

Behavioral Economics

Tutorial 11

Electronic Music Equipment Firms:
Case Studies of Marshall Amplification,
Watkins Electronic Music and Fairlight

Marshall Amps versus Watkins: Things to Look For

- Similarities and differences in the histories of Marshall Amplification and Watkins-WEM?
- Focus on how the firms evolved, how they developed their capabilities
- Why is Marshall still thriving and WEM long gone?
- What future do you imagine for Marshall Amplification?

Marshall Amplification

- Like Watkins's WEM, Marshall grew out of retailing
- Initially made copies of US amplifiers, then adapted as customers wanted to go even louder
- Note lack of wholesale distribution capabilities led to exclusive distribution deal with Rose-Morris, that hampered sales growth and even drove Marshall for a while to run a parallel brand ('Park')
- Stuck cautiously to valve technology as transistors started to gain hold – valve distortion sounded nice, unlike that of early transistor amplifiers ('valves'/'tubes' are now used only in guitar amplifiers and microwave ovens!); even today, it still mainly focuses on traditional valve amplifiers, except for its cheaper products not aimed at the professional musician.

Marshall Amplification (2)

- Stayed mainly in premium market but had to deal with resurgence of US premium amps in the 1980s, and with change in music fashions/technology towards keyboard sounds
- In 2007, some Marshall staff jumped ship to form the Blackstar company, which has been more innovative in the same area, and rapidly became very successful, also making much more use of offshore production.
- Threatened by amp ‘modeling’ technologies that copy its classic sounds in more portable, affordable packages – but which don’t offer so much status or provide the backline theatrical prop aspect of a wall of Marshall stacks
- Does offer a tiny 1-watt transistor model, made in Vietnam, while continuing to produce mainly in high wage-cost UK
- Business ethics? Risk of class actions from deafened users?

Charlie Watkins

- Originally an imitator, then an inventor
- Initially was making near-copies of US products in an era of limits to free trade
- Close interactions with customers and component suppliers (loudspeaker makers) alerted him to problems and helped him find solutions
- As guitar amplifiers got louder, singers had trouble being heard, as did drummers, so high-powered PA systems had to be developed, with a clear sound that solid-state transistor technology made possible
- Watkins's early uptake of solid-state technology hampered sales of his guitar amps but gave him a route into PAs

Charlie Watkins (2)

Pioneer of huge PA systems with good on-stage monitoring (side and front) for the performers

- If you are providing a PA system for a huge rock concert, what is the crucial thing it must offer aside from being loud and clear?
- It must be reliable and not suffer a meltdown or go silent due to the failure of a small component of the system
- How did he manage to provide PA systems for enormous rock concert venues?
- A **modular** system of solid-state (transistors, not valves) 100-watt slave amplifiers (so 20 amps needed for a 2000-watt system, and if one fails, you still have 1900 watts)

Charlie Watkins (3)

His 1974 exit from PA equipment

- As solid-state technology got more reliable, rival firms were able to product reliable systems that avoided the costs of using so many modules, leaving Watkins's products behind
- But note also the business **ethics** aspect: Watkins' growing concern with the impact of high sound levels on performers' and concertgoers' hearing – this is very different from fear of a class action by those who had suffered hearing damage
- The ethics issue had surfaced much earlier in relation to the risks of getting electrocuted by a defective amplifier

Charlie Watkins (4)

His exit from guitar making is part of a bigger picture of global economic evolution

- From the early 1970s, cheap UK-made guitars could not compete with rise of Japanese copies of US guitars – which were serious copies, provoking lawsuits, rather than merely being designs rather like the US products
- Japanese guitars then became premium instruments as they got better and had own designs, and as Japanese wages rose
- Next came copies or outsourced lower-tier production of US products in Mexico and Korea in the 1990s, but Korean wages rose, so Korean factories exited the cheaper end of the market
- Next came Indonesian-sourced guitars for established brand, including Japanese ones
- Now, we have Chinese factories making for US and Japanese brands and under brands from defunct European firms whose designs they have bought...
- ... and 'no name' Chinese copies
- Similar patterns are evident with other products (cars, computers, phones)

Fairlight: Background and Task

- Computerized musical instruments, for creating new waveforms and digitally sampling sounds
- Previous analogue sampling technology ‘the Mellotron’ (late 60s, 70s) used recordings on strips of magnetic tape, one tape for each note (could sustain a note for about 11 seconds), notoriously unreliable due to moving parts and tape stretching/breakages
- Fairlight’s product revolutionized the music industry, leading to modern digital synthesizer keyboards and ‘modelling’ amplifiers and guitars that can replicate the sounds of many different classic products
- **So, what happened to the firm? Why did it not achieve sustained market success of the kind achieved by Yamaha, Roland, Casio, etc.?**

Fairlight (2)

- Fairlight only catered to the elite end of the market, where superstars and recording studios could pay premium prices for cutting-edge technology
- Once the elite market was saturated, sales dried up
- Very different capabilities were required to produce and market the product for a mass market (where a few hundred dollars will buy a digital keyboard or an app, such as Apple's Logic X, with 'soft synth' sampled sounds – even including a digital sample of Mellotron sounds)
- Founders go in two directions: into video studio editing equipment (related capabilities, elite market) and (with Peter Vogel Instruments) offering a modernized, even more capable elite-market Fairlight, that can recreate the original's sounds in a way that is impossible with a modern digital sampling keyboard that doesn't have the early Fairlight's imperfections.
- Note how the costs of digital keyboard instruments collapsed in just the way that computers, phones, etc. have.

Fairlight (3)

- Note the similarity with the the Watkin's Copycat Tape Echo (which had similar issues to a Mellotron) it was the impossibility of replicating its imperfect but appealing sound that enable Fairlight to continue to enjoy limited sales in the midst of more sophisticated digital alternatives – for those who want that 'retro' sound.
- Note (as with Apple) the importance of keeping original creative teams together
- Failure to protect intellectual property?