Knowledge-Based Systems

How are Knowledge-Based and Expert Systems similar to Decision Support Systems?

- They are both based on relational information.

How are Knowledge-Based and Expert Systems different from Decision Support Systems?

<table>
<thead>
<tr>
<th>Decision Support Systems</th>
<th>Knowledge-Based and Expert Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>• quantitative (numbers)</td>
<td>• qualitative (text)</td>
</tr>
<tr>
<td>• model-based</td>
<td>• rule-based</td>
</tr>
<tr>
<td>• ( Y = f(X) )</td>
<td>• when facing …, do …</td>
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</tbody>
</table>

Knowledge-Based and Expert Systems are the follow-up to Decision Support Systems?

- Decision Support Systems: Which course of action is the best?
- Knowledge-Based and Expert Systems: How to implement the above course of action?
- Decision Support Systems: Buying a hybrid car is worth it when the price of gas > $6/gallon
- Knowledge-Based and Expert Systems: To buy a hybrid car, follow these steps: …………

What types of things do we know?

- We know that/when/who/where/what ➔ Factual Knowledge ➔ Information
- We know how-to ➔ Procedural Knowledge ➔ Skill/Competence
- We know why ➔ Explanatory Knowledge ➔ Understanding
Textbook (pages 89-90)

1. creating knowledge
2. capturing and storing knowledge
3. disseminating knowledge

Read enough to figure out her role in knowledge management.