

Lifetime Achievement Award

Carlos Salman Gonzalez reflects on his past achievements and challenges he faced in GIS career. Mr. Salman Gonzalez is the founder and CEO of SIGSA, the Esri distributor in Mexico.

<http://video.esri.com/watch/46/lifetime-achievement-award>

Video Transcription

00:01 Welcome back.

00:03 Welcome back, everybody. Thank you.

00:07 We're going to start this afternoon with something very special.

00:11 In the last several decades, we've given a lifetime achievement award in GIS.

00:17 This has gone to people like Roger Tomlinson, Duane Marble, Ian McCarg, Don Cook, Michael Goodchild...

00:28 ...many interesting people who've laid the footprints down for us to follow and build.

00:34 They also not only led their particular field but they were interesting people, and we let them talk a little bit.

00:41 Today, I'm very pleased to be able to honor an old friend of mine, Carlos Salman, with this honor.

00:49 Carlos is an interesting guy, as you will see, one of the most creative people I have ever met on the planet.

00:56 He went to school at ITC as a photogrammetrist and mapping person from his native country, Mexico...

01:04 ...came back and went to work for the government...

01:09 ...and had a passion for bringing modern mapping tools to Mexico in the '70s.

01:14 And he worked hard. And he got into bureaucracy and got fed up, and he left after contributing a lot...

01:25 ...started his own mapping company to map Mexico because he couldn't get it done in government.

01:31 He now owns the largest mapping company in South America.

01:35 On his own, he mapped all of Mexico with his own topographic maps and provided them to everyone there.

01:44 He also is a curious fellow, married to a wonderful architect and he's creative.

01:51 So he came across talavera. This is a kind of mosaic, originally brought from the Middle East to Mexico...

02:01 ...and it was a dying art, and he found a little factory, a few leftover artisans, and started it up again.

02:09 And then, as some of you might remember, made maps of tiles and brought them here from Mexico...

02:16 ...huge displays of all the ancient maps of the world.

02:20 And then he noticed that there wasn't enough trees in cities in Mexico, so he started a nursery...

02:27 ...something I love, and planted millions and millions of trees across Mexico, and many, many other stories.

02:35 I love this man. Please join me in welcoming and honoring Carlos Salman.

02:41 Carlos!

02:48 Thank you.

02:51 You give it to me before the speech?

02:53 Before the speech? Okay, I'll give it to you later.

02:55 Later!

02:56 Later. Okay, later! My cues are wrong. Carlos.

03:00 Yeah. I am very happy to be here.

03:04 What we are today comes from our thoughts of yesterday. Our present thoughts build our life of tomorrow.

03:12 Our life is a creation of our mind. I am just a mapmaker from Mexico.

03:18 I don't have great theories. I only have dreams.

03:22 But my dreams are long-lasting. I am a persistent dreamer.

03:28 I started in mechanical engineering at the MIT, not the one in Boston, the Madero Institute of Technology in Mexico.

03:38 After graduating in 1971, I had the good fortune to get a job at the National Mapping Agency of Mexico.

03:47 It was called Cetinal. The mission of Cetinal was to build a resource inventory of Mexico...

03:55 ...so the Mexican society could become aware how rich our territory was.

04:01 Two million square kilometers, 11,000 kilometers of coast, everything that you want, you have it there, biodiversity.

04:13 Engineer Juan [unintelligible] de la Para, the founder of Cetinal, used to tell us that we need to apply...

04:22 ...la visión de águila y la sabiduría del serpiente to get our job done; the vision of the eagle and the wisdom of the snake.

04:32 I was impressed by his passion.

04:35 The ambitious Cetinal program project involved topographic, geological land use, potential land use...

04:43 ...and sold maps at 1 to 50,000 scales and maps for the soil aptitude for urban development.

04:52 Photogrammetry means to measure with light.

04:57 In the ancient Mexican cultures, the spirit of the eagle...the eagle is the representation of the spirit of the sun.

05:05 And it was the light of the sun that imprinted the vision of Mexico that we were capturing with the aerial photography at Cetinal.

05:15 I was so happy to become a photogrammetrist.

05:18 In 1974, my boss sent me to the ITC in the Netherlands to study a postgraduate diploma.

05:26 I visited the Dutch cadastre and learned how important for the development of my country...

05:32 ...is to have a good and accurate and updated cadastral system and land registration.

05:38 I thought we needed to apply that concepts in Mexico.

05:42 Back in Mexico, I draw a diagram that shows the integration between the resource inventory we were doing and the cadastral.

05:54 I was...I asked my bosses to be sent to the states to try to apply this knowledge. They sent me to Zacatecas.

06:04 In Zacatecas, we did field surveys to complete the cadastral.

06:10 And then we overlaid the cadastral map and the potential land-use map.

06:16 What I saw was terrible.

06:19 The land for these farmers were very small parcels, the soil was very poor...

06:25 ...so we were condemning them to poverty for generations to come.

06:31 Also, they didn't understand maps. But they were in such a terrible condition that I was enraged.

06:38 I was very rebellious, so I told to my mentors how disenchanting I was with that situation.

06:48 I had very good mentors.

