



Entry Strategy for Tablets into Education Market

Confidential



Robert Hale & Associates

BUILDING BRAND AND MARKET SHARE

Methodology

- Secondary Research and interviews with trade publications (to identify key issues)
- Surveys of 258 Tablet/Phablet users who were teachers, principals, district officials or IT:
 - EMEA: France, Germany, Italy, Spain and UK
 - North America: Canada
 - APAC: Australia, Indonesia, Malaysia, Philippines and Singapore
 - Latin America: Argentina, Brazil and Mexico
- In-depth interviews with experts and ISVs (10)
- Competitors: Acer, MonkeyTab, Samsung

Executive Summary

Overview

- The addressable market for Education is 11.5 million Tablets globally per year (Phablets are a very small market in Education). This is only for Tablets used in an integrated setting (e.g. classroom), as individual purchases are much greater. There are 3 major sub markets where the organization purchases:
 - Colleges for Campus: 1.1 million (college students will typically purchase, but not always). Issues are for compliance (e.g. HIPAA) and the need for very advanced processing software in math and science.
 - K-12: 6.1 million units with 80% for middle and high school (most of the current roll outs). Note: in US and Europe all rollouts have been associated with WiFi. For less than 5th graders there are legal issues as well as different hardware platforms required (smaller and ruggedized)
 - Online: 1.1 million units, however this seems to be a very cost sensitive market.

Overview (Cont'd)

- Drivers of Adoption: CONSUMPTION is the major driver of adoption for Tablets as text books are expensive (estimated cost of \$500 to \$600 per year to provide) and the health concerns of kids carrying heavy books to school. (Note: notebooks are more about creation of content)
- Key Trends: Text books will become more of an interactive solution with videos and games inserted to help improve learning (studies have shown learning significantly increases). Thus Tablet needs computing power, but not premium processing or storage. Traditional text book providers are creating relationships with these interactive providers.
- Key Advantage of Android: Multiple user accounts (one for parent and one for teacher). Apple does not have this capability. Other important feature is that Android is more customizable than Apple, an important feature for kids.

Overview – Market Entry

- To be successful in this market, there are 3 key component needs:
 - Appropriate Hardware
 - Content (supporting, developing and integrating)
 - Distribution (since many of decisions are at school district, one needs a channel and credibility)
- We believe that the proper hardware can be configured (see next slide), but that content and distribution should be handled through key partner relationships. If needed, partners for content (interactive learning platforms) and for distribution can be separately identified.
- Opportunities in EMEA where Apple is strong but not dominant (especially in France and Germany where specified at National level).

Feature Analysis & Recommendation

	LearnPad	Unibook	Monkey Tab	Amplify	Recommend
Ports	USB, SD, HDMI	SD, HDMI	USB	Micro HDMI, Micro USB	HDMI, USB
GB Ram	1	1	1	1	1
GB Storage	16	16	8	16	16
Front and Rear Cameras	Y	Y	Y (1.3 and 2 MP)	Y (1.3 and 5 MP)	Y (1 and 3 MP)
GPS	Y	N	N	N	Y
CPU	1.5 Ghz	1.0 Ghz	1.6 Ghz	2.0 Ghz	>1.0 Ghz
Multi Touch Capacitive Screen	Y	Y	Y	Y (IPS Touch)	Y
WiFi	Y	Y	Y	Y	Y
Price	\$350	\$289	\$379	\$199 per year (for 3 years)	\$500 (for 2-3 years)
Screen	9.7"	9.7"	10"	10.1"	10.5" to 11"
Rugged	N	Aluminum	Optional	Y (Rubber Bumpers, Spill-Resistant Screen Protector)	Screen Protector, Optional Rubber Bumpers
Accessories Included	N	Pen Stylus & Headphone	Case, Headphones & Stylus	Tethered Stylus, Protective Case, Headphones & Keyboard	Tethered Stylus & Headphones

Other Recommendations: less than 2 pounds, rugged was important), GPS Important for teachers, period of time (to be premium product). Dell Price whistles (Apple volume pricing is about \$500 per Tablet).



Robert Hale & Associates

BUILDING BRAND AND MARKET SHARE

optional ruggedization (note: no one indicated Keyboard and Case should be thrown in if it is over is \$865 full configured but has too many bells and

Other Accessories or Needs

- Recharging Cart in class room (similar to what Apple provides)
- Insurance (Apple charges around \$50)
- 8+ hours (continuous use in classroom)
- Leasing has become an important issue for schools who typically need bond measures for capital purchases (“Given the limitations in increasing the tax levy by a school districts lease purchase financing has become an even more important tool to today’s business administrator”). HP has the financial wherewithal to offer leasing, yet note that revenues will be accrued differently.

Suggestions

- Tether stylus to case (with place to hold in case) instead of on the unit (if it is more cost effective).
- Different colored cases (as students will frequently go online to buy their own case color and customize with school logo for an additional charge).

