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The Process of Creating a Digital Communication Model for the Vatican

Abstract

In 1978, in the Holy See, all communication took place thanks to the analogue technology of text, sound and image recording. In the following years, the progress in computer science, made it possible to save any kind of data in the form of digital recording, so that one could collect data and transfer it to any place in an instant. Digitalization also allowed the Vatican to create a new model of communication with the modern world. This model was first based on the capabilities of computer networks and then on the Internet. It was first tested by the Holy See in Latin America. The experience of the Latin American Church's Computer Network (RIIAL) was transferred to the Vatican, and then developed and proposed by John Paul II to the entire Universal Church. This model of digital communication would not have been possible without collaborators such as John Patrick Foley, Judith Zoebelein, Joaquin Navarro-Valls and a group of lay Catholics and clergy from Latin America. It was thanks to them that the Holy See began to communicate digitally through the World Wide Web and to use e-mail in a relatively short time since their invention. The present analysis concerns the creation of a digital model of communication during the pontificate of John Paul II (1978-2005). The inclusion of social media in the communication model of the Vatican, took place during the successors of the Pope from Poland.

Keywords

Digital communication, Internet, IT, social communication, social studies, Vatican.

When the Pope from Poland began his pontificate in 1978, the media world of the Holy See included the Sala Stampa, Libreria Editrice Vaticana together with Typographia Vaticana, L'Osservatore Romano and Radio Vaticana. The Holy See printed documents, papers, and books in many languages; the Vatican radio station was also multilingual; fast communication was through faxes and telephones. All these activities were carried out using analogue text, sound and image recording technology.

John Paul II led the Church in a time when Information Technology, including the Internet, were developing. This progress has made it possible to record any kind of data in the digital form, to collect it and to transfer it immediately to any place. Digitalisation has also allowed the Vatican to create a new model of communication with the modern world. This model was first based on the capabilities of computer networks, and then on the Internet. It should be stressed, however, that the existing technical capabilities are never the same as those used by an institution or community and its individual members. Such changes require a competent team of people and at least a friendly attitude of the most important person in the community or institution. In the Holy See, this involved John Paul II and a group of significant people.³

This article is an analysis of the stages in the creation of the Holy See's digital communication model – especially in relation to the capabilities of the Internet, which was developing more and more dynamically at the turn of the 20th and 21st century. Apart from John Paul II himself, the key figure in this case was Archbishop John Foley, together with a group of people from RIIAL and the Pontifical Council for Social Communications, which was headed by him, but also a modest nun, Judith Zoebelein, daughter of an American computer scientist, who headed the *Ufficio Internet della Santa Sede* from the year 1996.⁴

¹ Cf. Storia del Dicastero per la Comunicazione, https://www.comunicazione.va/it/chisiamo/storia.html (16.08.2020).

² Walery Pisarek defines precisely analogue and digital recording technology and the concept of digitisation – cf. entries authored by him used in the introduction to this article: W. Pisarek (ed.), *Słownik terminologii medialnej*, Kraków 2006: *Analogowa technologia zapisu tekstu, dźwięku, obrazu*, p. 8; *Cyfrowy zapis*, p. 26; *Digitalizacja*, p. 32.

³ S. Valentan, I tre Papi e la necessita degli strumenti di comunicazione sociale nella Chiesa, "Bogoslovni vestnik" 79 (2019) Nr 4, pp. 1075–1086.

⁴ F-X. de Vaujany, *Between eternity and actualization. The co-evolution of the fields of communication in the Vatican*, "Communications of the Association for Information Systems" 18 (2006), p. 365–366.

The subject of research related to the analyses contained in this text are the components of the Vatican's digital communication model – creation of the assumptions of the communication system within the Vatican and the Holy See with the world, testing the architecture of the operation in Latin America⁵, and launching the Vatican website and email system. The article ends with conclusions about the Vatican's digital communication system created during the time of John Paul II.

