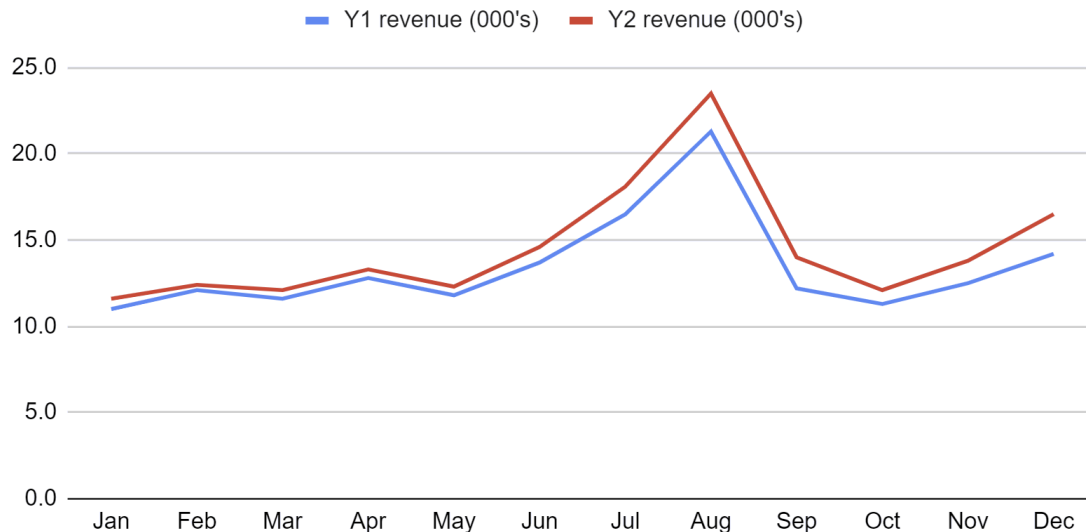


Ganacsi yar oo isticmaalaya xaashida (spreadsheet) si uu u raad raaco iibinta sanadba sanadka ku xiga qaabkan oo kale wuxuu ka faa'iideysan karaa noocyada kala duwan ee jaantusyada (charts) uu barnaamijku noo sawiri karo.

Raadinta waxqabadka (Tracking performance)

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	11.0	12.1	11.6	12.8	11.8	13.7	16.5	21.3	12.2	11.3	12.5	14.2
Y2 revenue (000's)	11.6	12.4	12.1	13.3	12.3	14.6	18.1	23.5	14.0	12.1	13.8	16.5

Y1 revenue (000's) and Y2 revenue (000's)



Waxaad ugu yeeri kartaa jaantus laba xariiq (dual line graph), ama jaantus xariiq oo la isbarbardhigi karo (comparable line graph).

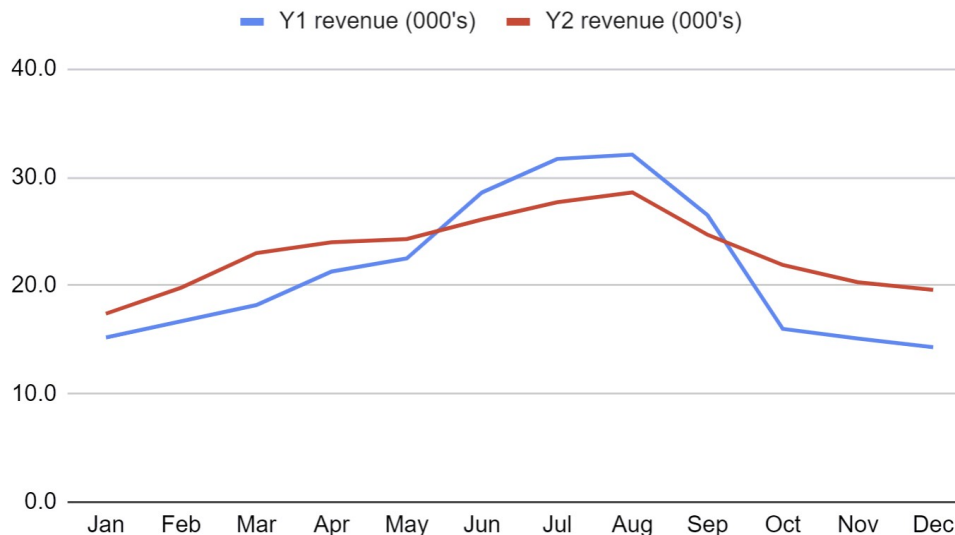
Waxay si cad u tusaysaa dakhliga S2 (Y2) inuu ka sarreeyo dhammaan dakhliga S1 (Y1). Sanadba sanadka ku xiga ganacsigani wuxuu wanaajinayaa iibintiisa.

