

Notes

Heuristic based on multiple analyst empirical studies is:

Revenue multiple = 10 times revenue growth plus 10 times EBITDA margin plus 2.5 (constant)

EBITDA is assumed to be a good proxy for free cash flow

Simply put the revenue multiple is 10 times the net of revenue growth and EBITDA margin plus 2.5

The range of revenue multiples might therefore look like this:

Revenue Multiple	Rev Growth + EBITDA margin	Revenue growth 10.0x	EBITDA margin 10.0x	Constant 2.5x
2.5x	0%	50%	-50%	
3.5x	10%	60%	-50%	
4.5x	20%	70%	-50%	
5.5x	30%	80%	-50%	
6.5x	40%	90%	-50%	
7.5x	50%	100%	-50%	
8.5x	60%	110%	-50%	

A £10m raise at 6 times revenue on £5m revenue has a pre-money of £30m and a post money of £40m. This assumes 35% revenue growth plus EBITDA margin. Let's assume 55% growth and 20% negative EBITDA margin: $(10 \times 0.55 + 10 \times (-0.2) + 2.5 = 6x)$

To justify this £40m valuation the business will need to grow at 49% (assuming margins remain constant) which derives revenue of £7.4m and a multiple of 5.4x to support the £40m post money valuation: $(10 \times 0.49 + (10 \times -0.2) + 2.5 = 5.4x)$.

Essentially this is a position that needs to be reached before the cash runs out so the revenue could be over more than one year but the growth rate that determines the multiple is still the last 12 months so with slower growth the revenue will need to be higher because the multiple will be less.

In the example above if revenue of £7.4m was achieved after two years of even growth the LTM growth would be 22% and the implied multiple is 2.7 times (with no change in EBITDA margin $(10 \times 0.22 + 10 \times (-0.2) + 2.5 = 2.7x)$ giving a valuation of £20m.

If the slower growth allowed a move to profitability then the position is better as with a 7% positive EBITDA margin the multiple would be back to 5.4 times: $(10 \times 0.22 + 10 \times 0.07 + 2.5 = 5.4x)$