1. Communication system assumptions

At the beginning of the pontificate of John Paul II, the mass communication of the Holy See in real time was carried out mainly through the multilingual Vatican Radio, broadcasting 24 hours a day to the whole world. The Vatican also used TV broadcasts – in this case with the help of the Italian TV channel RAI. An important role was also played by L'Osservatore Romano – the daily newspaper of the Santa Sede, published also as a weekly. The publishing house, together with the Vatican printing house, which published the official documents of the Holy See, enjoyed its own reputation. All the listed tools were elements of a one-way communication. The achievements of information technology, especially the Internet, brought new, and almost unlimited communication possibilities.

It was a great surprise when the Pope from Poland published the first document in the history of Christianity on the role of computer technology. John Paul II's message "The Christian Message in a Computer Culture" was published in January 1990⁷, and it is worth recalling that the turn of the 1980s and 1990s was only the beginning of the presence of computers in households. At that time, these devices were more typically associated with computer games, and with music bands which used them to generate new sounds. Where, then, should

⁵ We are concerned with the Church's Latin America Information Network (Spanish: *La Red Informática de la Iglesia en América Latina*, in short: RIIAL).

 $^{^{\}rm 6}$ In English (since 1968), Spanish (since 1969), Portuguese (since 1970) and German (since 1971).

⁷ John Paul II, *The Christian Message in a Computer Culture. Message for the 24th World Communications Day 1990*, http://www.vatican.va/content/john-paul-ii/en/messages/communications/documents/hf_jp-ii_mes_24011990_world-communications-day.html (5.07.2020).

we find such a bold vision of the use of computer techniques in the service of the Church community?

At the time, the United States was the most technologically advanced society, and it was there that Steve Wozniak's first computers came into the hands of ordinary people. It was in the Pentagon that the Internet was born, and then made available to American universities. Finally, it was the US media outlets that were the first to use the latest technologies for conveying information and for communication in the broadest sense. Therefore, the sources of the idea of using computer technology in the Church must be sought in the USA. Father John Patrick Foley came to the Vatican precisely from this country. John Paul II appointed him as President of the Pontifical Council for Social Communications, in April 1984. The bold ideas of the Pope from Poland contained in the message of 1990 have their roots in the milieu of American Catholic media workers.

John Paul II's assumptions regarding digital communication can be reduced to: 1) providing access to the teaching of the Church, 2) providing quick information (communicating events and explaining one's position on problems), 3) listening to public opinion, 4) conducting dialogue with the contemporary world and 5) creating new applications of computer technology. As regards the search for new implementations of computer techniques in the Church's mission, the Pope counted especially on young people – it will be their "task to use new tools in an ever wider and more intense dialogue", but does not exempt adults from seeking appropriate forms of data storage and exchange. John Paul II perceived the need to use computer technology as a duty, or even a necessity, while he treats failure to use these new possibilities in communication as a shortcoming or as a deficiency in conduct. Thus, it is clear through JP II's vision that the culture of computers is appropriate in modern communication – also in matters of religion.

⁸ Ibidem.

2. The beginnings of the transformation of the communication system

The Polish Pope's assumptions in the field of a new style of communication in the Holy See, were implemented by an American, Father John P. Foley. This experienced media worker and long-time editor-in-chief of the weekly Catholic Standard and Times, had been the head of the Pontifical Council for Social Communications from April 1984 as Archbishop by the papal nomination. The implementation of John Paul II's ideas concerned both the Vatican (ad intra communication) and the Universal Church, and the contemporary world in general (ad extra communication). Foley came to the Vatican from the American environment, where new models of Apple computers enjoyed great popularity as early as the 1970s. The beginning of the 1980s meant an even greater availability of computers for ordinary US citizens. In addition to the aforementioned Apple, Commodore, Atari and IBM PCs were the leading models. In newspaper editorial offices, computer-based word processors and networked computers significantly improved and accelerated the work. It is not surprising, therefore, that the new chairman of the Pontifical Council for the media relied from the outset on the achievements of information technology (in the 1980s and early 1990s) and then on the Internet (from around the mid-1990s to 2007) in ad intra and ad extra communication. These two periods feature prominently in the efforts of Foley, as evidenced by his activity in organising the RIIAL network and the Internet communication system in the Holy See and the external Vatican. An additional impulse in the Church was the prospect of the Jubilee Year 2000 and the problem of the flow of information related to it, to bishops' conferences all over the world.

