



Aiptek Portfolio Plan

*Moving Beyond Graphic Tablets
to Grow Sales of Digital Lifestyle Accessories
for the Mass Market*

Aiptek Overview

Aiptek is an agile “follower” in the fast-paced consumer electronics market.

Moving fast leaves Aiptek lacking in quality. Design capabilities may be insufficient to keep following as consumer electronics products become more elaborate.

As it approaches its tenth anniversary, Aiptek is considering how to develop its product portfolio in the midst of an ever-changing consumer electronics market. Its fundamental business strategy as a market follower is sound and profitable, but could be built upon to strengthen and broaden its position as a low-cost, mass-market provider of a digital lifestyle accessories.

Company Background

Established in 1997, Aiptek grew rapidly from manufacturing graphic digitizing tablets to selling a wide range of digital imaging hardware and peripherals. Aiptek International is based in Taiwan’s Hsinchu Industrial Park, the “Silicon Valley” of Taiwan); this analysis will be based on the products sold through the U.S. subsidiary, with its headquarters in Irvine, Calif. Additional subsidiaries are in Germany and China. Although the company was launched with the HyperPen Tablet series, it quickly moved into other areas of low-end consumer electronics, with a widely sold “PenCam” in 2000 (sold broadly on the Home Shopping Network TV channel), and a series of digital video cameras launched in 2002. Digital video cameras now make up 85% of production, and approximately 80% of U.S. sales. Aiptek also manufactures products as an original equipment manufacturer (OEM) for some of the world’s best-known electronics firms.

Company Focus

Aiptek has chosen to concentrate on products based on handwriting, digital video, wireless communication and opto-electronic technologies. In practice, this has meant a range of digital lifestyle accessories that work with a personal computer and/or a home entertainment system. Taking their inspiration from successful products already in the marketplace, Aiptek’s offerings are positioned at an affordable price (\$100 to \$200) and are sold through mass retailers, making them typically an “impulse splurge” purchase for an average consumer.

Strategic Position

Strengths. Aiptek manufactures its own products, and can keep tight controls over costs, resulting in competitive pricing within product categories. It can also move quickly to release new products as pricing and production permit feature upgrades.

Weaknesses. Quality control. Online user forums are rife with complaints about Aiptek products’ initial quality, and difficulty of repair and technical service. Aiptek products, though priced competitively, do not offer the same set of features as the segment leaders. Brand recognition is low.

Opportunities. Constant development of new products at the upper end of the consumer electronics (CE) spectrum builds overwhelming desire in the mass market for similar products at a lower price point; Aiptek can deliver in quantity—and at great profit, since it has both second-mover advantage and a more agile production process.

Threats. Without skillful in-house design, user interface, or marketing capabilities, Aiptek is vulnerable to the other low-end producers who can also imitate high-end products. As new CE devices become more sophisticated, Aiptek risks falling behind.

