Step 2

a. Excel count: 3
b. SQL count: 3
c. It was easier to use SQL for this because the query only returns the information I requested.

Step 3

a. Payment_id, customer_id, staff_id, rental_id, amount, payment_date
b. actor, store, address, category, city, country, customer, film_actor, film_category, inventory, language, rental, staff, payment, film
c. SELECT table_name FROM information_schema.table
   WHERE table_schema = 'public'
   AND table_type = 'BASE TABLE'
d. 6 days

Step 4

a. OLAP system:
   - The marketing department could use this to look at what impacts their advertising has on customer actions.
   - Buying teams could use this to determine which movies to put in stores and how many copies they'll need.
b. OLTP system:
   - Stores would use this as part of their check-out/check-in system to log each video rental and return by each customer.
   - Inventory teams could use this to input new videos into their system and record the quantity, as well as remove videos stores have stopped carrying.

Step 5

a. This is unstructured data because it's an invoice from an email or piece of paper.
b.

Vendor	**Vendor Address**	**Account Name**	**Account Number**	**Invoice Number**	**Invoice Description**	**Invoice Total**
Oaklanders	4826 Norma Avenue, Anderson, TX	Miko Santo	4929331000575420	2019001	New video collection licensing	$ 730.00