The first applications of IT in the service of the Vatican and the Church were to create a communication network making it possible to send out the documents of the Holy See, and to receive and send information from and to Rome and between Bishops' conferences, in a very short time. One of the contexts in which such efforts were put into practice, was in the preparations of the approaching Jubilee Year 2000.

⁹ Joint letter "Carta de Presentación del Estudio de Factibilidad" from the 1980s by Archbishop Dario C. Hoyos, President of CELAM and Archbishop John P. Foley evidences the bold plans of both hierarchs regarding the role of computer science in communication in the Church and the cooperation of both priests in this respect; cf. *Historia de la RIIAL explicada hoy*, http://www.riial.org/historia-de-la-riial-la-red-informatica-de-la-iglesia/ (5.07.2020).

2.1. RIIAL

In 1986 Foley started building a computer communication network in the poorest Church communities in Latin America, so that the new style of digital communication would not be "considered somewhat neo-colonial to impose such a system from Rome or the developed world in general". The Church's Latin American computer network was created with the substantive support of the Pontifical Council, which he headed, and the financial support of the Conference of Italian Bishops, and based on the know-how of IT companies (e.g. Olivetti, SICEI, IT Service ISE).

The name of the network was proposed by John Paul II himself – according to the Pope's vision, it would follow cultural axes. *La Red Informática de la Iglesia en América Latina* (RIIAL) was to become "an example for other continents until it became a network of the Church"¹¹. The first project for the computerisation of the Church in Latin America concerned the period between 1987 and 1988 and was completed in 1989.¹²

In South America, Foley found a very fertile ground – an environment of lay and clerical specialists (including bishops!), dealing with issues related to communication mediated by computer networks, and examining their usefulness in the environment of bishops, dioceses, religious congregations and parishes. A great advantage was the virtually single language used throughout Latin America. The vast area and the number of potential users were conducive to the capture of any problems in the digital communication system being built, and the number of specialists involved increased the chances and hope of solving them. The experience gained in the setting up of RIIAL was then used to develop the Vatican's digital communication with the Universal Church and general public.

J. P. Foley, *Internet Gives New Meaning to «Deus ex Machina»*, https://zenit.org/2001/06/07/archbishop-foley-s-address-for-communications-day/ (5.07.2020).

As cited in *La historia de la RIIAL*, http://www.riial.org/historia-de-la-riial-la-red-informatica-de-la-iglesia/ (5.07.2020).

An important moment of the promotion of the project was the presentation of the book entitled "Comunicación, misión y desafío" in Bogotá in 1986, at which Archbishop J. Foley was present. In his speech, he stressed the advantages of IT solutions for the Church on the South American continent and the possibility of establishing a continental communication network via satellite and regional networks.

