

ARPU

All these posts are generating lots more questions and I've been working through a number this morning, so, when the going gets tough, we blog.

ARPU = Average Revenue Per User. The key here is *per user*.

Let's take a hypothetical business that have three individual service offerings; S1, S2, S3, two bundles; B1 (=S1+S2) and B2 (=S1+S3) and one package; P1 (=S1+S2+S3).

You can quickly, and easily, calculate the ARPU, by making assumptions about the uptake of each offering and determining the revenue derived from each statistical 100 customer sample.

| | Code | Price | %Customers | Revenue |
|-----------|------|---------|------------|-----------|
| Service-1 | S1 | £ 10.00 | 50% | £ 500.00 |
| Service-2 | S2 | £ 8.00 | 20% | £ 160.00 |
| Service-3 | S3 | £ 5.00 | 5% | £ 25.00 |
| Bundle-1 | B1 | £ 15.00 | 15% | £ 225.00 |
| Bundle-2 | B2 | £ 13.00 | 7% | £ 91.00 |
| Package-1 | P1 | £ 21.00 | 3% | £ 63.00 |
| | | | 100% | £1,064.00 |
| | | | ARPU= | £ 10.64 |

This is a deceptively easy calculation, but there are two traps folks can fall into:

1. Market Share vs. Uptake.

The percentage here shows *uptake*, i.e. the percentage of your customers that will take various offerings. I usually talk about a *spectrum* of uptake, across all your offerings.

2. Average of Average.

Don't be tempted to do the following

| | Code | Price | %Customers | Revenue |
|-----------|------|--------------|------------|-----------|
| Service-1 | S1 | £ 10.00 | 50% | £ 500.00 |
| Service-2 | S2 | £ 8.00 | 20% | £ 160.00 |
| Service-3 | S3 | £ 5.00 | 5% | £ 25.00 |
| Bundle-1 | B1 | £ 15.00 | 15% | £ 225.00 |
| Bundle-2 | B2 | £ 13.00 | 7% | £ 91.00 |
| Package-1 | P1 | £ 21.00 | 3% | £ 63.00 |
| | | | 100% | £1,064.00 |
| | | AVG= £ 12.00 | ARPU= | £ 10.64 |

Now, this simple little model can also be applied if you are planning a *freemium* model. Simply plug Price=£0 for one of the offerings, e.g.

| | Code | Price | %Customers | Revenue |
|-----------|-------------|---------|------------|----------|
| Service-1 | S1 | £ - | 80% | £ - |
| Service-2 | S2 | £ 8.00 | 9% | £ 72.00 |
| Service-3 | S3 | £ 5.00 | 5% | £ 25.00 |
| Bundle-1 | B1 | £ 5.00 | 3% | £ 15.00 |
| Bundle-2 | B2 | £ 3.00 | 2% | £ 6.00 |
| Package-1 | P1 | £ 10.00 | 1% | £ 10.00 |
| | | | 100% | £ 128.00 |
| | AVG= £ 5.17 | | ARPU= | £ 1.28 |

You can always add much for reality (=complexity).

Variations across the Planning Period

This calculation is based on two assumptions (price and uptake) at **a single point of time**. For simplicity, you can apply those assumptions across your full planning period, but that's really unrealistic if you are looking at multiple years. Two things can happen:

1. Prices may increase
2. Uptake of various offerings may change.

So you can determine ARPU across your planning period as such:

| | Code | YEAR-1 | | | YEAR-2 | | |
|-----------|--------------|---------|------------|-----------|---------|------------|---------------|
| | | Price | %Customers | Revenue | Price | %Customers | Revenue |
| Service-1 | S1 | £ 10.00 | 50% | £ 500.00 | £ 11.00 | 55% | £ 605.00 |
| Service-2 | S2 | £ 8.00 | 20% | £ 160.00 | £ 9.00 | 18% | £ 162.00 |
| Service-3 | S3 | £ 5.00 | 5% | £ 25.00 | £ 6.00 | 7% | £ 42.00 |
| Bundle-1 | B1 | £ 15.00 | 15% | £ 225.00 | £ 17.00 | 12% | £ 204.00 |
| Bundle-2 | B2 | £ 13.00 | 7% | £ 91.00 | £ 14.00 | 5% | £ 70.00 |
| Package-1 | P1 | £ 21.00 | 3% | £ 63.00 | £ 25.00 | 3% | £ 75.00 |
| | | | 100% | £1,064.00 | | 100% | £1,158.00 |
| | AVG= £ 12.00 | | ARPU= | £ 10.64 | £ 13.67 | | ARPU= £ 11.58 |

Variations across Segments

This calculation is based on all (aggregate) customers. That would be fine if there was homogeneity across your entire customer base. But if you have different uptake in different segment (e.g. if S2 was more attractive to consumers and S3 was more attractive to professionals), then you **may** want to break your ARPU calculation down by segment. This could look like:

| | Code | Price | %Consumers | Revenue | | Price | %Professionals | Revenue |
|-----------|-------------|----------------|--------------|----------------|--|----------------|----------------|----------------|
| Service-1 | S1 | £ 10.00 | 50% | £ 500.00 | | £ 10.00 | 50% | £ 500.00 |
| Service-2 | S2 | £ 8.00 | 20% | £ 160.00 | | £ 8.00 | 15% | £ 120.00 |
| Service-3 | S3 | £ 5.00 | 5% | £ 25.00 | | £ 5.00 | 10% | £ 50.00 |
| Bundle-1 | B1 | £ 15.00 | 15% | £ 225.00 | | £ 15.00 | 12% | £ 180.00 |
| Bundle-2 | B2 | £ 13.00 | 7% | £ 91.00 | | £ 13.00 | 10% | £ 130.00 |
| Package-1 | P1 | £ 21.00 | 3% | £ 63.00 | | £ 21.00 | 3% | £ 63.00 |
| | | | 100% | £1,064.00 | | | 100% | £1,043.00 |
| | AVG= | £ 12.00 | ARPU= | £ 10.64 | | £ 12.00 | ARPU= | £ 10.43 |

Of course getting from segmented average to overall average cannot be done by taking an average of an average

