



In-depth interview with Loquendo CEO, Davide Franco

1. For anyone who is not familiar with Loquendo, can you provide a brief overview of what the company offers, and who its customers are?

Loquendo is a global speech technology provider. Our product portfolio embraces a full range of speech technologies - Text-To-Speech, Speech Recognition, Speaker Verification and Identification, Voice Platforms and embedded solutions for speech-enabling any kind of application. Loquendo Technologies and Solutions have been taken up in markets right across the globe and in all sectors, such as on-board/mobile navigation, voice portals, virtual web assistants, talking devices for the differently able, phone banking, IVRs and CRM.

In response to market demand we have continually expanded our portfolio, now boasting more than 25 languages and over 60 voices. We have also made all our speech technologies available in a wide range of memory footprints to suit any environment, such as telephony servers, desktop PCs, navigation devices and smartphones.

It is important to remember that in recent years the speech technology market has evolved enormously, with consumer interest constantly growing as mass market and mobile speech applications have thrived; this has had a significant influence on prices as well as on the consolidation of the market through mergers and acquisitions, reducing the number of players in the sector.

Within this context, Loquendo occupies a more or less unique space in the speech technology industry, being the only speech technology provider with a single speech engine that powers a complete product line for telephony servers, desktop PCs, and navigation and handheld devices – with the same extensive portfolio of high-quality languages and voices in each of these environments, all proprietary.

Loquendo's long-standing experience in the speech industry has, in fact, allowed the company to develop an entirely in-house technology, complete with a full range of advanced and innovative features for any kind of device. Few companies can compete with Loquendo in all these sectors and in all these environments with the same continuous high quality across all languages and voices. This, along with the company's extensive experience in telecommunications, has enabled Loquendo to achieve considerable success in other markets – new markets undergoing rapid growth, where the capacity for innovation, for anticipating trends, and for technological excellence are determining and differentiating factors.

2. Looking back at 2008, how would you characterize the year for your company? What was your company's biggest achievement in the past year?

It's been a very busy year, full of exciting challenges and including many considerable achievements. When I took over the role of CEO in January, Loquendo was already well-established as a leading player in the international market. My first priority, therefore, was to ensure Loquendo upheld and strengthened the excellence of its product portfolio and the technological innovation it is known for, and this we have certainly succeeded in doing with new product releases of all our technologies: Loquendo TTS, Loquendo ASR, Loquendo MRCP Server and VoxNauta – our VoiceXML/CCXML platform. Besides featuring a wealth of new features, all of our products have expanded their geographical reach, as our language portfolio has grown by three new languages and eight new voices. Notable, also, was the introduction of our Loquendo ASR for Automotive - a fully optimized engine for performing demanding in-car tasks such as voice destination entry - as well as the extension of our portfolio to new operating systems such as Linux Enterprise and iPhone.

In terms of voice platforms, Loquendo has worked closely with the major players and has already achieved the certification of Loquendo MRCP Server with the products of major IVR Vendors such as Avaya, Cisco, Genesys, Interactive Intelligence, Siemens, Voxeo, Dialogic and many others, and has achieved considerable success, in particular in the Telco and Finance markets.

Maintaining continuity, we have also successfully reinforced our partnerships and our presence in many vertical markets – including banking, customer care, Intelligence and Security, etc. In the Customer

Care sector in particular, in which the company has always had a strong presence, an important new application for speech technology has taken the market beyond traditional, telephony-based ASR solutions: the online virtual assistant - software based, human-like avatars that can speak, understand and respond in real-time. Loquendo TTS currently powers a wide range of such assistants, developed with our partners, on the websites of numerous high profile companies (e.g. Fiat and TIM Brazil, deployed with H-Care, ICEX, with Umanify, and IKEA UK, with Artificial Solutions, to name just a few), and this CRM solution is one that the market has received with considerable enthusiasm.

Over the last twelve months our customers and partners have also greatly appreciated the effectiveness of Loquendo's proprietary tuning and authoring tools, which give our partners maximum independence and flexibility in application domains which are highly heterogeneous in terms of complexity and size. Loquendo places great value on its partnerships, being a key factor to success, through strategic alliances in specialized vertical markets with both System Integrators and Service Developers, and we are always highly sensitive to their needs and receptive to their comments and ideas.

Another significant aspect of this past year is that, as predicted at the beginning of 2008, while take-up of speech technologies has been relatively slow in other new markets, it has been particularly rapid in the automotive sector.

The company has indeed met with great success in automotive, with the sale of the 7 millionth Navigation Device with Loquendo Automotive Speech Solution on-board. Loquendo automotive solutions can today be found on devices by all major manufacturers.