When analysing the documentation¹³ of RIIAL in terms of John Paul II's five priorities, the greatest activity of the organisation in relation to the creation of new applications of computer techniques, can be observed in the period until 2005 (priority number 5): a) setting common standards for computer (and communication) networks, b) mutual references of the continental Church network and the network of local Churches of Latin America, c) open architecture of individual networks (RIIAL, CELAM, Episcopal conferences, dioceses and orders, parishes), d) IT education of technicians, e) application of real-time communication tools in national information agencies and catechetical services. The emphasis which John Paul II put on the need to collect and make available the teaching of the Church (priority No. 1), in the case of RIIAL was complemented by the cultural aspect – the document and data bank would cover priestly care, but also the cultural heritage of Latin America. The issues of rapid communication and clarification of the Church's position on current problems were to be addressed by the already mentioned news agencies within RIIAL. The meetings of the interested parties played a fundamental role in the creation and subsequent development of the Information Network - first as informal meetings in small circles, such as during the presentation of a book in Bogotá on the Church's communication and mission, and then by continental meetings convened from time to time.¹⁴ By 2003, RIIAL had become a communication tool for CELAM (The Latin American Bishops' Conference) and individual Latin American episcopates – also in terms of pastoral care.¹⁵ The crowning achievement of the efforts was the establishment of the Centre for the development of ecclesiastical software and the training of priests in the field of information

¹³ Cf. *Breve historia de la RIIAL*, http://www.riial.org/historia-de-la-riial-la-red-informatica-de-la-iglesia/ (5.07.2020); Misión Visión y Objetivos de la RIIAL, http://www.riial.org/la-riial-mision-vision-objetivos/ (5.07.2020).

¹⁴ The first meeting took place in 1994. During the period analysed here, i.e. during the pontificate of John Paul II, until 2005, nine such meetings took place, including one in Italy – in May and June 1992 at the Olivetti Training seat in Florence; a training course for technicians from Latin America was also held there. During these two months, basic software components (based on the Unix operating system) to be used in RIIAL were analysed. In 2003, an international congress was also held in Monterey (Mexico) dedicated to the Church and information technology.

The international congress "Iglesia e Informática. Hacia una red humana de respuesta y ayudas" took place in April 2003 in Monterey, Mexico. Its participants included 12 bishops and 1 cardinal, which proves the interest that it had generated. The Congress laid the foundations for far-reaching activities for the Latin American Church.

technology in Santa Fe, Argentina, in the same year. During the lifetime of John Paul II (2004), the Archdiocese of Madrid published the "Internet Guide of the Catholic Church" as part of the RIIAL Project (a book with a CD-ROM), a new version of software for Church offices and a database of Church documents. All the materials were handed over to the participants of the 8th RIIAL continental meeting in Santiago de Chile, and then distributed throughout Latin America. The availability of the teachings of the Church through the achievements of computer science and the use of computer techniques in the Church community – since 1986, when RIIAL was established – gradually became a reality (see Fig. 1).

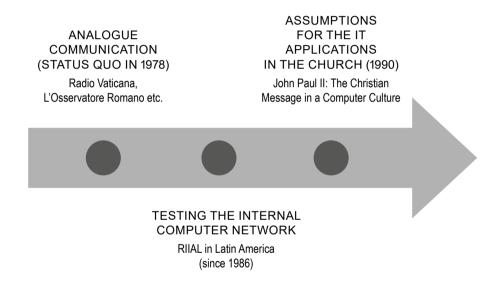


Fig. 1: From the analogue to the digital communication of the Vatican

2.2. Creativity of collaborators

The realization of this computer-based communication network, was due to the work of Archbishop John Foley together with a large group of collaborators

We are concerned here with a centre named Centro Nuestra Señora de Guadalupe in Santa Fe de la Vera Cruz. Its task was to develop software for the Church environment and to train priests in the field of information technology (online and stationary formation courses). The centre was managed by Daniel Cabaña from Argentina under the leadership of bishop Lucio Ruiz – cf. *La historia de la RIIAL explicada hoy*, op. cit.

from various Latin American countries. Among the closest from this cultural circle were the hierarchs: Darío Castrillon Hoyos (Colombia, Vatican), Juan Luis Ysern de Arce (Chile), priests like Enrique Planas y Coma and Leticia Soberón Mainero, a specialist in social communication.