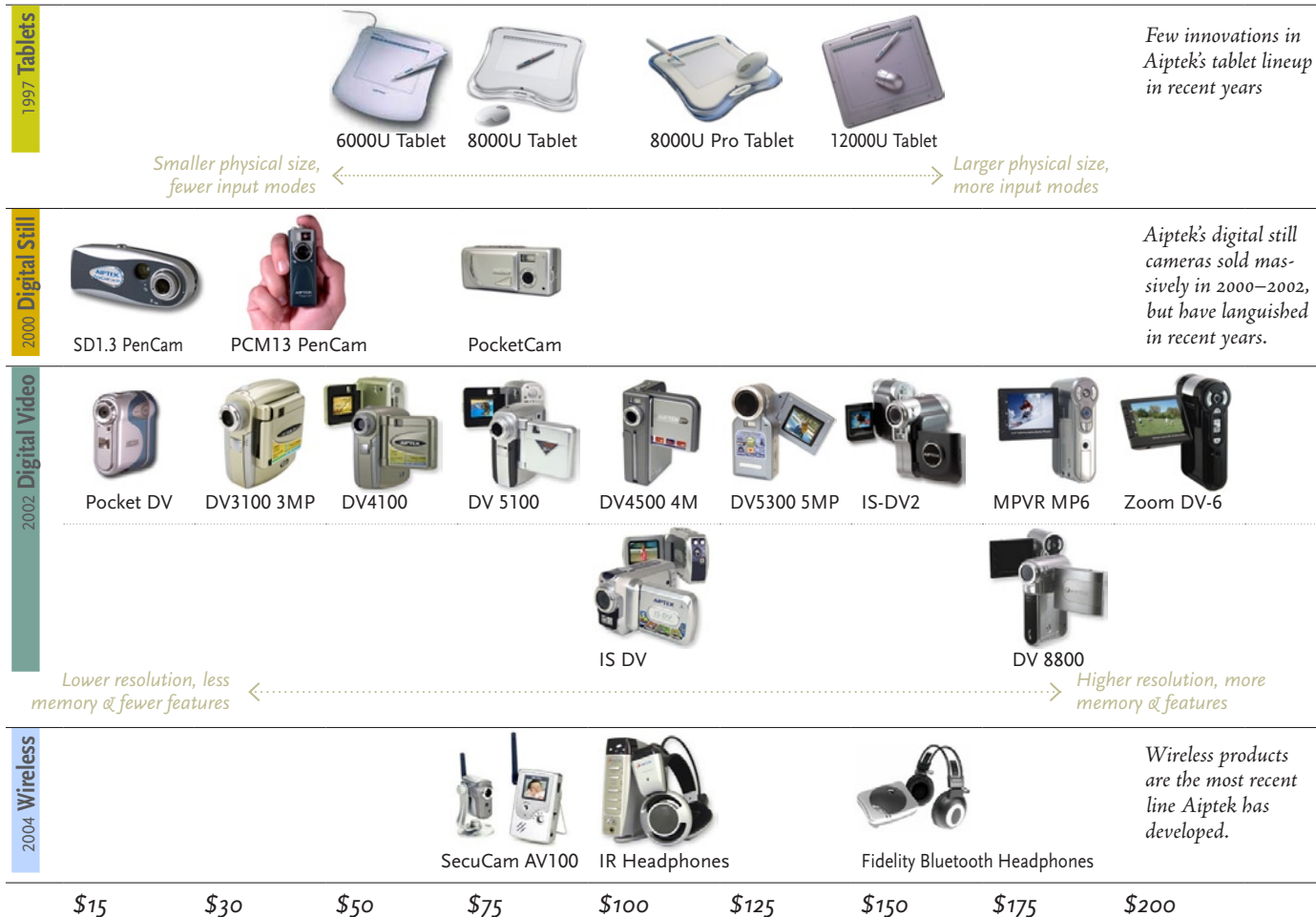
Aiptek International Website, at <http://www.aiptek.com.tw/>

Aiptek USA Website, at <http://www.aiptek.com/>

Burns, S. (2006) Cheap Shots. Taiwan Review, February 1, 2006, online at <http://taiwanreview.nat.gov.tw/ct.asp?xItem=1179&CtNode=128>

Product Portfolio

Aiptek USA Product Lines are shown below. Note that rapid change in some product lines leaves numerous discontinued products still available through various outlets—including Aiptek.com’s own websites; Aiptek also sells OEM products it doesn’t make itself. Its overseas subsidiaries may have different product mixes.



Aiptek has found a sweet spot: products that seem like they should cost more, available through mass retailers at prices that are hard to pass up.

Aiptek is juggling a lot of different models of Digital Video cameras, chiefly because feature and performance upgrades take place so fast. This complexity is less apparent on the shelves of a particular retailers—most consumers see only four or five models.

Neither the cameras nor other lines have garnered rave reviews or critical awards, but most purchasers are not domain experts and have only minor complaints—though few express much admiration.

Sales Channels

In-Store



Various Discounters (Big Lots)

Online



Aiptek USA Website, at <http://www.aiptek.com/>

Conversation with Douglas, customer service representative at Aiptek USA, November 16, 2006.

