Kimbell

Pros:

1. The dimensions that surrounds fact are denormalized so you can drill up and drill down without joining to another table.
2. You can create dimension once and than use it with many facts tables,because it conforms. Conformed dimensions  tell us that thing, which is described will be used the same way in all facts tables. (attributes in separate dimension tables have the same column names and domain contents)
3. Process oriented, data marts are created first, so we can deliver some result quickly.

Cons:

1. Redundant data, because in different dimensions the same data can repeat.
2. Works better with small business areas, than with enterprise-wide.
3. Before data can be loaded into a Kimball data warehouse, you have to transform it into a dimensional structure. That will slow down the ETL process.

Inmon

Pros:

1. The data warehouse is a single source of truth, because all data marts receive data from it.
2. With an Inmon data warehouse, the ETL process is faster and easier because you moves data from one relational structure to another.
3. Data warehouse stores the ‘atomic’ data at the lowest level of detail.

Cons:

1. Querying normalized tables is harder than denormalized star schema as it requires joining many tables.
2. More ETL processes needed, you should create/support/change ETL for every data mart.
3. The initial set-up and delivery will take more time, because you must create corporate data model (entity relationship diagram, data item set, physical model) and only than you can deliver certain result.

Linstadt

Pros:

1. The Data Vault model consists of star schema and 3NF that include dimensions, many to many linkages and standard table structures, so we receive advantages from both structures.
2. Concept provides ability to merge new business units into the. New data simply connects by the way of adding new hubs and links to the existing model, without breaking or modifying the existing structure.
3. Data Vault 2.0 designed from the box to use products like Hadoop, MongoDB and NoSQL at all.

Cons:

1. Bad documentation, a few information in internet, comparing to Inmon and Kimbell.
2. Harder to learn methodology how to develop Data Vault(2.0).
3. More tables than in 3NF and Star Schema approaches and semantic complexity of tables relationships, which leads to complexity of joins, and worse performance.