Archbishop Dario C. Hoyos took part in the work of RIIAL both as President of the Latin American Bishops' Conference (CELAM), but also as Cardinal and Prefect of the Congregation for the Clergy. He was a great supporter of educating seminarians in the field of computer and Internet applications in pastoral work. He treated the ability to use the computer proficiently on a par with the ability to read and write. He stressed the need to conduct interdisciplinary scientific research on the Internet as a new means of evangelisation, communication and building a Church community. According to him, it is necessary to educate clergy, who would then analyse the ever-new possibilities of using IT in the mission of the Church.¹⁷

Ysern de Arce was born in Spain in 1930, nominated bishop of Chile in 1972; he had a significant influence on Latin American hierarchs – he called for their interest in computer technology in the context of the Church. He stressed that without shepherds we cannot speak of pastoral work. As early as in the 1990s, he analysed the possibilities of applying computer technology in pastoral work. He was one of the first hierarchs to pose questions about the use of computer technology in the Church's everyday mission. Although he was in favour of using the achievements of computer technology in pastoral activity, he also saw the dangers. In an extensive lecture delivered during the RIIAL continental meeting in the Brazilian capital in 1995, in addition to many incentives with regard to the pastoral work of the Church, he also spoke of the need for the analysis and humanisation of the culture of information technology.¹⁸

¹⁷ Cf. D. C. Hoyos, *El sacerdote y la informatica*, https://es.catholic.net/op/articulos/6173/cat/45/el-sacerdote-y-la-informatica.html#modal (12.01.2021). Due to his computer and pastoral competence, it is not surprising that the Website www.clerus.va of the Congregation for the Clergy from the very beginning contained materials for priests, deacons and seminaries. The "Library" with 31 sections – from catechesis and homilies to the works of the Fathers of the Church – is particularly impressive today.

Ysern de Arce also included concerns about the new technique; according to him, the widespread use of computers in various areas of life can lead to... unemployment. Fortunately, the bishop of the diocese of San Carlos de Acud quickly abandoned this style of thinking, observing the creation of new jobs related to information technology and then to the Internet – cf. J. L. Ysern de Arce, *Elementos básicos para una pastoral de la informática y de las nuevas tecnologías de la comunicación social*, Brasília 1995.

Planas y Coma – a Spanish clergyman, appointed director of the Vatican Film Archives director in 1985, and appointed director of the Office of the Pontifical Council for Social Communications in 2004. As one of the important personalities in the RIIAL, he stressed the Community character of the Network and encouraged the involvement of individual Latin American Churches in this project. In his lecture, he spoke of the need to apply the achievements of IT in priestly work and of the fact that the subject of the activities, including within RIIAL, is a human being, not ever faster computers and more and more complex software.¹⁹

Mexican woman, Leticia Soberón Mainero, is a communications expert. Since 1997, she has worked at the Pontifical Council for Social Communications in the Vatican; she was also actively involved in the work on RIIAL, in which she has been the general coordinator since 2006. Soberón Mainero defended her doctoral thesis in 2008, entitled "La inteligencia conectiva en la Red Informática de la Iglesia en América Latina"²⁰, at the Interdisciplinary Centre for Social Communication of the Pontifical Gregorian University in Rome, headed by Professor Michele Sorice.

The Church's Information Network in Latin America became a great laboratory where the latest ICT solutions for the Church were tested. The teamwork, which was multifaceted, brought solutions to many problems. The Vatican passed on its experience to the RIIAL network, and the latter to the Holy See. This two-way exchange of experiences served to develop a digital model of communication for the Church – in the first stage it was based on computer networks

According to Planas y Coma, the Church and its structure is the best model for a network such as RIIAL and the similar ones. He understood the network as a service to the Church community. He saw the enormous impact of digital communication on human life – both its highlights and shadows (cf. E. Planas, *Una red informática para la comunion eclesial*, https://es.catholic.net/op/articulos/20996/cat/156/horizontes-eclesiales-en-informatica.html#modal (14.01.2021).

