



## Activity: Sony Walkman Case

They had been disappointed at first, but it wasn't something that was going to keep them awake nights. Mitsuro Ida and a group of electronics engineers in Sony Corporation's Tape Recorder Division in Tokyo had tried to redesign a small, portable tape recorder called "Pressman" so that it gave out stereophonic sounds. A year or so before, Ida and his group had been responsible for inventing the first Pressman, a wonderfully compact machine - ideal for use by journalists - which had sold very well.

But the sound in the tape machine was monaural. The next challenge for Sony's tape recorder engineers was to make a portable machine just as small, but with stereophonic sound. The very first stereo Pressman they made, in the last few months of 1978, didn't succeed. When Ida and his colleagues got the stereo circuits into the Pressman chassis (5.25 inches by 3.46 inches, and only 1.14 inches deep), they didn't have any space left to fit in the recording mechanism. They had made a stereophonic tape recorder that couldn't record anything. Ida regarded this as a good first try, but a useless product. But he didn't throw it away. The stereo Pressman was a nice little machine. So the engineers found a few favourite music cassettes and played them while they worked.

After Ida and his fellow designers had turned their nonrecording tape recorder into background music, they didn't entirely ignore it. They had frequent discussions about how to fit the stereo function and the recording mechanism into that overly small space. It was not an easy problem to solve, and because of that it was all the more fascinating and attractive to Ida and his group of inveterate problem solvers. Their focus on the problem of the stereo Pressman blinded them to the solution to a different problem that was in their hands.

"And then one day," said Takichi Tezuka, manager of product planning for the Tape Recorder Division, "into our room came Mr. Ibuka, our honorary chairman. He just popped into the room, saw us listening to this, and thought it was very interesting."

It is the province of honorary chairman everywhere, because their status is almost invariably ceremonial, to potter about the plant looking in on this group and that group, nodding over the latest incomprehensible gadget. To this mundane task, Masaru Ibuka brought an undiminished intelligence and an active imagination. When he happened into the Tape Recorder Division and saw Ida's incomplete tape recorder, he admired the quality of its stereophonic sound. He also remembered an entirely unrelated project going on elsewhere in the building, where an engineer named Yoshiyuki Kamon was working to develop light-weight portable headphones.



“What if you combined them?” asked Ibuka. “At the very least the headphones would use battery power much more efficiently than stereo speakers. Reduce power requirements and you can reduce battery consumption.” But another idea began to form in his mind. If you added the headphones, wouldn’t you dramatically increase the quality of what the listener hears? Could you leave out the recorder entirely and make a successful product that just plays music?

In the world of tape recorders, Ibuka’s thought was heresy. He was mixing up functions. Headphones traditionally were supposed to extend the usefulness of tape recorders, not be essential to their success. This idea was so well established that, if Ibuka had not made an association between a defective tape recorder design and the unfinished headphone design, Walkman may well have remained a little byway in musical history. Design groups within Sony tend to be very close knit and remain focused on short-term task completion. Even when things were less busy, there was no reason for tape recorder people ever to communicate with headphone people. They had nothing to do with each other. Tezuka, the man who later was described as “the secretariat of the Walkman project,” said, “No one dreamed that a headphone would ever come in a package with a tape recorder. We’re not very interested in what they do in the Headphone Division.” But, even without this insularity, there is no assurance that someone else at Sony would have made the connection that Ibuka made. To people today, the relationship between a cassette player and a set of headphones is self-evident. But to people at Sony, and at virtually every consumer electronics company, that connection was invisible in 1978.

Ibuka got a predictable response from the researchers in the electronics lab and from others in the Tape Recorder and Headphone divisions. They were painfully polite but noncommittal. Ibuka might be right that the headphones would improve Pressman’s efficiency, but nobody could guess how much of an improvement that would be. No one wanted to tell Ibuka that the idea of removing the speaker in favour of headphones was crazy. But it was! What if the owner of the device wanted to play back a tape so that more than one person could listen?

When Ibuka ventured further into illogic by suggesting a playback machine with no speaker and no recorder, he lost everybody. Who would want to buy such a thing? Who in Sony Corporation would support even ten minutes of development on such a harebrained scheme?



In a way, they were right and Ibuka was wrong. This was an idea that violated most industries' well-established criteria for judging the natural increments of product development. It only makes sense that a new product prototype should be better than the previous generation of product. Ida's nonrecording prototype seemed worse. The idea had no support from the people who eventually would be responsible for funding its development, carrying out the research, and trying to sell it to a consumer market. The idea should have been killed. The system made sense and the people who worked within the system were making sense. For Honorary Chairman Ibuka, the handwriting was on the wall. Even though he was a revered man at Sony, he had no authority to order such a project undertaken against the wishes of the division's leaders. It was clear that the only way to sell a bad idea to a group of cautious, reasonable businessmen was to find an ally. So, in his enthusiasm, his next step was straight to the office of his partner and friend, Akio Morita.

SOURCE: P. Ranganath Nayak and John M. Ketteringham, *Breakthroughs*. New York: Rawson, 1986.

### **Discussion Questions:**

1. What principles of rational problem solving and creative problem solving were used in this case?
2. How was innovation fostered within Sony by top managers?
3. What roles were played by the various characters in the case that led to the success for the Walkman?
4. If you were a consultant to Sony, what would you advise to help foster this kind of innovation more frequently and more broadly throughout the company?