The Africa Market for Self-paced eLearning Products and Services: 2011-2016 Forecast and Analysis

Massive Content Digitization Efforts and Boom in Online Higher Education Driving Adoption of Self-paced eLearning

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This is a Regional Report. Ambient Insight has five types of syndicated market research reports:

- **Premium Reports**: A Premium report includes a buyer analysis, with five-year forecasts and profiles for the top buying countries in each region, a supply-side analysis, and an index of suppliers - These reports are designed for suppliers that need an in-depth view of the buying behaviors in each of the top buying countries in each region of the globe.

- **Standard Reports**: A Standard report includes a brief buyer analysis and a regional demand-side forecast analysis across seven regions. A Standard report does not include country profiles, supply-side analyses, or an index of suppliers - These reports are designed for suppliers that understand the international market dynamics and "just want the numbers."

- **Regional Reports**: A Regional report includes regional demand-side forecast analysis with five-year forecasts and profiles for the top buying countries in each region - These reports are designed for suppliers that are competing (or plan to compete) in specific regions.

- **Targeted Reports**: A Targeted Report may analyze buying behavior and trends in a specific buyer segment; may isolate revenue opportunities, forecast revenues, and trends for a particular product type; or may pinpoint revenues and trends for a specific sub-category of content, service, or technology - These reports are designed for suppliers that are targeting specific buyers or specializing in a particular product sub-type.

- **Revenue Snapshots** are 2-3 page reports that include a single revenue-forecast table and a brief description of that table from a current market report. Please review the free Executive Overview for each report for a list of available tables. Contact us at info@ambientinsight.com to request a specific Revenue Snapshot.
Abstract

The growth rate for Self-paced eLearning in Africa is 15.2%. Revenues reached $250.9 million in 2011 and will more than double to $512.7 million by 2016. Eleven of the sixteen countries analyzed in this region have growth rates above the 15.2% aggregate rate.

This is a regional report designed for suppliers that are competing (or plan to compete) in Africa and includes revenue forecasts for sixteen countries: Algeria, Angola, Ethiopia, Ghana, Kenya, Morocco, Mozambique, Nigeria, Rwanda, Senegal, South Africa, Tanzania, Tunisia, Uganda, Zambia, and Zimbabwe.

Senegal has the highest growth rate in Africa at 30.4%, followed by Zambia, Zimbabwe, and Kenya at 27.9%, 25.1% and 24.9%, respectively. Revenues are growing very fast in many African countries. By 2016, revenues will double in seven countries and will more than triple in four countries.

As of 2011, the revenues are concentrated in four of the countries analyzed in this report. This will change over the forecast period as eLearning adoption gains traction across the region. For example, by 2016, Angola will displace Tunisia as the fourth-largest buying country in the region. Nigeria will be the second-largest buying country after South Africa by 2016.

Africa is the most dynamic eLearning market on the planet. In the last two years, dozens of countries in Africa have embarked on new government-backed initiatives to integrate learning technology into education and training.

The major finding in this report is that the supply and demand metrics for eLearning in Africa are evolving so fast that the market bears little resemblance to the competitive landscape as recently as two years ago. Essentially, any commercial market research or trend analysis on the adoption of eLearning in Africa older than two years is effectively obsolete.

Ambient Insight has revised our forecasts significantly upward for most African countries. In our syndicated reports, we only include revenue forecasts for countries with over $1 million in revenue. We have added five more countries to our Africa analysis in just the last year. There are three major catalysts in Africa:

- The wide scale digitization of academic content in every country analyzed in this report
- The explosion of online enrollments in higher education institutions
- And the sharp spike in the adoption of eLearning in the corporate segments in the booming economies.
This in turn is driving the emergence of a new supply-side ecosystem with new suppliers coming to market at an accelerated rate. Over 40% of the domestic eLearning suppliers cited in this report launched after 2009.

With very few exceptions, most of the countries in the region now have official government policies on the use of technology in education. There are now dozens of new national digitization projects funded directly by the central governments with and without the aid of external donors.

For example, the Kenyan government has embarked on an ambitious digitization plan for the nation's academic system. According to a press release by Plato (a supplier in East Africa), "The decision by the government to create and deploy digital learning nationally will result in massive demand for educational content, computer hardware, software, internet bandwidth, consultancy services, and an array of communication solutions."

The international NGOs continue to support the adoption of learning technology across the region with increased funding and direct involvement in deploying learning technology in the schools.