06:50 They listened to me very careful and told me, "Carlos, you put about your life to try to change the conditions...

06:59 ...that make Mexico so unfair and so poor, even if we have a lot of resources, but it will be a long journey.

07:08 It will take you 40 to 50 years, and you will have many defeats and some successes."

07:22 And to address the issue that the farmers don't understand our maps, you need to understand.

07:29 Maps are like messages.

07:33 With messages, not only matters what you say but what the other people understand...

07:40 ...and what the other people understand...

07:42 ...it depends on who he is and what filters he has built in his conscience, in his possible conscience.

07:50 Our mission is not...it involves maps understood, not maps produced. Maps could be useless.

08:02 They told me that 34 years ago. My mentors also advised me to get a real life, not just a work life.

08:15 So they sent me to the university to give lectures to the students of the urban planning master course.

08:23 And they encouraged me, try to get a girlfriend there. You know?

08:30 The worst sin a man can commit is not to be happy.

08:35 So I have always been obedient to my mentors, so nine months later, I married Gloria...

08:45 ...a student of that training course, nine months later, my daughter Paula was born.

08:53 This girl came very fast. Then two years later, I had...Fabiola arrives.

09:01 I became a family man.

09:03 And I know that women of any age are wiser and stronger and smarter than men.

09:17 In 1977, I wrote a paper proposing the transfer of Cetinal technology to state governments.

09:24 I believe it that if we build state information systems at a provincial level...

09:31 ...we were going to make better part to help, to have better policies for water and land management.

09:40 The paper was very well received by my bosses, but something terrible was about to happen with the Cetinal mapping agency.

09:49 There were political changes at the minister level.

09:53 A new minister, ill advised by international monetary fund economists, started to ask

questions.

10:02 How much do you spend on these maps? At what price do you sell it? What is the profit?

10:08 We tried to explain to him that a national resource inventory is like an x-ray of your lungs or your brain.

10:19 You will not make a fast-cash profit from it, but it could save your life.

10:27 They didn't listen, and they decided to stop the resource inventory.

10:34 International monetary fund economists' favorite song is downsize.

10:40 Downsizing is like losing weight; it could be good if you apply it to the fat...

10:46 ...but it's terrible if you try to lose weight taking out your eyes or your brains.

11:00 Mapping and GIS are like the eyes and the brains of a country. You need both to have a shared vision.

11:10 A shared vision with the resources can be used not to produce the richest map in the planet like in Mexico...

11:18 ...but to share all the resources such that the children could have enough nutrition.

11:24 I faced a hard choice. I liked to work for the government.

11:29 But then I needed to stop dreaming or go to the private sector and hope for the best.

11:34 I decided to embrace hope, and in 1980 we founded a company with two employees, my wife and me...

11:43 ...that with a mission to implement land information system in the state governments.

11:48 We grew in eight years from 2 to 200 employees and I thought we were going to be able to do something in 20 years...

11:59 ...not 40 or 50 like my mentors had told me.

12:03 But then, in 1988, I met Jack Dangermond in Baltimore, and all my problems started.

12:12 Esri was showing ArcInfo 3.x in 1988, and they were showing how to do geographic analysis with computers.

12:21 We didn't use computers. We just overlaid the maps.

12:27 I listened to Jack very passionately speaking about landscape planning with GIS.

12:34 I stopped to talk with him about the difference in mapping and urban systems in Mexico and the United States.

12:42 In United States, you first make the streets, put the utilities, networks and then put the houses.

12:49 In Mexico, we put the houses, and then later maybe we will put the streets and the utilities.

12:57 So, in United States, you make maps of what is there.

13:02 In Mexico, we need to make maps of what is not there but it should be, maps of the needs of the people.

13:09 Then Jack told me, "Don't worry. Next version of ArcInfo, we'll make the maps of what is not there."

13:21 In the user conference, I found a group of people that thought that they could change the world with GIS.

13:30 They appeared, it appears that they don't know that changing, making dreams happen, is the most difficult task a man can undertake.

13:39 So, like I am a experienced demon, I say I should join them.

13:45 I decided to join them and since I became the Mexican distributor of Esri 22 years ago...

13:53 ...I have made many friends from every continent, including the small pueblito, or town, of Tierras Rojas, California.

14:06 I have been a witness of the evolution of the most powerful GIS platform in the world.

14:13 Many years of suggestion, insight, and complaint from all of this network are put into ArcGIS 10.

14:26 So in 1999, many rivers flooded Mexico as almost every year.

14:34 Flooding is good because it makes the soil more fertile, but it was a problem that we put the cities too close to the rivers.

14:44 So the clean water, the rains, it was polluted with sewage and flood the cities...

14:52 ...setting back the lives of many people because they have to pay again all the commodities they had.

15:00 So this makes me desperate. I am a desperate man because this is a disaster of our own making.

15:10 We could not blame the river. Don't blame the water. We did it wrong.

15:16 Mexico deviates, is between, is dry or is flooded.

15:22 You know, and these fields flooded, so if we keep the water, we shouldn't be dry.

15:28 But we are very crazy to manage the water, so we need to learn from the Dutch.