However, the most significant change Loquendo has made to its product lines in the past year has been the broadening of its portfolio to include a range of turnkey solutions, in order to meet the intense demand for speech in new application environments. One example, available for the Italian market only, is Loquendo @BX – an IP-based PBX incorporating an advanced IVR (TTS and ASR), and combining all the benefits of VoIP with those of a 24/7 auto attendant. Adding out-of-the-box solutions to Loquendo's core technologies and platforms marks a significant change for the company, and has opened up a wide variety of new markets for Loquendo.

Looking back at 2008 as a whole, we can say that the company's hard work has been rewarded not only in terms of our economic performance, but also with numerous awards during the year, beginning with the '2008 Frost & Sullivan European Telematics and Infotainment Emerging Company of the Year Award'. Loquendo was also greatly honoured to receive, for the second year in a row, 'Market Leader-Best Speech Engine' at SpeechTEK 2008 as confirmation of Loquendo's attention to its clients' needs, the skills of its personnel and the passion for innovation within the company. The Loquendo MRCP Server was, furthermore, singled out for the '2008 IP Contact Center Technology Pioneer Award' in acknowledgement of the company's position as a leading innovator in the IVR sector.

Of course, competition grows even fiercer during a downturn, and the need for differentiation becomes greater than ever. To this end, Loquendo has, right from the beginning, carved out a unique niche in the speech technology market, reflected at every level of our product range - from core technologies to turnkey solutions. Our customers are already taking advantage of this product differentiation and the added value our solutions are creating for them, and this is translating into a genuine respect for the quality of our products and service and for the way Loquendo does business, based on the company's key strengths of quality, reliability, excellence, continual innovation and focus on customer care.

The greatest sense of satisfaction, though, comes from the trust which our clients and partners continue to invest in the company, evidenced by the strengthening of ongoing agreements and the creation of new ones; this fact is further reinforced by the large number of companies that have chosen to initiate partnerships with us during 2008.

I would also like to underline the fact that such successes have been made possible thanks to a dedicated team of personnel who continually demonstrate excellence and expertise. During this last year I have come to appreciate, as have our clients, the real value of the people that work at Loquendo and the passion and commitment with which they approach their work and with which they face each new challenge.

3. What are some of the creative, real-world ways Loquendo's customers are using speech technologies?

In terms of stand-alone speech technologies, Loquendo has achieved strong positioning in the speech synthesis market with Loquendo TTS - multi-award winning technology, recognized worldwide for its high performance thanks to a wide range of tools and functionalities. Loquendo ASR has also seen take up in many significant projects in key markets, such as Finance and Telco applications

Loquendo has, and has always had, a very strong presence in the Telco applications sector, which as a market is already mature and has already seen high take-up of speech technologies. In Southern Europe, Loquendo is absolute market leader in this sector, and very strong in Latin America and the rest of Western Europe.

As I mentioned previously, Loquendo has also entered newer, younger and rapidly expanding markets such as embedded and automotive, thanks to the company's significant investments in software engineering which have resulted in excellent portability; such investments have been repaid many times over by the considerable successes achieved in these markets. Today, these successes have enabled Loquendo to power innumerable innovative devices and telematics systems by TomTom, HP, Nav N Go, AvMap, DeCarta, Magneti Marelli, Peugeot, Citroën, Fiat, Alfa Romeo, and many others. Loquendo ASR and TTS have also been integrated into the iLane solution from IMS, which retrieves and reads your emails in-car – all hands-free - so that you can safely use your drive-time to stay in touch and keep on top of your emails.

Another sphere of use of speech technologies which has achieved widespread diffusion is the digital assistant in the provision of online Customer Care. For example, Loquendo speech technologies have been deployed in mobile-based and web-based avatars for ICEX (Spanish Institute for Foreign Trade), giving users full voice access to 'speech Web content', improving human-machine interaction and breaking down accessibility barriers for the differently able.

We have also seen the pioneering use of speech technology in domestic appliances, such as Speaky – the voice-operated remote control - and Indesit's voice controlled oven.

Likewise, the Loquendo TTS-powered screen reader from TIM, which reads out the screen contents of your mobile phone, is an important leap forward in increasing independence for the blind and visually impaired. In the US, the ChatPC-4 - from Ohio-based Saltillo - enables people who can not use their own voice to communicate more effectively: by pressing thoughtfully designed keys on the device, users can create sentences and express their needs by means of TTS.

The Telemonitoring system from Health Insight Solutions is another example of how quality of life can be hugely improved by means of speech technology, using non-invasive, home-based monitoring (blood pressure, ECG, oxygen, etc.), and alerting the appropriate medical staff or care provider when necessary. All measurement procedures are explained via text-to-speech, keeping patients fully informed and up to date.