For example, in January 2012, the African Development Bank Group (AfDB) approved a $15.6 million grant, "to help strengthen the capacity of the African Virtual University (AVU)." As of 2012, AVU had 31 active higher education partners across Africa. AVU helps these partners build eLearning centers and train content developers. They intend to use the new funds to build out 12 new eLearning centers.

The boom in online higher education enrollments in Africa is nothing short of astonishing. Many countries are adopting eLearning as a way to meet the strong demand for higher education – a demand they simply cannot meet with traditional campuses and programs.

The University of South Africa (UNISA) UNISA is a pan-regional virtual university with over 310,000 students (3,500 come from outside Africa.) Over half of all UNISA students take at least one online course a year. New virtual universities are springing up everywhere in Africa.

- The first virtual university in Senegal, Campus Numerique Francophone de Dakar, was launched in 2009 by the pan-regional Agence universitaire de la Francophonie (AUF).

- In May 2011, the Indira Gandhi National Open University (IGNOU) announced the launch of a pan-African virtual university branch of IGNOU with headquarters in Ethiopia. IGNOU has partnerships with institutions in 20 African countries.

- Innorero University, a private institution in Kenya, launched their Virtual Campus in January 2012.

- The Virtual University of Uganda (VUU) claims to be the first online university in East Africa and started taking students in January 2012.

For more information about this research, email: info@ambientinsight.com
In June 2012, the Kenyan government funded the development of a new online education institution called the Open University of Kenya in an effort to meet the strong demand for higher education in the country.

The African University College of Communications (AUCC) and the India-based AVAGMHAH Online School of Bharathidasan University announced in October 2012 that they would launch a virtual university in Ghana in January 2013.

Finding the buyer in many countries in Africa can be daunting as many ecosystems are made up of government agencies, universities, private schools, domestic companies, international companies, pan-African consortia (like the African Virtual University), NGOs, and foreign government funding agencies.

Often the foreign entities operating in these ecosystems are the actual buyers of eLearning products and services. They then in turn donate or sell those products at highly subsidized prices on the continent. This report describes those ecosystems (and the real buyers) in each of the sixteen countries analyzed in this report.

For example, in July 2012, Microsoft and the British Council announced that they had set up 80 "Digital Hubs" across six African countries and were on target to open 90 more by the end of 2012 in Kenya, Uganda, Tanzania, Ethiopia, Ghana and Nigeria. Each Digital Hub has 20 Internet-connected terminals and a full catalog of educational content including, "e-books, English Language Training products & Services, and Schools Online – a central portal for finding and working with partner schools in other countries."

The sharp uptake of eLearning in the corporate segments in Africa are heavily concentrated in specific industries, particularly energy, finance, technology, and telecommunications. Corporations are the top buyers in South Africa and Nigeria. The highest corporate growth rates are found in the countries with robust (if not booming) economies.

Some deployments are pan-regional. In July 2012, the telecom Bharti Airtel announced a deal with the Learning Resources Management Group to develop a catalog of over 500 online courses for Bharti Airtel's employees across 17 African countries.

A major obstacle in many African countries is the lack of electricity in the rural schools. However, companies such as Samsung and Intel are working with government agencies to deploy solar-powered learning technology to these schools.

In October 2011, Samsung launched their Solar Powered Internet School in Africa, which is a fully equipped computer lab for high school students housed in a modified shipping container powered by solar panels. The labs are moved to different rural schools in rotation.
Digital Links, a UK-based NGO, provides laptops preloaded with education content bundled with solar technology. As of December 2012, they had distributed almost 1,000 of the systems to schools across Rwanda.

A major catalyst in Africa is the recent arrival of fiber optic connectivity. Prior to this, satellite access was the primary connectivity medium, which is very expensive. This was inhibiting the uptake of Internet connectivity.

The telecom industries across Africa are undergoing a rapid expansion due to the recent connections to three international fiber optic cables: SEACOM, TEAMS, and EASSy. This ends the region's dependency on expensive satellite connectivity and dramatically increases the bandwidth available to customers.

This has created a price war with telecoms and ISPs dropping prices to attract customers. This has also created a boom in the adoption of Internet and mobile technologies.

_**Internet penetration in Kenya essentially doubled from 2010 to 2011, growing from 28% to 52% in just one year. Internet penetration more than tripled in Rwanda between 2011 and 2012, growing from 8% to 26% in one year.**_

There are two sections in this report: a demand-side analysis and a supply-side analysis. Additionally there is an index of suppliers competing in the region. The demand-side analysis provides suppliers with insight into the buying behaviors in the top buying countries in Africa.