In her dissertation inspired by the Ph. Howard's research methodology on social network, which RIIAL is, she proved that digital networks of this kind strengthen so-called connective intelligence, so that they can become an appropriate way for the Church to better address the challenges of the information society. She is currently a member of the Pontifical Dicastery of Communication. Cf. M. L. Soberón, *Collaborative intelligence. How to make our human-sized digital key conversations for transforming organizations smarter*, "Psychology and Cognitive Sciences Open Journal" 4 (2) (2018), s. 48–51; M. L. Soberón, *La inteligencia conectiva en la Red Informática de la Iglesia en América Latina (RIIAL)*, "Signo y Pensamiento" 28 (54) (2009), s. 300–316.

such as RIIAL, and in the second stage – in the early 1990s – the Internet became the basis for digital communication, not only in the Church.

3. The registration of *.va domain and electronic mail system

Foley's efforts were not just limited to RIIAL – he worked in parallel on the internal communication system in the Vatican, which was also to be a window on the world. In the early 1990s, a significant change in digital communication took place through the introduction of standards for new Internet protocols for websites. If to this we add the development of email, we can speak of a real revolution that surpasses computer networks in the field of communication. The experience related to local RIIAL computer networks was not in vain – it was translated into the Internet, which was much more convenient to use and at the same time had a universal range – both locally and globally. The range covers every point of the globe and every single office or person – the condition is having access to the Internet (see Fig. 2).

Through his actions concerning digital communication, Foley took into account five assumptions of John Paul II from 1990, but also drew attention to others: 1) unambiguous identification of the Vatican on the Internet, 2) guarantee of authenticity and integrity of texts.

The national top-level Internet va domain has been granted to the Vatican after Foley's efforts; the abbreviation va at the end of the address guarantees its identification on the internet with Vatican. The va domain was established on 11 September 1995; the Holy See – Vatican City State was indicated as the entity currently holding rights to it; the Department of Telecommunications was appointed as the administrative service, and the Vatican Internet Service as the technical one²¹. From the moment the va domain is added to the directory, only the Holy See may create and give appropriate rights to website and email addresses. Therefore, on the basis of the addresses identified by the va domain, the users of the Network can be sure that they "receive certain and authentic information"²². It also makes it possible to distinguish between sites that merely claim to represent the Vatican and the genuinely Vatican ones. All texts in the va

Data according to IANA WHOIS Service, https://www.iana.org/whois?q=vatican.va (16.07.2020).

²² J. P. Foley, *Internet Gives New Meaning to «Deus ex Machina»*, op. cit.

domain can certainly be regarded as "truly authentic, fully Catholic and of truly Vatican origin"²³. Such identification guarantees the authenticity and integrity of the teaching in the sources in the *va* domain pages, as opposed to unreliable texts by authors claiming to be clergymen or theologians.

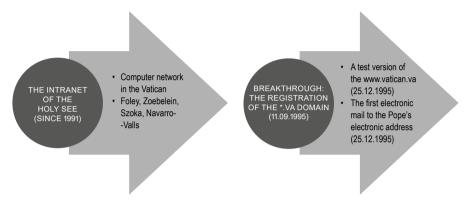


Fig. 2: The implementation of the assumptions for IT applications

It is worth noting at this point that the domain of the Church's Latin American Information Network called riial.org was registered on 29 May 1997 in Santiago, the capital of Chile, through one of the branches of RIIAL, almost two years after that of the Vatican.²⁴ As can be seen, at this stage the Holy See was ahead of the Latin America Network, i.e. by registering a domain, developing and making its own website available on the Internet, and thus a new phase of digital communication. The significant acceleration was due to several factors – the most important being the arrival in the Vatican of Sr. Judith Zoebelein, the daughter of an American computer specialist.

4. The Vatican website

Zoebelein took her interest in computer technology and telecommunication systems with her to Rome. In the Holy See she quickly formulated and passed on the idea of a Vatican website to Pope John Paul II. The Pope, together with

²³ J. P. Foley, *Internet Gives New Meaning to «Deus ex Machina»*, op. cit.