Customer Segments



Budding Artist



Media Amateur



Office Gadgeteer



Regular Folks



Comfortable Dabbler

DEMOGRAPHIC					
Age/Gender	15–25, mostly M	20–50, mostly M	30–50, mostly M	25–45, M/F	40–70, M/F
Occupation	Student	Varies	Business	Blue collar; service industry	Business; retired
Education	in high school or college	high school – college	high school – college	high school – community college	high school – college – professional degree
Income	\$0 to \$5,000	\$20,000 – \$70,000	\$30,000 – \$70,000	\$20,000 – \$50,000	\$70,000 – \$100,000
PSYCHOGRAPHIC					
Social Class	working class – middle class	upper lowers – upper middles	middle class	upper lowers – middle class	working class – lower uppers
Personality	Gregarious	Curious	Curious	Content	Impulsive
Sample PRIZM segment	Children of #28, Big City Blend: Middle-Income Immigrant Families	#38, Middle America: Midscale Families in Midsize Towns	Business buyer: Price-oriented novice	#25, Mobility Blues: Young Blue-Collar/Service Familie	#13, Gray Power: Affluent Retirees in Sunbelt Cities
BEHAVIORAL					
Occasion & Location of Purchase	Intentional purchase, online	Intentional or impulse purchase, online at Target or Best Buy	Impulse or intentional purchase, Buy.com or Office Depot	Impulse or intentional purchase, Walgreens, Target, Wal-Mart	Impulse purchase, Target
Benefits Sought	Learn design/media	Enter or develop in hobby	Make work easier by trying out new technology on old process	Capture family memories, enjoy a small luxury, give as gift	Low-cost entry into a new kind of product; experimentation
Usage Status	Novice	Novice, regular user	Novice, regular user	Novice, regular user, non-user	Novice
Usage Rate	Light to Medium user	Light to Medium user	Light user	Light to Medium user	Light user
Loyalty to Brand	Slight	Slight	None	Moderate	None
Attitude to Product	Positive	Positive	Indifferent, negative	Enthusiastic	Indifferent
PRODUCT MAPPING (with market size and growth trend)					
Tablet	■ ↘	■ ↘	■ ↓	□ ↓	□ ↓
Still Camera	□ ↓	■ ↓	□ ↓	■ ↓	□ ↓
Digital Video	■ ↑	■ ↗	■ ↗	■ ↑	■ ↗
Wireless	□ ↗	■ ↗	□ ↗	□ ↗	■ ↗

Aiptek wins in affordable digital video for “Regular Folks.”

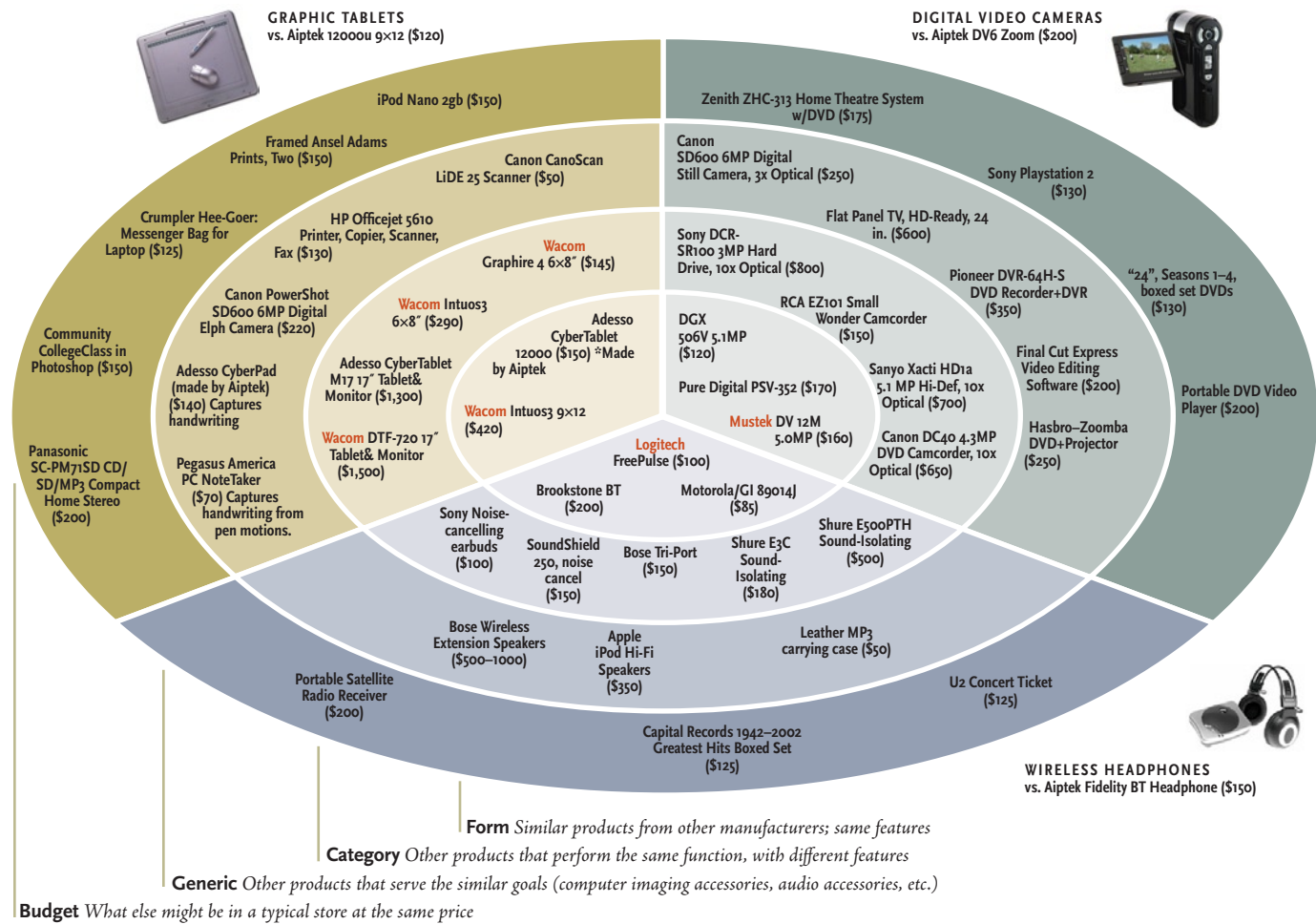
Customer segmentation based on which magazines review Aiptek products, and the customer reviews posted on Amazon.com *et al.*