Raadinta waxqabadka (Tracking performance)



Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	15.2	16.7	18.2	21.3	22.5	28.6	31.7	32.1	26.5	16.0	15.1	14.3
Y2 revenue (000's)	17.4	19.8	23.0	24.0	24.3	26.1	27.7	28.6	24.7	21.9	20.3	19.6

Y1 revenue (000's) and Y2 revenue (000's)



Waa maxay qaababka (patterns) aad ku aragtaa sanadba sanadka ku xiga jaantuska iibinta ganacsigan yar?

Waxaa laga yaabaa inaad tidhi, "Kala duwanaanshaha xilliyada (seasonal variation) ayaa ka yar S2 (Y2). Iibinta Jiilaalka/Dayaanta ayaa ka sarreysa S2 (Y2), halka iibinta Xagaaga ay hoos u dhacday".

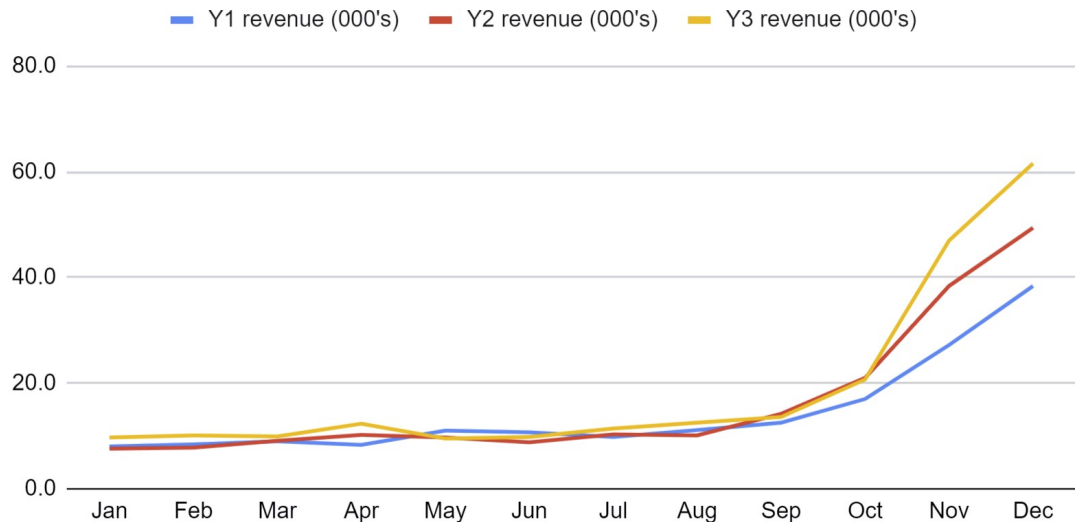
1) Halkan waxaa ah saddexda sano ee ugu horreeya ee iibinta ganacsi yar oo cusub.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	8.0	8.4	9.0	8.3	11.0	10.7	9.8	11.1	12.5	17.0	27.2	38.4
Y2 revenue (000's)	7.6	7.8	9.1	10.2	9.7	8.8	10.3	10.1	14.2	21.0	38.4	49.4
Y3 revenue (000's)	9.7	10.1	9.9	12.3	9.5	9.8	11.4	12.5	13.6	20.7	47.0	61.6

a) Xisaabi celceliska (mean) iyo kala duwanaanshaha (range) sanad kasta, oo ka hadal isbeddellada sanadba sanadka ku xiga.

b) Ka hadal qaababka (patterns) aad ku aragto xogtan.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	8.0	8.4	9.0	8.3	11.0	10.7	9.8	11.1	12.5	17.0	27.2	38.4
Y2 revenue (000's)	7.6	7.8	9.1	10.2	9.7	8.8	10.3	10.1	14.2	21.0	38.4	49.4
Y3 revenue (000's)	9.7	10.1	9.9	12.3	9.5	9.8	11.4	12.5	13.6	20.7	47.0	61.6



1) Halkan waxaa ah saddexda sano ee ugu horreeya ee iibinta ganacsi yar oo cusub.