Data for such subdomains in the.*org* domain according to https://whoisweb.dreamhost.com/ (16.07.2020).

J. Navarro-Valls, not only approved of her idea²⁵, but "took the initiative by allowing his words to be posted on the Internet."²⁶ Cardinal Szoka, who was responsible for the Vatican's finances, raised an adequate amount of money among American donors.²⁷ Sr. Judith led the "Ufficio Internet della Santa Sede", assembled a team of computer specialists and editors and, together with Foley, started to build the Vatican's digital communication system both *ad intra* and *ad extra*.

The registration of the top level domain, i.e. va, was preceded by a survey questionnaire from Foley to the postal and telegraphic services which, according to Foley, were the two most interested services of the Holy See. He asked them about the benefits that could be provided by using their own internet address; they replied that they needed to think about it.²⁸ Without waiting for their analyses, and having as their ally and great supporter of the Internet the Vatican's spokesperson, J. Navarro – Valls, Foley and Zoebelein together with their team started a discussion and preparations for the first version of the Vatican website. Thus, the idea for the Web itself was born in 1994 from a discussion between "friends and colleagues talking about ideas."²⁹

At the same time, this Website was an empirical test of the response to it. The website, which was launched on the Christmas of 1995, was extremely simple.³⁰ It included the Pope's Christmas address, the text of *Urbi et orbi* blessing in many languages and a link for those who wished to send an email to John Paul II. "In the first 48 hours, more than 300.000 people from 70 countries visited the site. About 1.000 people left messages."³¹ The new element of *ad*

Seeing the Spirit at work in the world, http://vision-vocation-guide.blogspot.com/2006/11/sister-judith-zoebelein-developer-of.html (16.01.2021).

The Pope's strong support is confirmed by S. Judith, and at the same time he sees John Paul II's attitude as approving of the use of the Network in reaching out to both Catholics and non-Catholics, cf. J. Zoebelein, *The Vatican*, w: D. Arasa, L. Cantoni, L. A. Ruiz (eds.), *Religious Internet Communication. Facts, Trends and Experiences in the Catholic Church*, Rome 2010, pp. 139–144.

T. Staley, *Surf's up. Vatican website serves as an important resource since Pope John Paul OK'd it*, https://www.thecompassnews.org/compass/2003-08-22/editorial1.shtml (23.01.2021).

²⁸ J. P. Foley, *Internet Gives New Meaning to «Deus ex Machina»*, op.cit.

J. Zoebelein, *The Vatican*, op. cit., p. 140.

It should be added that at that time it was mainly HTML text and at most GIF or photo. It had not been long since Tim Berners-Lee himself designed the first web at the beginning of 1990, when the web was in its infancy.

T. Staley, Surf's up. Vatican website serves as an important resource since Pope John Paul OK'd it, op.cit.

extra communication was very positively received by the media: the appearance of the website was a success.³² Sr. Zoebelein herself and her colleagues were surprised by the incredible popularity of www.vatican.va. The activities of the *Ufficio Internet della Santa Sede* were supported and used by the spokesperson for the Holy See, who profoundly reformed the Vatican Press Office. The shift of contacts with the media world to digital communication was described as a revolution.³³

Staley recalls the Vatican's website dormancy from the Christmas of 1995 to Easter 1997 despite, as he claims, the positive opinions of the Pope and other Church officials and (...) the Pope's personal intervention twice.³⁴ Foley and Zoebelein treated the launch of the first version of the website in 1995 with the texts of John Paul II as an empirical test.³⁵ It was a positive development and the *Internet della Santa Sede* team began to build a proper Holy See website that could meet the high standards of digital communication. The work took over a year, and this should not come as a surprise, as it was an institution with a global reach, a complex structure and a large number of different types of documents which come in many languages.

