4. When you are training and/or mentoring a new IT employee, what are the main things you spend the most time on with them to improve their performance?

Decision Making for Individuals and Teams: Team collaboration is something to emphasize and incorporate into the mindset of new IT workers. Students tend to graduate with the mindset, "I get to work in isolation and my decisions related to a work product I created are the only decisions that count."

Here are effective ways to make individual or team decisions. Individual

Decisions:
From Skills You Need (SkillsYouNeed), the method they offer consists of seven stages:

1. Listing all possible solutions/options.
2. Setting a time scale and deciding who is responsible for the decision.
3. Information gathering.
4. Weighing up the risks involved.
5. Deciding on values, or in other words what is important.
6. Weighing up the pros and cons of each course of action.
7. Making the decision.

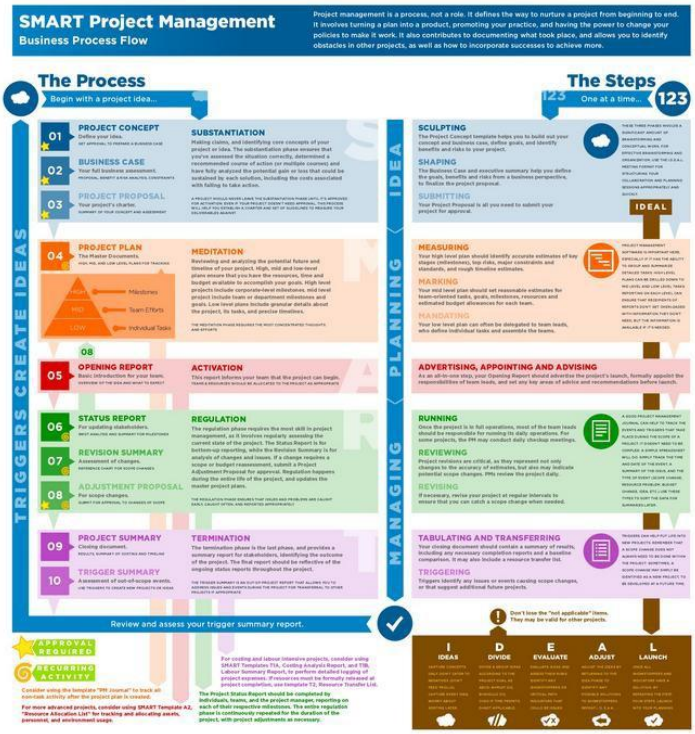
There is then an explanation of each of these stages.

Group/Team Decisions:
From Mind Tools, the Stepladder Technique consists of five steps:

- Step 1: Before getting together as a group, present the task or problem to all members. Give everyone sufficient time to think about what needs to be done and to form their own opinions on how to best accomplish the task or solve the problem.

- Step 2: Form a core group of two members. Have them discuss as a group of three. The third member presents ideas to the first two members BEFORE hearing the ideas that have already been discussed. After all three members have laid out their solutions and ideas, they discuss their options together.
- Step 4: Repeat the same process by adding a fourth member, and so on, to the group. Allow time for discussion after each additional member has presented his or her ideas.
- Step 5: Reach a final decision only after all members have been brought in and presented their ideas.

Mind Tools recommends that productive teams are composed of four to seven members to optimize effectiveness. They also offer a comprehensive overview of team decision making.



Business Processes: "Another area where IT students can improve upon is their understanding of business processes. IT students who enter the workplace must expect that there are steps to follow and take time to know the reasons for the process."

A business process is a collection of related, structured activities or tasks that produce a specific service or product (serve a particular goal) for a particular customer or customers. There are three main types of business processes:

- Management processes that govern the operation of a system. Typical management processes include corporate governance and strategic management.

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- Operational processes that constitute the core business and create the primary value stream. Typical operational processes are purchasing, manufacturing, marketing, and sales.
- Supporting processes that support the core processes. Examples include accounting, recruitment, and technical support.

(**Source:** Wikipedia)

now How to Ask for Help:

IT students, who join the workforce, should be able to assess a problem in order to determine when the right time to ask for guidance is. IT educators should help students develop an awareness that ***there is a critical time*** during a project that instead of becoming too determined in solving it by themselves, ***they are actually wasting time*** by not asking for help. Here is some advice from an IT professional.