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Y1 revenue (000's)	8.0	8.4	9.0	8.3	11.0	10.7	9.8	11.1	12.5	17.0	27.2	38.4
Y2 revenue (000's)	7.6	7.8	9.1	10.2	9.7	8.8	10.3	10.1	14.2	21.0	38.4	49.4
Y3 revenue (000's)	9.7	10.1	9.9	12.3	9.5	9.8	11.4	12.5	13.6	20.7	47.0	61.6

a) Xisaabi celceliska (mean) iyo kala duwanaanshaha (range) sanad kasta, oo ka hadal isbeddellada sanadba sanadka ku xiga.

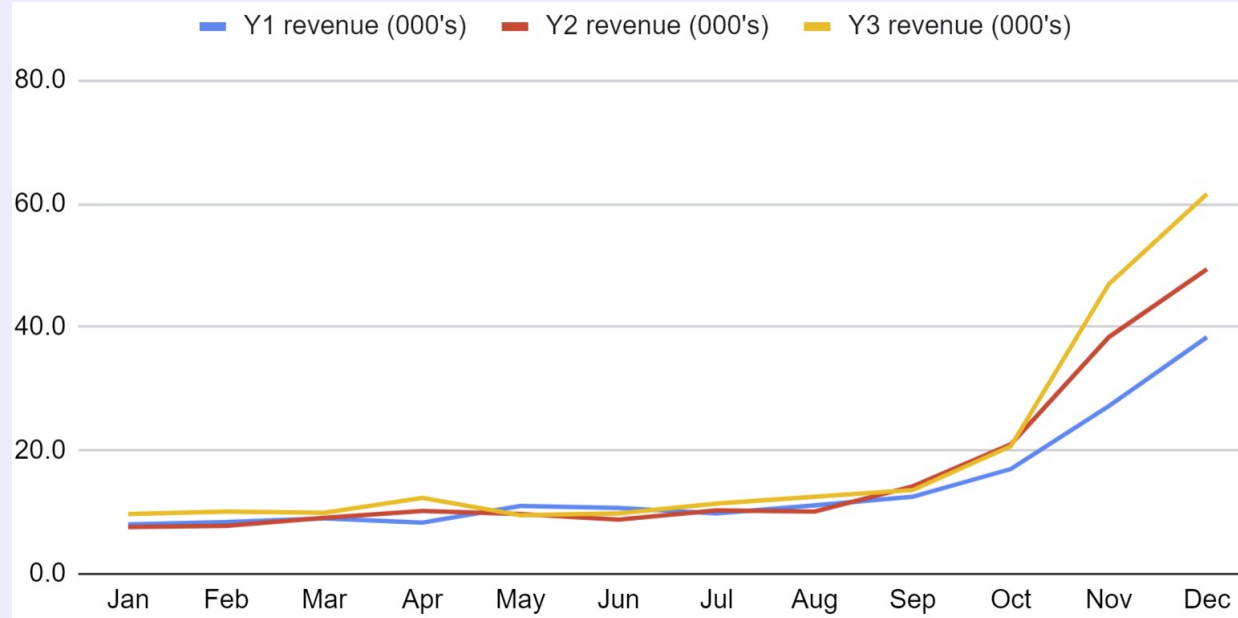
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a)

Waxaa laga yaabaa inaad tidhi, “Celcelisku (Mean) wuu kordhayaa sidaas darteed ganacsigu wuxuu iibinayaa wax badan sannad kasta. Kala-duwanaanshuhu (Range) wuu kordhayaa sidaas darteed iibku wuxuu noqonayaa mid aan joogto ahayn, aan la saadaalin karin bil kasta”.

1) b)



1) c) Waxaa laga yaabaa inaad tidhi, "Garaafku wuxuu muujinayaa inay jirto heer sare oo xilliyeed oo iibka ganacsigu Nov/Dec. Waxqabadkoodu waa isku heer sannad kasta Jan ilaa Sept laakiin iibka Oct/Nov/Dec wuu hagaagayaa sannad kasta".

Soo koobid Maamulista ganacsi yar (Running a small business)

Milkiilayaasha ganacsiyada madaxa-bannaan waxay isticmaalaan xisabinta boqolleyda (percentage) si ay ula socdaan faa'iidada muddo ka dib, faa'iidada alaabta gaarka ah, iyo inay dejiyaan qiimaha iibka. Xaashiyaha shaqada (spreadsheets) waxaa loo isticmaalaa inay ka caawiyaan ganacsiyada yaryar inay fahmaan alaabtooda ugu faa'iidada badan.

Ganacsiyada yaryar waxay sidoo kale isticmaalaan celcelis (averages), kala-duwanaansho (spread), xaashiyaha shaqada (spreadsheets), iyo teknoolojiyadda garaafyada si ay ula socdaan waxqabadka muddo ka dib.