When IT meets Music

[CBN ZJ New Economy – China, 29 Nov 2013] PLAYNOTE, a music education software development company at Hong Kong, has combined digital signal processing, artificial intelligence and cloud computing together. They further use this combined technology to assist the problems faced in the traditional education model. This digital technology lets music note reach more music lovers.

Opportunity for incubation

When logic and emotion meets at music score, what chord will be played? Eric Yung, founder and CEO of Playnote, is the combination of logic and emotion already. "Colleagues and friends always say my character keeps changing and they do not guess my emotion in different time." Mr. Yung said. The special type of character between login and emotion lets other people find difficulty in understanding the true thinking of Eric.

Eric, with electronic engineering background, has achieved grade 8 level in piano performance and has been the conductor of orchestra. "The objective of entrepreneur is very simple. When I teach piano, I understand the needs of students and teachers and the problems that they face. The education software of PLAYNOTE is based on the syllabus of music examination in foreign countries and let students learn and self-practice without guidance of music teachers." Examination in foreign countries consists of music instrument playing and vocal singing. Eric said, in the practical education, the level of music knowledge of music teachers in foreign countries is very high but they don't know how to teach students.

PLAYNOTE is the star company in incubation program of Hong Kong Science and Technology Park. Incubation program is a incubator launched by Hong Kong SAR Government. It helps company to raise funding, link up collaboration channels, etc. PLAYNOTE got a number of awards in the 2012 Asia Pacific ICT Alliance Award (APICTA). Its app AURALBOOK became famous afterward and become a star in the music education market.

In 2010, a group of musicians and technology experts founded this IT music company and developed related music education products. PLAYNOTE combines digital signal process, artificial intelligence and cloud computing together and further use this combined technology to assist the problems faced in the traditional education model. PLAYNOTE currently works closely with international music schools and organizations and promote the music education revolution to other markets.

Digitize music education

AURALBOOK is a music-learning platform, which changes the traditional music-learning model. Its users are music students around the world. It can help to students in different levels to learn sight-singing skill and take professional music examinations in a much effective way. The examinations include Associated Board of Royal Schools of Music (ABRSM) of UK, Australian Music Examination Board (AMEB) of Australia and Royal Conservatory of Music (RCM) of Canada.

Currently, AURALBOOK, which is under patent protection, can let student self-learn and improve listening and singing skill, any time, anywhere, even without music teacher. On top of helping student to practice clapping, recognizing note and singing skill, AURALBOOK records student's singing, analyzes in real time, points out errors and provides comments.

Eric demonstrates AURALBOOK with iPad to reporter. In listening test mode, AURALBOOK will play two pieces of music. Some notes in the second piece will be difference from the first piece. It requires user to find out the notes changed. In singing test mode, AURALBOOK will play a piece of demo music. User follows to sing and AURALBOOK will record the singing and analyze. It will further find out the deviation between the recorded singing and the requirement and provide suggestion. The process of learning piano is nearly the same.

Other than iOS version, Android version is also available. User can use iPad or mobile phone to download. More than 60,000 teachers and students are using this app already. As the examination syllabus of these foreign countries and China is not the same, PLAYNOTE has not entered China market completely. Eric said, "In China, piano examination does not require singing. As a result, we still need a period of time to develop China market." The market size of the apps for music examination training is small. Is the development sustainable? Eric believes that there is still a large space to develop in foreign market. " Music examination is an international standard. It can be applied in everywhere. It is not just about examination or not. If music does not disappear, this market will not disappear. "

For users, Eric said music students in China or foreign countries area the same: They focus in examination. He continued, "In our customers base, only a few portion of customers are just for interest. Based on the feedback from users, students around the word are the same.

Since the beginning, the biggest challenge comes neither in R&D nor in following-up, but customer development" Not every teacher could master in short time. Most teachers, especially in America and Europe, are still stuck with Nokia and know nothing about iOS. So we still need time to communicate and nurture." If R&D could be compared to laying eggs, to PLAYNOTE customer development is a continuous process, which needs to be conducted step by step.

Currently, there is a department in PLAYNOTE, dedicated for customer service, which mainly answers customers' questions through Internet platform. The questions include how to use iPhone, iPad, etc. "As a result, there are very few technical staffs in the company and more musician staffs can be found in the company. We look like a music company instead of IT company."