Key Market Drivers

- Adoption is being driven by the cost as compared to traditional textbooks, health concerns of children (carrying large text books) and studies have showed that children learn better with Tablets (especially with integrated videos, games, etc in an e-text).
- Move away from traditional textbooks to interactive learning materials (which take pieces of various sources and integrate video, games and other learning enhancing experiences).
- Apple has significant installation issues but students download materials they are not suppose to (not adequately shut down) and lack of enforceable policies by teacher (who controls content but also needs to remotely ensure everything is properly loaded) is a major issue.

Advantages of Android over Apple

1. Android is much easier to customize (e.g. change the style of the keyboard). High school students like to individualize (as they are looking for their own self identify).
2. Android allows for multiple user accounts (may be advantage... see later slides).
3. Teacher can create mass emails with Android, but not Apple (a glaring defect in Apple, although a software packet can be purchased and configured). This will cause the teacher to take much time to compose emails (e.g. general notices, homework assignment changes) as well as to parents. Although many schools have a portal where work can be found, nonetheless there are times when emails to students (especially for extra-curricular activities where typically no portal exist) or last minute critical updates by the teacher.

Key Issues with Apple Historical Rollouts

- Configuration Management: the IT leaders we spoke to said that configuring their fleets of iPads and then purchasing and updating apps across the devices is by far their biggest challenge--and that Apple Configurator and Profile Manager are not adequate tools for large-scale deployments. Being able to easily manage these tasks is the key reason the directors mention for turning to MDM solutions and one of the key features they evaluate when considering an MDM.
 - IOS7: Now makes configuration easier with supervised mode and enhanced management systems. However, it is unclear whether that solves all these issues.
- Batch Installer: We saw one that would push apps out, but still required some activity at the recipient end to finish the install. We can't ask a first-grader to do that," says one IT person responsible for installation. IT team ends up doing those updates manually. "It has been a real pain for us. We have chosen to limit the number of updates we do to three times a year, instead of when the apps' developers push out updates."
 - This issue seems to be solved with IOS7.
- Security and Content Control: Can't download unauthorized videos and games with security settings for teachers and parents (depending on whether used at home or at school).
 - This is still an issue with IOS7 when not in institutional mode (because other than that restrictions are set by only the user of the device).
 - Android can set up multiple user accounts (a clear advantage to set up one for teachers and parents).

Ecosystem

The ecosystem is made up of hardware (tablets), content providers (key is integrated, interactive e-texts and Distribution).

Strategic Focus by Major Players (Technology and Online)

	Device Manufacturer	Content Provider	Distribution
Amazon	Medium	Low	High
Apple	High	Medium	Medium
Barnes and Noble	Medium	Medium	High
Blackboard	Low	Medium High	Medium High
Google	Medium	Medium High	Medium
Microsoft	Medium	High	Low
Pearson	Low	High	High
Sony	High	Medium High	Medium

Use Cases for K-12 (Only Multiple Mentions)



Robert Hale & Associates

BUILDING BRAND AND MARKET SHARE

Education

Use Case	Description	Usage
Access E-mails	<ul style="list-style-type: none"> •Use to communicate with parents in case of emergency. •Use for student communication, getting emails from students and sending emails to them about classes. 	High
Attendance	Teachers use it for logging into our school's attendance and marking site. Pro Note allows one to keep track of student's attendance.	Medium
Download educational resources	<ul style="list-style-type: none"> •Use the tablet to find educational games and programs for the students in the classroom. •Use the tablet to download worksheets for students to work on in the classroom (high school). •Use the tablet to access dictionary in the classroom. Download the Oxford English Dictionary, Longman Dictionary of Contemporary English (LDOCE), w3school application for learning purposes and other eBooks, such as catholic bible diary to use when teaching students. 	High
Grading and Reviewing Work	<ul style="list-style-type: none"> •Use the tablet for hands-on editing and mark-up when reviewing student's writing. •Use the tablet to type up research summaries. 	High
Lesson Plans and Lectures	<ul style="list-style-type: none"> •Use as an aid in Art & Designs lessons/lectures to make learning more interactive for students. • Use tablet to work with special needs students aged 3-5 on basic academic concepts (letters, numbers, colors, shapes) as well as for teaching them language acquisition. • Use the tablet to create lesson plans, test and quizzes for students. 	Very High

Education

Use Case	Description	Usage
Play video/audio	<ul style="list-style-type: none">•Use a tablet to play video and audio files usually from YouTube in the classroom so that children can follow along and repeat or sing what they see and learn the English language.	Moderate
Presentations in classroom	<ul style="list-style-type: none">•Use the tablet to present graphs and organization structures to students in the classroom.•Use the tablet for video presentation of different chemistry experiments in the classroom.•Use the tablet to show students interactive examples and slideshows on subjects they are struggling with.	Moderate
Smartboard	<ul style="list-style-type: none">•Use to interact with Smartboards in the classroom.	Low
Taking Notes	<ul style="list-style-type: none">•Use for students to take notes.	High