

# Case Study: Bridgman Art Library

Bridgman Art Library manages copyright of artworks on behalf of individuals, art galleries, museums, libraries and universities (“owners”). Customer organisations that wish to use a copyrighted image created by an artist (“maker”) can pay a fee to Bridgman Art Library, who will then provide a highquality image for reproduction.

## Uses of Artworks

Once a customer is registered in the Bridgman database, they can browse through information about the available artworks. When the customer finds an artwork they wish to use, they must register a proposal for the use of the artwork. The proposal contains information about the intended use (e.g. for a TV documentary, book cover, calendar, T-shirt, tote bag, theatre set dressing, etc.), intended market (Commercial, Research, or Non-Profit) and intended duration of use. The duration of use could range from a week to five years. The customer also nominates the price (in US dollars) they are willing to pay for their proposed use. If a customer wants exclusive use of an artwork, this must be recorded in the database. The date the proposal was made is also stored.

Each intended category of use is recorded once in the system and designated with a unique five-digit numeric code (e.g. 10001 “Life-size Reproduction”; 10010 “TV Documentary”; 10037 “T-shirt”; 12831 “Tea Towel”; 60001 “Book Cover”). A customer can propose multiple intended categories of use for the same artwork (e.g. 12831 “Tea Towel” and 19833 “Ceramic Mug”) as part of a single proposal. If the intended category of use has not been requested previously, it must be added to the database. This ensures that the categories are common for all art copyright managed by Bridgman.

## From Proposal to Contract

Once the customer’s proposal has been registered in the system, a Bridgman Art Library account manager prepares a contract with a negotiated “contract price”, and the status of the contract being “offered”. For each contract, the date the account manager created it is captured in the database. The contract price may be the same as, or higher than, the price that the customer offered in their proposal.

If the contract is agreed upon by both the customer and the artwork’s owner, this is recorded in the system with the contract status being “approved”. The date of approval is captured, and the customer receives the invoice, where each invoice is uniquely identified by the proposal number and the contract iteration number.

When an agreement has not been reached, the contract’s status becomes “cancelled”, and a brandnew contract is prepared with a different contract price. For cancelled contracts, the date of approval will not be captured.

The process of issuing new contracts for the same proposal is repeated as many times as it takes to reach an agreement – sometimes it continues for so long that different contracts for the same proposal may be prepared by different account managers. For legal and accounting purposes, it is critical that Bridgman keeps track of all contracts, including those that were never approved.

Account managers are paid a base salary, and they may also be paid bonuses when they negotiate an approved contract which significantly exceeds the proposal price. When an account manager negotiates an approved contract price that is more than US\$2,000 above the proposal price, they receive a bonus of 2% of their base salary for each such contract. Each account manager’s first and last name, city and country must also be recorded.

## Owners and their Representatives

Bridgman Art Library needs to be able to identify who has owned the artwork at any point in time since the artwork's creation. The owner may be the artist, an art dealer, auction house (e.g. Sotheby or Christies), art gallery, museum, etc. Each artwork may have been owned by many owners over time but can only have one owner at any particular moment.

About each owner we need to know the organisation name (if known), address, and country, and the details of their representative who deals with the owner's negotiations. For each owner representative we need to store their first and last name, email address, and phone number including international dialling code (e.g. +44 7388 2120) of the representative. Even if the owner has had many representatives in the past, we need to capture the details of only the most recent such representative. To avoid conflicts of interest, Bridgman allows each representative to deal on behalf of a single owner only. Even after a representative ceases to work for an owner, their details remain stored in the database.

## Makers

Bridgman Art Library refers to the creator of the artwork as a maker. A maker can be an individual, a company (e.g. Tiffany), or an atelier (e.g. Wedgwood). Each maker can produce many artworks throughout their lifetime. The database needs to be able to store the maker's first and last name (e.g. Paolo Veronese), nationality (e.g. Italian), birth year and death year, and the atelier or company name (if known). However, not all makers will have all this information – some of this information might be simply unknown. Bridgman records a single maker for each artwork; however, there might be artworks without a known maker.

## Artworks

For each artwork, we store a unique object ID, the type of artwork, the title (e.g. "The Wedding Feast at Cana"), the artwork's maker, the artwork's dimensions in centimetres – height, width, and, if appropriate, depth (e.g. H 677 × W 994 cm), a description of the artistic medium (e.g. "oil on canvas"), origin (e.g. "Venice, Italy"), the year the artwork was finished (e.g. 1563), and importantly whether it is available for copyright reproduction ("Yes", "No", or "By Negotiation").

## Customers

Customers can be individuals or companies. We need to know contact information for each customer – first and last name, company name (if relevant), postal address, city, country, email address, and telephone numbers. At any given time, multiple customers may have copyright permission for a particular artwork.

Your database design needs to be able to solve the following business requirements:

- What is the approved contract with the highest price?
- How many proposals for sculptures were made in 2018 by customers from Ireland?
- Who owned Albert Namatjira's painting *Mount Hermannsburg* on 15 February 2016?
- How many contracts created in 2017 were cancelled?
- Who is the account manager with the highest number of approved contracts?
- How much bonus has been earned by account managers for a particular artwork?

- What is the most common intended use of artworks?

**Note:** These requirements are listed for your guidance only. You do **not** need to submit any SQL queries or explanations of how these requirements are met.

## Examples of artworks managed by Bridgman Art Library



Title: *Coming South* (1886)

Type: Painting

Maker: Tom Roberts (1856–1931, English/Australian)

Dimensions: H 63.5 × W 52.2 cm

Medium: Oil on canvas

Origin: Australia



Title: *Napoleonic Egg* (1912)

Type: Jewellery

Maker: House of Fabergé (Russian company)

Dimensions: H 11.7 × W 8.9 × D 9.1 cm

Medium: Gold, ruby, diamond, and other materials

Origin: Russia