When IT Meets Music

当IT遇上音乐

如果说科技研发是一个不断下蛋的过程，
培养客户则是一个循序渐进的过程。

文 / 蒋骋

香港音乐教学软件开发商PLAYNOTE融数字信号处理、人工智能和云端技术于一炉，用技术智能弥补传统教学的人工难题，让音符在数字技术的全新诠释下渗透到更多音乐爱好者心中。

孵化的契机

理性和感性在五线谱上碰撞，会奏出什么和弦？身为PLAYNOTE创始人兼首席执行官，容志伟（Eric Yung）就是一个理性和感性的综合体。"同事朋友都说我的性格变化很大，不知道下一刻会是什么情绪。"在理性和感性之间跳跃的这种"阴晴不定"的性格，让身边人很难揣摩容志伟的真实想法。

电气工程出身的他，早前考过钢琴八级，任港地乐队指挥。"创业的初衷很简单，我在教学生弹钢琴时，切身体会到学生和老师各有哪些需求，教学会遇到哪些问题。PLAYNOTE的教学软件以国外音乐考试的模式量身定制，让学生在没有音乐老师的教导下，也能练习或自学。"国外的音乐考试分弹琴和声乐。容志伟说，现实教学中，国外音乐老师往往音乐水准过硬，却不知道如何指导学生。

PLAYNOTE是香港科技园公司"科技创业培育计划"孵化出的产业新星。科技创业培育计划是香港政府创办的孵化器，为企业筹集部分资金，打通各类合作渠道。在2012年"亚太信息及通讯科技奖"（APICTA）中力夺数项大奖，旗下研发的音乐应用程序AURALBOOK一炮打响，成为音乐培训这块利基市场的新秀。

2010年，一群音乐和科技专才创办了这家音乐IT公司，研发有关音乐教育的产品。PLAYNOTE融数字信号处
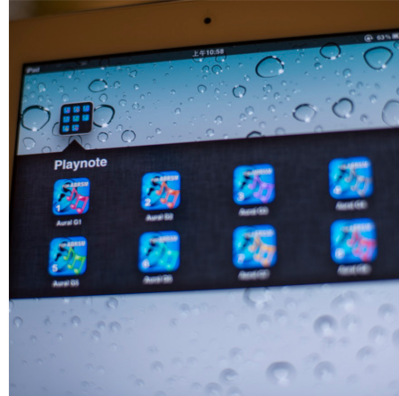
The biggest challenge comes neither in R&D nor in following-up, but customer development. "Not every teacher could master in short time. Most teachers, especially in America and Europe, are still stuck with Nokia and know nothing about iOS. So we still need time to communicate and nurture." If R&D could be compared to laying eggs, to PLAYNOTE customer development is a continuous process which needs to be conducted step by step.

理、人工智能和云端技术于一炉，用技术智能弥补传统教学的人工难题。PLAYNOTE已和全球各地的音乐院校、机构建立紧密合作，把具有革命性而国际标准化的音乐培训模式带到更多市场。

音乐传授数字化

AURALBOOK是一个音乐学习平台，革新了以往的音乐学习方式。其用户对象是世界各地的音乐学习者。它能帮助初高阶各个层次的学生掌握视唱技巧，更高效地应付各项专业考试，包括英国皇家音乐学院、澳大利亚音乐考试委员会及加拿大皇家音乐学院等音乐考试。

目前，受专利保护的AURALBOOK，可以让学生随时随地自学并改进听唱技能，即便身边没有老师。在帮助学生练习打节拍、辨音符及唱歌等技巧以外，AURALBOOK会记录下学生的跟唱，实时进行对比分析，指出错误，提出改进建议。

容志伟打开iPad，给记者当场演示。进入听音练习后，AURALBOOK放出两段音乐，第二段相对第一段音乐，有个别音符走调，要求听者靠耳朵把这些异常音揪出来。进入唱歌练习后，会响起一段示范音乐，听者跟唱后，录下唱音，进行对比分析，找出差异较大的部分，指出改进建议。弹琴练习如出一辙。

目前，PLAYNOTE Android版已经问世，用户可以在iPad和手机移动端下载。全球已有6万多名师生正在使用这个应用程序。PLAYNOTE的用户群集中在欧美和中国香港等地区的音乐师生。由于内地和这些地区的音乐考试内容不同，PLAYNOTE尚未完全打入内地市场。容志伟说："在中国，钢琴考级不需要唱歌。所以我们在内地的拓展，还有一段时间。"乐考为主的培训应用，针对的是

如此小众的细分市场，发展有持续性吗？容志伟认为，国外市场还有极大的持续和挖掘空间。"音乐考试的国际标准，是放诸四海皆准的。不单是考不考试，只要音乐不消失，这块市场是不会消失的。"

谈到用户本身他说，国内外学习音乐的学生，都有一个共性，为考试是瞻。"我们的用户中，纯粹出于兴趣的学生占很少一部分。从用户信息的反馈来看，全球的学生都差不多。"

公司在创立之初至今，遇到的最大障碍不在研发和产品跟进，而在于培养用户。"不是所有老师都能很快上手应用操作。不少老师，尤其在欧美，还在用诺基亚的平板手机，对苹果操作系统一窍不通。这都需要一段时间去沟通、教育。"如果说科技研发是一个不断下蛋的过程，培养客户就是PLAYNOTE更需要的循序渐进的过程。

目前，PLAYNOTE有一个专门的客户资讯团队，主要通过网上平台，解答客户问题，包括在iPhone和iPad的应用等。"所以，技术人员其实不多，搞音乐的倒不少。我们更像是一家音乐公司。"