15:35 To change the situation, we need 16 of these.

15:39 One is large-scale, accurate maps. Accurate maps and updated. Then the cadastral layer.

15:50 Then the public record should be tied to the cadastral layer, and then we need the resource

inventory that we stopped 30 years ago.

16:00 That is the reason I am desperate. But even these four things are useless if the community doesn't use it.

16:08 We are not making maps for ourselves. We need to transfer this information.

16:12 We need maps in the brains of the people. So we need the community using the maps.

16:19 And another thing, you know, another thing we need is a consensus building engine.

16:26 Because the cities fought for this party or this party, for the rich, for the poor, for the old, for the young.

16:34 So we should not discuss the data, we should discuss the solution.

16:41 Since the maps were not available, six have decided to map old Mexico 20,000 scale in vector formats and at 10,000 in orthophotos and to 5,000 and 1,000.

16:57 We call it Proyecto Mexico.

17:00 We did a cartographic structure, sent the surveyors to establish a rock-solid network, take aerial photography.

17:09 We didn't have any contract to do it. We didn't know how we were going to finance it or sell it.

17:19 We didn't even know if we were going to complete it.

17:22 We just started to do it with no other light, no guide except the one burning in our hearts.

17:32 Ten years later, maps of old Mexico at 20,000 scale have been completed and are already been updated.

17:40 With maps, you always need updating.

17:44 And we have produced thousands and thousands of maps at different scales, from 1,000 to 5,000.

17:50 But, as my mentors told me, maps are useless unless the people apply them.

17:57 And what we need...and that is our new challenge.

18:01 If we want to change Mexico, how is the status of Mexico?

18:05 Imagine an orchestra that they sing five different floors and we don't have a partitur.

18:13 Every guy, the orchestra is split in five floors, everyone wants to play a different song.

18:20 There is no director. It's chaos.

18:23 We need optimization of the government process and orchestration of them. And that is a big challenge we have.

18:33 I love maps, new and old. Photogrammetry is a science, but cartography is an art as much as

a science.

18:42 I realize that many antique maps that were produced hundreds of years ago...

18:47 ...were destroyed or were not used and were hidden in libraries.

18:52 We decided to start...this is Amsterdam. We decided to start a small tile shop with a technique called talavera a puebla...

19:01 ...that these an evolution of the Islamic techniques and Mesopotamia techniques...

19:07 ...and then to Spain and then to Mexico in the 16th century.

19:11 It has been very enriching experience to do these maps.

19:18 Eradicating poverty and injustice in Mexico will take many years.

19:24 So our motto is, if Mexico is going to be poor, at least make it beautiful.

19:32 So 14 years ago, we bought a piece of land that was at audit and decided to transform it.

19:39 We started a nursery. I have a friend from California that was a nursery boy.

19:46 His name is Jack. The family of Jack had a nursery. So he gave me some tips about where to buy seeds and things like that.

19:54 We make children to adult trees, we give trees to the schools...

19:59 ...and we have collections and pines and try to have some shelter for the species that are endangered.

20:07 To be here today and be part of your network, it makes me very happy and very grateful to Laura and Jack...

20:15 ...and all my hardworking Esri friends, Proyecta Mexico, Talavera de la Luz...

20:22 ...and the flowering trees here are the results of many people. The merit is of all of them.

20:30 So we make this map with the faces of the children of the [unintelligible] workers at Cetinal.

20:38 It's nice way to remember why we need to work harder.

20:44 I am, as you could imagine, very grateful to the mentors I had at Cetinal for the teachings...

20:51 ...but especially for sending me to university where I found my wife, Gloria.

20:58 Meeting her is the best thing that ever happened to me.

21:03 Everything that happens, happens because life wants to teach you something.

21:17 It's your duty to find out what it wants to teach you.

21:22 So when Jack told me about this award or this thing of lifetime, I was very nervous.

21:28 I asked myself, do I look so old, or what?

21:35 And then, for months, I was thinking what life is trying to teach me with this thing.

21:40 Lifetime is an intimidating concept.

21:44 Then I realized that lifetimes are just a collection of days, so I will tell you a Sanskrit poem...

21:55 ...as I recall it in Spanish but translated to English...

22:00 ...Take care of today because is life, the true life of life, and today, time spans you will get the excitement of action...

22:13 ...the power of thought, the opportunity to improve yourself, because yesterday is only a memory and tomorrow only a vision...

22:24 ...but today we live, makes every yesterday a memory of happiness and every tomorrow a vision of hope.

22:34 Take care of today, therefore.

22:38 So I will finish with a one-minute video that I brought to you with my wish.

22:47 Please, try to be happy. Thank you very much.

22:58 [Begin video]

23:55 [End video]

23:59 That was good! Thank you, Carlos. Congratulations. You're a great guy. Isn't he wonderful?

24:10 Thank you, Carlos. Good luck to you.

24:11 Thank you very much.

24:12 You bet. Thank you.

24:14 Good luck with your next presentation.

24:15 Ah, yes, my next presentation. Thank you, again. Good.

24:27 You can see why I'm very fond of this man. He's a wonderful person.