**Module – 4**

**1)What are the main factors that can affect PPC bidding?**

1. Quality Score (Google Ads specific)

* Google assigns a score (1–10) based on:
  + CTR (Click-Through Rate): Expected likelihood of users clicking your ad.
  + Ad Relevance: How closely your ad matches the user’s query.
  + Landing Page Experience: Relevance, speed, and usability of the page.
* Higher Quality Score → Lower CPC for the same position.

2. Ad Rank & Competition

* Ad Rank = Bid Amount × Quality Score × (Ad Extensions & Formats).
* Strong competitors with higher bids or better quality can increase the cost to secure top positions.

### 3. **Bid Strategy & Budget**

* Manual CPC vs. automated strategies (e.g., Target CPA, Maximize Clicks, Target ROAS).
* Limited budgets may force lower bidding and reduced visibility.

### 4. **Industry & Keyword Competition**

* Highly competitive industries (finance, legal, travel, e-commerce) have higher CPCs.
* Generic vs. long-tail keywords → long-tail often cost less and convert better.

### 5. **Geographic Targeting**

* Ads in high-demand regions (e.g., Tier-1 countries, metro cities) usually cost more.
* Local campaigns may be cheaper depending on competition.

### 6. **Device Targeting**

* Mobile searches often dominate, but CPCs may differ across desktop, tablet, and mobile.
* Adjusting device bid modifiers impacts cost and ad position.

### 7. **Time of Day & Seasonality**

* Competition fluctuates by time of day, week, or year (e.g., Black Friday, travel seasons).
* Seasonal spikes → higher CPC due to increased bidding pressure.

### 8. **Ad Extensions & Format**

* Sitelinks, callouts, structured snippets, etc., improve CTR and Ad Rank.
* Higher Ad Rank reduces the actual CPC you pay.

### 9. **Audience Targeting**

* Narrow targeting (remarketing lists, custom audiences, demographics) can impact costs.
* Highly relevant audiences may convert better, lowering effective CPC.

### 10. **Account & Campaign History**

* Google rewards well-managed accounts with good performance history.
* Poor performance (low CTR, irrelevant ads) can raise CPC over time.

✅ **In short:** Your PPC bidding is shaped by both **external factors** (competition, industry, seasonality) and **internal optimizations** (Quality Score, targeting, ad relevance).

**2) How does a search engine calculate actual CPC?**

In PPC (like **Google Ads**), you don’t usually pay your **maximum bid**. Instead, you pay just enough to beat the advertiser below you. This is done through an **auction system** where the **actual CPC** is calculated.

## **🔹 Formula for Actual CPC**

In Google Ads, the **Actual CPC** is calculated as:

Actual CPC=Ad Rank of competitor below youYour Quality Score+0.01\text{Actual CPC} = \frac{\text{Ad Rank of competitor below you}}{\text{Your Quality Score}} + 0.01Actual CPC=Your Quality ScoreAd Rank of competitor below you​+0.01

### 🔹 Key Concepts Behind This

1. **Ad Rank**
   * Determines your ad’s position.
   * Ad Rank = Max Bid × Quality Score × Ad Extensions/Formats.
   * Higher Ad Rank → higher placement.
2. **Quality Score**
   * Google rewards relevance.
   * If your Quality Score is higher, you can pay less for the same position compared to a competitor.
3. **Competitor’s Ad Rank**
   * Your cost is based on the competitor right below you.
   * You only need to "just outbid" them to keep your position.

### 🔹 Example

Suppose:

* + - **You**: Max Bid = $4, Quality Score = 8
    - **Competitor B**: Max Bid = $6, Quality Score = 5

**Your Ad Rank** = 4 × 8 = **32**  
 **Competitor B’s Ad Rank** = 6 × 5 = **30**

Now, your **Actual CPC** is:

308+0.01=3.76+0.01=3.77\frac{30}{8} + 0.01 = 3.76 + 0.01 = \mathbf{3.77}830+0.01=3.76+0.01=3.77

### 🔹 Why This Matters

* You never pay your full max bid unless absolutely necessary.
* A **higher Quality Score** reduces your CPC
* Google’s system rewards relevance and good ad experiences, not just high budgets.

**3) What is a quality score and why it is important for Ads?**

**Quality Score** is one of the most important concepts in PPC advertising, especially in Google Ads.

## **🔹 What is Quality Score?**

**Quality Score** is a **rating (1–10)** given by Google Ads that measures how relevant and useful your ads are to users.

It’s Google’s way of rewarding advertisers who create **better, more relevant ads**.

It is based on three main factors:

1. **Expected Click-Through Rate (CTR)**
   * How likely it is that someone will click your ad when it’s shown.
   * Higher CTR → better Quality Score.
2. **Ad Relevance**
   * How closely your ad copy matches the user’s search intent and keywords.
3. **Landing Page Experience**
   * The relevance, transparency, and ease of navigation on your landing page.
   * Fast-loading, mobile-friendly, and keyword-relevant pages score better.

## **🔹 Why is Quality Score Important?**

1. **Lower Cost-Per-Click (CPC)**
   * Higher Quality Score → lower CPC for the same ad position.
   * You pay less while staying competitive.
2. **Better Ad Positions**
   * Ad Rank = Max Bid × Quality Score.
   * Even with a lower bid, you can outrank competitors if your Quality Score is higher.
3. **Higher ROI**
   * Since you’re paying less per click and attracting more relevant traffic, your overall return on ad spend improves.
4. **User Experience**
   * Google wants users to have a good experience. High-quality ads lead to satisfied searchers, which keeps them using Google.

## **🔹 Example**

* **Advertiser A**: Max Bid = $5, Quality Score = 10 → Ad Rank = 50
* **Advertiser B**: Max Bid = $10, Quality Score = 4 → Ad Rank = 40

👉 Even though Advertiser B bids more, **Advertiser A’s better Quality Score wins the top position AND pays less per click**.