The buying behavior is different in each country. The top buyer segments (consumers, government agencies, corporations, etc.) are identified in each of the sixteen countries analyzed in this report.

**What are They Buying?**

The supply-side section provides revenue forecasts for five types of Self-paced eLearning products and services including:

- Packaged content
- Custom content development services
- Cloud-based authoring tools and learning platform services
- Installed authoring tools
- Installed learning platforms

The Self-paced eLearning product type that will generate the highest revenues in Africa throughout the forecast period is packaged content. The growth rate for packaged Self-paced eLearning content is 11.2%. Content suppliers competing in Africa have to know the primary languages of education and training used in the schools, government, and business. Consumer-facing suppliers also need to understand the language patterns in each country. This is different in very country analyzed in this report.
This report identifies the primary language of instruction in each country. French is dominant in several countries. Arabic is used in North African schools, although French is widely used as well. There are two Lusophone (Portuguese-speaking) countries analyzed in this report. English is the primary language of instruction in eight African countries analyzed in this report. Yet, it is rarely that simple in Africa.

For example, in Tanzania, the government mandates that Swahili be used as the language of instruction in public primary schools and government-sponsored adult education. However, English is the official language of instruction in Tanzanian public secondary schools and universities.

There is a strong demand for digital language learning content in Africa. The language in demand differs from country to country. The demand is concentrated in the academic and consumer segments, although there is a growing demand for digital business English or business French in the corporate segments in countries with booming economies.

Often dozens of native languages are used in the early grades is specific areas of countries in Africa with French or English instruction starting in about fourth grade. This is one factor contributing to the emergence of new domestic firms that are better suited (compared to international suppliers) to develop digital content in the local languages. This report identifies the language parameters for each of the sixteen countries analyzed in this report.

The growth rates in Africa for four product types (custom content development services, cloud-based authoring tools and learning platforms, installed authoring tools, and installed learning platforms) are the highest in the world.

Africa is the only region in the world where installed authoring tools generate more revenue than platforms. This is due to the widespread use of open source platforms across the region.

As of November 2012, there are over 900 registered Moodle sites across Africa. The Moodle installations are heavily concentrated in the higher education segment. South Africa has the lion’s share with 243 registered sites, followed by Morocco, Kenya, and Nigeria with 96, 91, and 81 registered Moodle sites, respectively. Tunisia has 57 Moodle sites and Algeria has 56.

Additionally, there are over 50 registered Claroline sites in Africa, mostly in French-speaking countries. Sakai is also used in Africa, mostly in South Africa. While the use of open source platforms may dampen the demand for commercial platforms, it is a major catalyst for custom services. The growth rate for custom content services is a healthy 27.9% Africa.

Over 200 suppliers operating in specific countries in Africa are cited in this report. This will help international suppliers identify local partners, distributors, resellers, and potential merger and acquisition (M&A) targets.
Device makers and telecoms are quite active in the Africa eLearning market and offer significant partnering opportunities for international suppliers. This report identifies those device makers and telecoms.

Targeting specific buyers in particular countries with particular product types is the key to generating revenues in Africa. Ambient Insight provides a description of how we categorize product types in Ambient Insight’s 2013 Learning Technology Research Taxonomy.

**Related Research**

Buyers of this report may also benefit by the following Ambient Insight market research:

- The Worldwide Mobile Location-based Learning Market: 2011-2016 Forecast and Analysis
- Ambient Insight’s 2013 Learning Technology Research Taxonomy

Africa has the highest growth rate for installed authoring tools in the world at 22.7%. These revenues are heavily concentrated in six countries in the region and those forecasts are included in the supply-side analysis in this report.
2011-2016 South America Forecast and Analysis

The following two sections provide demand-side and supply-side analyses. The demand-side analysis provides suppliers with insight into the buying behavior of the top buying countries in Africa.

The supply-side analysis provides suppliers with the total addressable market (TAM) for five product types across all buying segments and across all of Africa.

Demand-side Analysis

This section analyzes the demand for Self-paced eLearning products and services. With some exceptions in particular countries, the top buyers in Africa are not corporations, but rather government-funded academic institutions. Foreign aid agencies, NGOs, and technology suppliers often subsidize the academic expenditures.