In the transport sector, the Nitax SIDUS-Nav+ makes use of Loquendo speech technology to read out dispatch addresses, road and traffic conditions, POIs and so on, allowing taxi drivers in Spain to multitask safely. On French public transport, Archean are using our TTS to inform travellers of the name of the next bus or train stop, along with other info, while also reading out travel information displays for the visually-impaired.

In Spain, VoxWeb brings speech to web portals for accessing online local information such as news and 'what's on', and has been hugely popular in enabling visitors to navigate websites in the most natural way possible - by using their voice.

By means of important collaborations and strategic partnerships, Loquendo has contributed greatly in the last twelve months to extending the adoption of speech technologies in different market sectors. The scalability and high quality of Loquendo's products have raised awareness of the true potential of speech, and have strengthened the positioning of speech technology in a huge number of markets.

Now that speech technology has reached maturity, the opening up of new markets is fundamental for the industry and Loquendo is playing a leading role in blazing the trail for speech. The only limit to the potential application of speech technology is the imagination.

4. There's no doubt these are troubling financial times for many people, and for many businesses. Taking a broad perspective, what are some things businesses can do to ride out this storm?

Understand what your customers want! Economic downturns are difficult times for all businesses, but companies which manage to play to their strengths often come out the other end both stronger and more profitable, and this means they must listen to their customers and be able to satisfy their real needs.

During a recession, businesses must perform a rigorous assessment of the shape they are in, cutting costs where possible and backing products that are selling well. They must consolidate successes and strip back the rest. Become as lean as possible and maximise your profits, prepare your business for when the upturn comes, and be ready to respond quickly when it does.

Now more than ever a company must know and understand its customers: a business that neglects Customer Care, the quality of service or the user experience - in terms of reliability of information, response time, or the consistency of interactions - will never make it through a recession. Wherever you plan to cut costs, don't do it there! Find out what your customers want from you - why do they buy your products or use your services? Are they 100% happy with what they get, with your quality of service and after-sales support?

5. More specifically, how is Loquendo able to reassure its customers it can help them get through these rough times?

In difficult economic times it is more vital than ever to have the support of a solid and reliable group of partners with whom your company can collaborate; a solid business relationship facilitates the development of winning solutions and strategies for market penetration.

Loquendo, in addition to benefiting from an ever-expanding group of trusted clients, is also part of the Telecom Italia Group, which gives the company significant competitive advantages, such as robustness to changing economic conditions, and all the benefits of economies of scale; at the same time, Loquendo's particular position within the Group guarantees us a degree of independence that encourages innovation, new partnerships and complete freedom to pursue the ambitious goals of the company.

Loquendo's has a considerable wealth of expertise and experience which more than covers its technological and business needs, while at the same time affording us a degree of flexibility that other companies simply don't have, enabling us to create more value for our customers.

Furthermore, it is important to remember that Loquendo technologies are, by their very nature, cost-saving: the total cost of ownership required to create and maintain a speech-enabled service or application using recorded messages is far greater than that required to install Text-to-Speech or Speech Recognition software; speech technology offers huge cost savings, and makes the process of updating your service far simpler, quicker and less costly – and this is true for all sectors and for any application that uses speech, even more so as the technology becomes more commoditized.

In recent years, providing customer support has become an ever more sophisticated and complex process, yet effective CRM has never been more crucial than in the current economic recession – this is just where speech technology solutions can play a key role: complementing your team of skilled human operators with a well designed IVR allows you to manage your peak-time call load without losing callers, to get the most out of your highly trained personnel, and ensures your customers find the answers and information they are looking for as rapidly as possible – and all this is can be achieved while cutting expenditure on hardware and service updates.

As already said, pressure can be taken off an overburdened contact centre or IVR by setting up effective online customer care – and here the innovative online Virtual Assistant has proved itself extremely successful: for example, by means of multichannel customer care services able to meet customer's needs anytime, in anyway and on any device. Virtual Assistants represent an emergent and fast growing technology for online CRM, and are created using sophisticated animation synchronised with synthetic speech, and backed up by sophisticated rule-based algorithms. They have proved themselves to be very efficient at dealing with enquiries, even complex ones, taking users directly to the appropriate webpage for product queries, bill payments, form-filling, etc. All this takes much of the strain off your call centre, and frees up your valuable human operators to deal with more complex customer requests, ensuring a seamless service that gives genuine customer satisfaction for a greatly reduced financial outlay. Whether used in kiosks, email/MMS marketing campaigns, or as website assistants, it has been clearly demonstrated that customers enjoy interacting with this kind of innovative technology, and that they find the results extremely satisfactory.

The time is ripe for the market to embrace the fact that speech technologies are not merely a possible alternative but a concrete opportunity, a solution for increasing the competitiveness and the efficiency of our clients, helping them to increase customer satisfaction and customer retention.

