

Deal MVP loyalty token supply formula

For the MVP, there are three parameters that are provided in the deal creation form:

1. **Budget:** The total amount in fiat that the merchant is willing to reserve for the deal. This will be noted as B .
2. **Milestones:** The number of milestones (visits) a participating customer will complete to earn the reward. This will be noted as M
3. **Reward:** The corresponding amount in fiat that a participating customer will receive or entitled to after completing the milestones for the deal. This will be noted as R .
4. **Point value:** The value in fiat of a unit of loyalty point of a deal. This will be noted as P .
5. **Total supply:** The total supply of loyalty tokens for the deal. This will be noted as T .

We will assume for the MVP that the loyalty token unit for the deal is the equivalent of a milestone as defined above.

The deal loyalty token total supply is given by:

$$T = B * M / R$$

And the deal loyalty token value is given by:

$$P = R / M$$

Example 1

if $B = \$1000$, $M=10$, and $R=\$5$,
Then $T=2000$ tokens, and $P=\$0.5$.

Example 2

if $B = \$100$, $M=1$, and $R=\$0.1$,
Then $T=1000$ tokens, and $P=\$0.1$

Example 3

if $B = \$1,000,000$, $M=10$, and $R=\$25$,
Then $T=400,000$ tokens, and $P=\$2.5$