Table 1 - 2011-2016 Revenue Forecasts for Self-paced eLearning by Sixteen Countries in Africa (in $US Millions)

<table>
<thead>
<tr>
<th>Africa</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>5-year CAGR</th>
</tr>
</thead>
<tbody>
<tr>
<td>South Africa</td>
<td>$81.44</td>
<td>$86.30</td>
<td>$94.65</td>
<td>$101.34</td>
<td>$110.30</td>
<td>$124.63</td>
<td>8.9%</td>
</tr>
<tr>
<td>Morocco</td>
<td>$45.99</td>
<td>$48.72</td>
<td>$51.45</td>
<td>$59.67</td>
<td>$63.94</td>
<td>$70.01</td>
<td>7.8%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>$33.70</td>
<td>$37.45</td>
<td>$43.92</td>
<td>$59.00</td>
<td>$77.60</td>
<td>$96.22</td>
<td>23.3%</td>
</tr>
<tr>
<td>Tunisia</td>
<td>$20.66</td>
<td>$25.55</td>
<td>$31.50</td>
<td>$33.61</td>
<td>$38.19</td>
<td>$38.68</td>
<td>13.4%</td>
</tr>
<tr>
<td>Angola</td>
<td>$15.27</td>
<td>$18.04</td>
<td>$21.18</td>
<td>$26.33</td>
<td>$32.80</td>
<td>$41.26</td>
<td>22.0%</td>
</tr>
<tr>
<td>Algeria</td>
<td>$9.34</td>
<td>$12.72</td>
<td>$16.92</td>
<td>$20.49</td>
<td>$22.77</td>
<td>$24.06</td>
<td>20.8%</td>
</tr>
<tr>
<td>Kenya</td>
<td>$6.43</td>
<td>$7.30</td>
<td>$10.50</td>
<td>$12.30</td>
<td>$15.32</td>
<td>$19.58</td>
<td>24.9%</td>
</tr>
<tr>
<td>Tanzania</td>
<td>$4.89</td>
<td>$5.12</td>
<td>$5.98</td>
<td>$6.94</td>
<td>$8.96</td>
<td>$11.73</td>
<td>19.1%</td>
</tr>
<tr>
<td>Ghana</td>
<td>$4.30</td>
<td>$4.98</td>
<td>$5.54</td>
<td>$6.32</td>
<td>$7.11</td>
<td>$9.92</td>
<td>18.2%</td>
</tr>
<tr>
<td>Rwanda</td>
<td>$4.04</td>
<td>$4.54</td>
<td>$5.07</td>
<td>$5.80</td>
<td>$6.70</td>
<td>$9.06</td>
<td>17.6%</td>
</tr>
<tr>
<td>Uganda</td>
<td>$3.72</td>
<td>$3.80</td>
<td>$3.95</td>
<td>$4.71</td>
<td>$5.26</td>
<td>$6.55</td>
<td>12.0%</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>$3.55</td>
<td>$5.03</td>
<td>$8.89</td>
<td>$9.73</td>
<td>$11.34</td>
<td>$10.87</td>
<td>25.1%</td>
</tr>
<tr>
<td>Zambia</td>
<td>$2.94</td>
<td>$3.86</td>
<td>$5.00</td>
<td>$6.83</td>
<td>$7.92</td>
<td>$10.05</td>
<td>27.8%</td>
</tr>
<tr>
<td>Senegal</td>
<td>$1.65</td>
<td>$2.81</td>
<td>$3.79</td>
<td>$4.50</td>
<td>$5.48</td>
<td>$6.22</td>
<td>30.4%</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>$1.27</td>
<td>$1.49</td>
<td>$1.73</td>
<td>$1.90</td>
<td>$2.06</td>
<td>$2.98</td>
<td>18.8%</td>
</tr>
<tr>
<td>Mozambique</td>
<td>$1.14</td>
<td>$1.25</td>
<td>$1.44</td>
<td>$1.65</td>
<td>$1.82</td>
<td>$1.90</td>
<td>10.8%</td>
</tr>
<tr>
<td>Other</td>
<td>$12.60</td>
<td>$14.82</td>
<td>$17.23</td>
<td>$19.20</td>
<td>$24.20</td>
<td>$32.03</td>
<td>20.5%</td>
</tr>
<tr>
<td>Total</td>
<td>$252.92</td>
<td>$283.78</td>
<td>$328.73</td>
<td>$380.32</td>
<td>$438.77</td>
<td>$512.75</td>
<td>15.2%</td>
</tr>
</tbody>
</table>

In many cases, the NGOs and the technology companies are the actual buyers, particularly of eLearning content. They purchase the content and then bundle it with hardware solutions that they then donate to the schools.