6. On a similar note, how can Loquendo's speech technologies help companies operate more efficiently and tighten their budgets?

As mentioned above, speech technologies are cost-saving by nature since they obviate the need for expensive and time-consuming recordings, but they are NOT JUST a cheaper alternative – they also offer real and genuine advantages over using messages pre-recorded with a human speaker: messages can be modified and updated rapidly and easily at no cost; with just one mouse click you can activate or deactivate specialised styles for reading addresses, data, foreign language text, etc. to all or some of your prompts; voices and languages can also be changed with one mouse click although, if required, the same voice can be used every time.

Over time, a business is likely to want to make modifications to its database of prompts, and such changes may even be required monthly or weekly: when using recorded prompts, making such changes involves frequent and costly re-recording, requiring both time and money; with TTS, modifying prompts is simple, fast and more or less cost-free.

With a TTS system you can also insert names and personal data into a prompt, personalising messages individually and yielding far higher call completion rates – no recorded system can do this, and the evidence is clear that callees are often suspicious of anonymous/impersonal calls.

Changing language or reading texts in more than one language is also very straightforward with synthetic speech - Loquendo TTS is currently available in more than 25 languages and over 60 voices, so a company can offer its callers a choice of languages at minimal additional expenditure.

On the ASR front, automated call centres have, in recent years, evolved towards the use of natural language speech rather than deep menus and DTMF - which callers so often find frustrating to navigate as well as ineffective in providing them with the information or service they are looking for.

Speech Recognition technology is now mature enough to permit fairly sophisticated levels of natural language interaction, empowering the caller to express him/herself in a more spontaneous and relaxed way. This, in turn, means the call is directed far more rapidly and efficiently to the information or service required, and routed to a human operator only when needed and only once the caller's intentions have been correctly identified – which in turn brings down costs. In this way human resources are utilized in the most efficient way possible, and skilled personnel are able to use their expertise to the maximum benefit.

Speech recognition by means of natural language speech thus leads to significantly higher call completion rates, since the caller is free to make requests in his/her own words - rather than as directed by the IVR - and to respond to questions in a more natural way than with menu-based approaches. It has been demonstrated that callers prefer the increased flexibility such systems provide, since their needs are identified more rapidly and efficiently, giving them a positive and enjoyable user experience as well as greatly reduced call time.

7. Do you think a new administration in Washington, D.C. will be good for the communications industry? If so, how? If not, why not?

From a European perspective, it is interesting to observe the events taking place in the countries of important allies such as the US: enormous expectations have been placed upon the new administration, both political and economic, at home and abroad. Many challenges lie ahead, and it will require courage to overcome them. Prevailing over such difficulties, economic and otherwise, will demand a commitment to confront hard times with humility, moderation and solidarity.

Periods of economic crisis can bring opportunities for the ICT sector to evolve and develop, but this depends on businesses fully understanding that the implementation of ICT solutions can bring great cost savings, and that traditional, low-tech, low efficiency systems are expensive to manage, run and maintain.

We believe that the US is able to drive the re-spin of the world economy, but to fully recover from this difficult period everybody needs to be able to compete within a framework of fair market rules, allowing all companies that could benefit the process to operate at their best.

8. If you had to make one bold prediction for 2009, what would it be? What are your customers looking for in the coming year?

Now more than ever it is difficult for anyone to foresee the future. What I would like to express is my hope, despite the recession, that the speech technology sector will continue to grow more than the rest of the economy, as companies appreciate the key role our technologies play.

The credit crunch and economic downturn, however, will diminish company value in general, and will facilitate merger and acquisitions, so we are looking at an increased concentration of players in our market. Those who survive will definitely be stronger. Recent moves in the market are tangible proof of this trend.

In general, our customers are looking for excellent value for money, and for a reliable and committed partnership. We believe we are, more than ever, ready to exceed their expectations.

9. Looking ahead toward brighter times, what predictions do you have about companies continuing to utilize the benefits of speech technologies?

Companies know that to remain competitive requires putting your customers' satisfaction before all else, as well as streamlining your company and keeping costs down. Moreover, companies increasingly understand that speech technologies enable them to do these things at the same time – by delivering an improved experience to customers at reduced outlay.

It is always vital for businesses to keep innovating and to keep abreast of new market trends, to work consistently hard at maintaining and building on their relationships with their partners. Those who make the right choices - in terms of innovative design and automation - can and will, with the help and trust of their partners, succeed in the market.

The bottom line is that we strongly believe our products - used in conjunction with a successful exploitation of Contents, Data and Networks - can add value to the Human-Machine experience in terms of quality, innovation, efficiency and flexibility: key values which will ultimately deliver success to both our partners and our customers.