Emerging Trends

Digital photography hobbyists are moving into video; still imaging technology is becoming ubiquitous. Wireless products are poised for explosion; wireless iPod listening is the “Holy Grail” of consumer electronics. But the underlying driver is Aiptek’s most direct pathway to continued profits: consumer electronics products that were considered “luxuries” just a year or two ago becoming the \$150 impulse buy for the mass market Wal-Mart shopper.

Competitors

Aiptek competitors in three product lines are plotted in the following diagram; digital still cameras are not currently competitive. Critical competitors in **red**.



Competitors to Watch

Aiptek competes mostly on price, and not on brand reputation. It should be concerned, however, about companies like **Mustek**, also based in Taiwan, and skilled at low-end production. In the realm of wireless headphones, **Logitech** has some well-designed offerings, sold under a trusted brand name; Aiptek can compete if it pushes prices lower.

Aiptek should exit the graphic tablet category.

Informal survey of current and potential graphic tablet purchasers, conducted November 10 to December 1, 2006 (N = 15).

Survey by BCN Research Institute in 2005, referenced on "About Wacom" via <http://www.wacom.com/>.

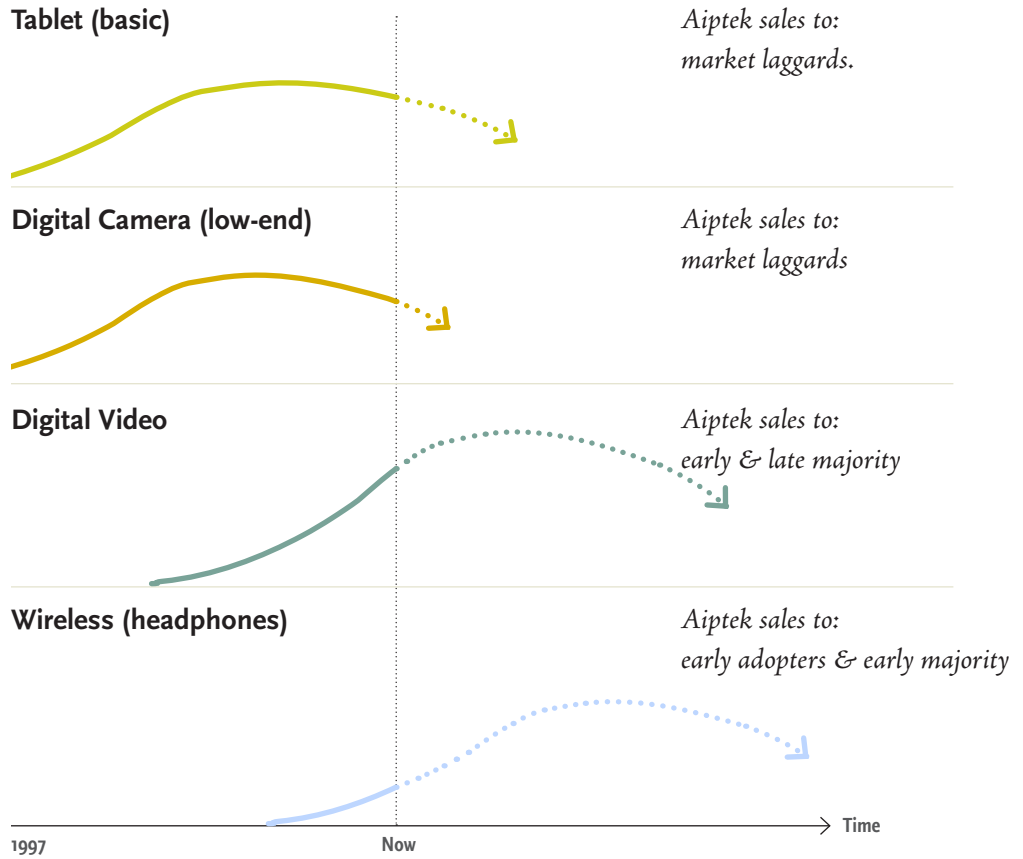
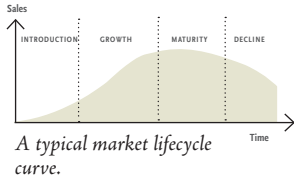
CalComp Technology, Inc. Quarterly Report (10-Q) Exhibit 10.35 at <http://sec.edgar-online.com/1999/05/14/07/0001017062-99-000873/Section8.asp>

Wacom and the Graphic Tablet Category

Wacom is the undisputed leader in the graphic tablet market. An informal survey revealed both amateurs and professionals vastly prefer Wacom—and Wacom's own market research indicates it owns a staggering 95.8% of the tablet market. Wacom technology is used by all major TabletPC manufacturers. Their current line of tablets includes incremental innovations added over the last 17 years; Wacom owns most of the patents on digitizing tablets (the vast majority of its 335 U.S. patents overall), and has used them to drive other manufacturers out of business. Aiptek has just 14 patents on tablets. The U.S. market for Aiptek's tablets is small and dwindling fast.

Strategic Situation

Aiptek has found a very profitable position in mature and later markets, but is moving upstream slightly as it introduces new market categories:



As a market follower, Aiptek's profits depend on cheaply imitating the products invented by category leaders.

Strategic Position

Aiptek has been a **market follower**, with great success. Their manufacturing capabilities and efficiencies have helped them be among the lowest-cost producers in their product areas. By keeping top product prices in the \$75 to \$200 range, they become an “impulse splurge” item for the mainstream consumer. A person walking through Walgreens can see a \$100 digital video camera and make an on-the-spot purchase decision.

Aiptek has not developed design, user interface, platform creation, or software capabilities that would enable it successfully to create and sell innovative products, but it earns a healthy profit in its follower position. This position, however, is vulnerable to undercutting by other companies that could potentially produce the same goods even cheaper. Aiptek's quality and level of customer delight is low—customers buy largely on price.

