Exoskeletons: From Other Perspectives
(Simplified Version)

Think about this: Do exoskeletons help everyone?

Right now, there is only one exoskeleton in the United States (the ReWalk) that is considered safe to use. But you can use the ReWalk only if you:

- Are between 5'3" and 6'2"
- Weigh under 220 pounds
- Can control your arms
- Have bones strong enough to let you stand and walk
- Don't have certain medical conditions (like cerebral palsy)

Think about this: Does everyone want an exoskeleton?

From William Peace, paralyzed since the age of 18:
A lot of news stories say the exoskeleton is a "miracle" that lets paralyzed people walk again. The message is that walking is the best way to get around, and using a wheelchair is bad. But I think a wheelchair is a great invention. It makes my life go. A wheelchair helps people feel more in power of their lives.

From Kim Sauder, graduate student who has cerebral palsy:
I don't like the idea that something means more if you can stand while you're doing it. Think about crossing the stage at graduations. It takes 10 seconds to walk across the stage—while getting your degree probably took you years and so much more work. Getting your degree is the great thing that you did, not walking across the stage.

From Rose Eveleth, writer, designer and producer:
Why are we excited about exoskeletons and not really high quality wheelchairs? A lot of the time, this is because wheelchairs are made without talking to the people who use them. When you talk to people who use wheelchairs you find that in fact, many of them don't really care about walking.

From Sara Hendren, researcher:
Giving exoskeletons too much attention can lead to the idea that there is a '"successful" disabled person: that someone who can use an exoskeleton to walk or run has succeeded more than someone who cannot.

Think about this: Many people who are paralyzed have medical problems because they have a "sedentary" lifestyle (meaning they can't move around very much). What other approaches could help them?

From William Peace, paralyzed since the age of 18:
Give people who are paralyzed a longer treatment time. Get them a state-of-the-art and well fitted wheelchair. Get this person involved with the most helpful exercises and sports programs that they can do.

An exoskeleton costs $60,000. But a wheelchair, a wheelchair cushion, a hand-cycle, and a sit-ski cost only a little over $20,000. I would be willing to bet that a newly paralyzed person who had this sort of support would do great. They wouldn't even be able to imagine what it's like to have a sedentary lifestyle.

Think about this: How could we make spaces more "accessible" (meaning easier for people with disabilities to move around in)?

From Kim Sauder, graduate student who has cerebral palsy:
People may think that we don't need to worry about ramps or stairs anymore because people with exoskeletons can walk. A lot of people think: Isn't the exoskeleton so inspiring? But they also think this lets us off the hook of having to do anything about making spaces easier to move around in.

From Rose Eveleth, writer, designer and producer:
We need to think about why many people seem more interested in getting someone out of their wheelchair than they are in making spaces accessible to that chair. I asked a person [at a disability rights conference] whether there was any city that was set up well for people with disabilities, and people in wheelchairs specifically. She laughed and turned to a nearby group to ask them what they thought. They couldn't come up with a single one.

I don't think that we should stop designing technology like the ReWalk. But the future needs people to think not just about cool futuristic devices, but also about the future of cities, of buildings and roads, and of transportation.

Adapted (and heavily edited for simplification) from the following sources:
http://badcripple.blogspot.com/search?q=exoskeleton
https://www.flashforwardpod.com/2018/05/08/enter-the-exos/
https://www.theatlantic.com/technology/archive/2015/08/exoskeletons-disability-assistive-technology/400667/