An IT student should consider asking themselves (as both a student and a future IT worker) the following:

1. **Do you understand the problem?**
   First of all, make sure you understand the problem. There are no stupid questions. Do you understand what your client/boss is asking you versus what they need?
2. **Do you know that the problem is unsolvable (within your time/budget constraints)?**
   This will happen. "Build me a bridge by tomorrow." Make sure you know for a fact that a problem is unsolvable within your constraints. Your client/boss might be flexible on the time/budget and these can be modified to give you more time/budget.
3. **Do you just not know how to solve the problem?**
   If the problem is understandable and the constraints are within reason, and there is technology that can solve the problem, but you just don't know enough...that's what StackOverflow and the Internet is for. Make sure you do your research first. Try to ask explicit questions that have quantifiable answers. Ask your peers. Have a design session. Ultimately, if the above steps don't lead to an answer, let your client/boss know you're stuck. It will help them to adjust the deliverable deadlines before it's too late.
4. **Is your client/boss asking for the impossible?**
   This is a variant of answer number 2. It seems like your client/boss is asking the impossible.

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Do your research. Never say that the problem is unsolvable unless you know exactly why and you can clarify.

5. **Is it worth it? (ROI)** ROI stands for ***Return on Investment***. This refers to an investment in time. Your time! Is the problem important enough to solve to warrant the amount of time it will take you to research and solve the problem? Discuss this with your client/boss
   Is it a REAL problem?
6. Is it a real problem? Clients, often times, understand what they want, but don't necessarily understand what they need. Try to understand what your Client/Boss actually needs and discuss this with them.

(**Source:** Stack Overflow)

Deadlines and Time Management: Everyone knows what a deadline is. Something (a product, project, etc. with pre-specified elements) someone committed to do is due on a specific date to a specific person. Understanding

1) what a deadline is,
2) different types of deadlines, and,
3) what are the responsibilities as the person who has to meet a deadline or the person who is expecting a deadline to be met with a deliverable.

These are all critical concepts for an IT student and worker.

Deadlines are related to time management, and sharing time management tips with IT students will serve them will when they enter the workforce.

The Fail Date: This is considered the "test" deadline. If you fail to meet this type of deadline, you won't be asked back to work on a project for the group, company, contractor, etc. You'll know it's a **fail date deadline** because the timeline seems unrealistic, a need for frequent updates will be part of the project specifications, and you are asked if there is a possibility of completing the project early. If you think you can actually meet the deadline, then break the task down into multiple parts with hourly deadlines. If you think it's a fail date deadline project, then either counter with a

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realistic deadline for deliverables or pass on the project.

Firm, but Flexible: This is the most common type of deadline. The deadlines are "firm," but there is a chance they won't be met due to unexpected issues that might arise. Find out why there is an aura of ambiguity around some or all of the deadlines. If the project authors actually know that some of these deadlines might be missed because of the unexpected issue, what aren't they telling you? Find out. Is it because another part of the project has been farmed out to another person or group and you will have to wait for them to complete their part of the project? This type of deadline is something you can succeed with. It just might take a bit of perseverance and patience on your end.

Stale Date: Stale Date deadlines are attached to a project that isn't really expected to go anywhere. It might be a pet project of someone at the top level of management that produced a lot of initial excitement and then is forgotten about as other projects receive higher priority, or it's a project that doesn't have actual resources attached to it and fades away as time goes by. Deadlines for these types of projects require acknowledgement of the deadline, keep it on your horizon, but expect that eventually no one will even remember what it was about. (**Source:** Adapted from Gigoam.com)

Other Resources to Consider:

The Deal on Deadlines and What They Teach US, LinkedIn

10 Time Management Tips that Work, Entrepreneur

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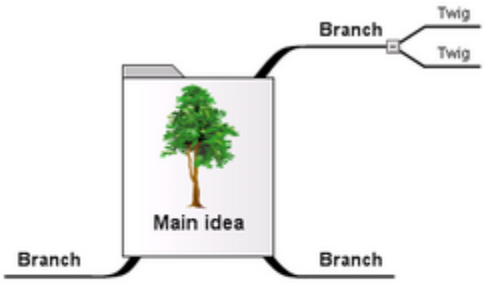

A Mind Map is a highly effective way of getting information in and out of your brain - it is a creative and logical means of note-taking and note-making that literally "maps out" your ideas.

The five essential characteristics of a Mind Map:

- The main idea, subject or focus is crystallized in a central image.
- The main themes *radiate* from the central image as 'branches.'
- The branches comprise a key image or key word drawn or printed on its associated line.
- Topics of lesser importance are represented as 'twigs' of the relevant branch.
- The branches form a connected nodal structure.

(**Source:** Excerpt from Mind Mapping)

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