Strategic Goal

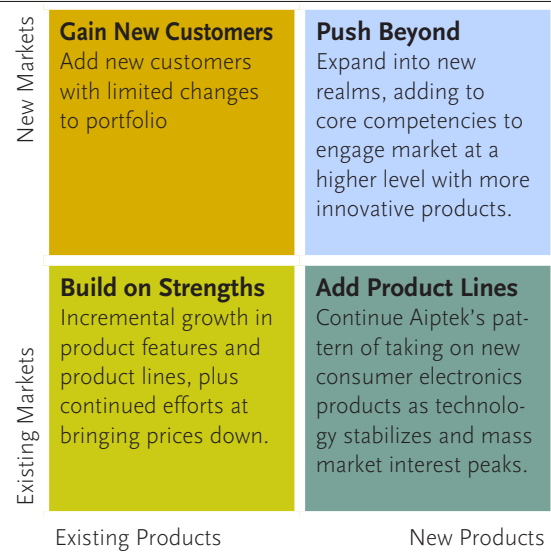
Under the current strategy, Aiptek's most important task is to maintain low-price leadership, even as it adds features and performance to stay competitive with an evolving market. Focusing development on its **digital video** and **wireless** lines will be essential; phasing out tablets and cameras will help. At the same time, Aiptek should explore pursue partnerships, acquisitions, and human resources moves as ways to build **design capabilities**, so that more advanced products can be developed in coming years. This will distinguish Aiptek from other low-end manufacturers, and provide customers with more complete value than lowprices alone.

Aiptek should maintain its follower strategy, and position itself to continuing entering markets earlier in the lifecycle.

Portfolio Options

Potential portfolio directions have been developed in each of the four quadrants shown at right.

It is important to note that we assume Aiptek will continue to explore product imitation opportunities as leaders like Samsung, Canon, and others launch innovations in consumer electronics. A successful low-cost imitation will still be quite profitable.



Better Optics. Aiptek DV cameras use digital zoom only, and have only adequate video quality. Upper-tier camcorders have 10x digital zoom. By adding better lenses, Aiptek could vault out of its so-so quality reputation.



Noise-cancelling Wireless Headphones are becoming a must-have audio accessory. Aiptek could vault ahead by providing noise-cancelling features in their wireless offerings, at a lower price point.



Lite Wireless Headphones. Whether a particular iPod/MP3 player is already Bluetooth-capable or not, eliminating wires is a highly desired feature.



Kid Tablets. An unexploited niche is graphic tablets for kids, sold in a package with drawing software.



Low-end GPS. Commodity GPS location devices (and/or adding GPS awareness to other devices as an OEM component) could mainstream a currently high-end product. The new line would not feature mapping features at first.



Hi-Def DV Camcorders. With Hi-Def video poised for mass-market breakthrough in the next three years (and already dominating the upper-mid- to high-end), increasing the resolution of Aiptek's DV product line would broaden appeal.



Video Editing Platform. With the spread of video cameras comes more consumer video content. Build a \$200 platform for editing video streams—without needing a computer.



WiMax Octavo Pad. A stretch product: build a cheap personal communication device, the size of a slender hardback novel, using open source web browser and text messaging and chat software, based on a thin client OS driven by forthcoming free city-wide Wi-Max access.

Option Evaluation

Portfolio direction options have been evaluated against each other on a series of key success factors, with the top two ranked in each factor accounted a “top hit.”

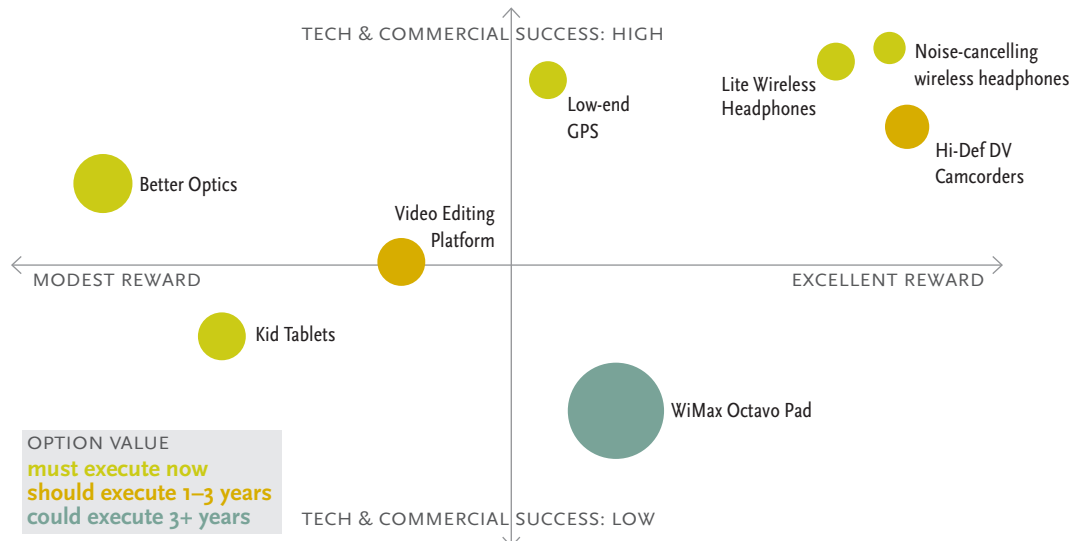
Commercial Success Scorecard *Relative rankings from 1 to 8*

CONCEPT	STRATEGIC FIT	CUSTOMER VALUE	MARKET POTENTIAL	COMPETITIVE ADVANTAGE	ECV	# TOP HITS
Better Optics	6	8	6	7	8	0
Noise-cancelling Headphones	1	1	2	5	4	3
Lite Wireless Headphones	3	2	1	4	1	3
Kid Tablets	7	6	8	8	6	0
Low-end GPS	4	5	4	3	5	0
Hi-Def DV Camcorders	2	4	3	2	2	3
Video Editing Platform	5	7	7	6	7	0
WiMax Octavo Pad	8	3	5	1	3	1

Feasibility Scorecard *Relative rankings from 1 to 8*

CONCEPT	EXISTING MFG. FIT	EXISTING TECHNICAL ABILITY	COST OF NEW COMPETENCIES	NEW COMPETENCIES NEEDED; PLAN TO ACQUIRE THEM
Better Optics	8	7	6	Lens grinding could be outsourced, but prices will never beat experienced camera makers
Noise-cancelling Headphones	2	2	1	Minor technical information needed; 1 new hire sufficient
Lite Wireless Headphones	3	3	2	Manufacturing optimization & price control; in-house knowledge sufficient.
Kid Tablets	1	1	5	Product is fine; marketing, UI, and software expertise would be needed. Could be outsourced.
Low-end GPS	6	5	4	Minor GPS electronics knowledge needed. Some UI experience will be required—more if navigation features desired.
Hi-Def DV Camcorders	5	4	3	Some additional technical knowledge needed.
Video Editing Platform	4	6	7	UI & software issues a challenge; could be outsourced, but will be the bulk of value delivered in the product.
WiMax Octavo Pad	7	8	8	Significant UI & software issues. Using networks other than free city-based Wi-Max may require partnerships.

Risk vs. Reward Potential, with Option Value *Size: relative cost*



Aiptek's "quick hits" include product line enhancements.

In the long term, Aiptek should explore an innovation of its own.

Recommendations

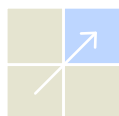
We propose two options, one or both of which Aiptek could pursue. Both grow market opportunities in the future, and build on Aiptek's low-cost leadership strategy.



Option One Increased Features / Continued Low-Price Leadership

Add Wireless Portable Headphones, Noise-Cancelling Headphones, and Hi-Def Video Cameras; Launch GPS Line. Lower risk.

Focusing developing on keeping existing lines competitive will help maintain Aiptek's visibility through mass retail channels, as an increasingly attractive option for "Regular Folks." Adding an affordable line of GPS devices will continue that trend; we also assume Aiptek will maintain its rapid imitation of other consumer electronics devices as they emerge in the market at a higher price point.



Option Two Move Into Mass-Market, Network-Enabled Communication

Design and launch a handheld communication device, suitable for Web-surfing, watching viral video, and exchanging email and text messages: a laptop-lite, or Blackberry-plus, for just \$200, powered by free city-wide WiMax. Increased Risk.

If Aiptek adds design and software capabilities, it could build a broadly appealing, yet low-cost device that could be sold widely in cities that offer free network access. Aiptek's edge over competitors would be its ability to produce in volume at low cost.

Capabilities to Add

Product Design & User Interface Design. Aiptek needs to be able to create more sophisticated interactions that are easy for customers to use.

Software Partnerships. Either in-house or outsourced, Aiptek will need to draw on expertise with open-source software to build out a cheap personal communication device.

Branding & Marketing. Aiptek hasn't yet had to develop a widely-known and -trusted consumer brand in the U.S., but that will become more important for the Octavo product.

Network Partnerships. Since the Octavo device depends entirely on its network connection, Aiptek should explore a more formal relationship with network service providers, to ensure proper functionality.

Roadmap