The Vatican website would not have started to exist in 1995 if it had not been "for the incredible vision and foresight of Pope John Paul II, who from the very beginning supported and promoted the use of the Internet."³⁶

Today, after 25 years, it is difficult to find out what was happening on the Vatican's website during those months, and even more difficult to rely on the sources. Wayback Machine – a digital archive of websites and other information available on the Internet – is one source which, although it does not have a copy of the Vatican site from December 1995, allows for an indirect reference to a turning point in the history of this site; this is the new version published

³² Ibidem.

³³ This is the wording used by Greg Burke in his memoirs after the death of J. Navarro-Valls. The Holy See's Press Room sent out a bulletin every day on the Internet, which at the time was a sensation – cf. KAI, *Stolica Apostolska w Internecie*, https://kair.ekai.pl/depesza/23404/show?q=%22Stolica%20Apostolska%20w%20Internecie%22 (24.07.2021).

Only Staley gives this information about the papal intervention – cf. T. Staley, op. cit. But a(ny) person who has taken part in this type of communication can tell you how much work S. Judith has done in a small team over a period of several months with very good results.

J. Zoebelein, *The Vatican*, op. cit., p. 140-141.

J. Zoebelein, *The Vatican*, op. cit., p. 140.

on 30 March 1997.³⁷ At that point it included 1200 texts by Paul VI, John Paul I and John Paul II with a total volume of 300 MB in 6 languages: Italian, English, French, German, Spanish and Portuguese. The Vatican's website also coincided with the introduction of 200 email addresses in the *va* domain; they served for internal communication between individual entities of the Holy See, as well as external communication – including the media, Bishops' conferences around the world and apostolic nunciatures.³⁸

As for the Vatican's website which was launched in March 1997, a very logical menu in six languages, and a careful design with a pastel background containing graphics from the Basilica and St. Peter's Square should be highlighted. The dichotomous structure of the site was based on the organisational chart of the Roman Curia, which had been developed over the years³⁹ and was presented by John Paul II himself. Subsequent pages could also serve as a model for combining graphic design with an extensive and at the same time intuitive menu of individual pages. Everything that was related to the Internet in the years 1995–1997 was a breakthrough in the *ad extra* and *ad intra* Vatican communication.

5. Conclusions

The strength of creating the Vatican's digital communication model was John Paul II himself – a great supporter of taking advantage of the possibilities of the new culture of the computer age. The proof of this is his teaching in this area⁴⁰, as well as the strong personal support for the computerisation of Vatican offices and the launch of the website of the Holy See. The Pope's personal e-mailing of the Apostolic Letter to the Church of Australia and Oceania has grown to the rank of a symbol – the photograph of John Paul II clicking a computer while sending an email is one of the most characteristic pictures of his pontificate.

Wayback Machine first saved a copy of www.vatican.va on 30 January 1998. Since then, by July 2020, it has been copied more than 7300 times in its entirety, which makes it possible to study the development of Vatican digital communications through this channel. Cf. https://web.archive.org/web/*/vatican.va (14.08.2020).

³⁸ KAI, Stolica Apostolska w Internecie, op. cit.

Zoebelein mentions here the yearly "Annuario Pontifico" – cf. J. Zoebelein, *The Vatican*, op. cit., p. 143.

The time frame for this teaching extends from the first document on the subject, i.e. *The Christian Message in a Computer Culture* (1990) to the last one – *Fast Development* (2005).

Among religious leaders, it is rare to see such significant support for digital Internet communication.

Other people who have directly influenced the development of digital communication in the Holy See were: the spiritus movens of the aspirations - Archbishop John P. Foley, Franciscan and computer specialist Sr. Judith Zoebelein and a group of clergy and lay Catholics from RIIAL. Those two Americans, especially Foley as the President of the Pontifical Council for Social Communications, initiated the introduction of everyday use of computers and the Internet in the Vatican. The RIIAL theorists and practitioners working with the Vatican included people with considerable influence in CELAM and in the Holy See (Castrillon Hoyos, Ysern de Arce, Planas y Coma, Lucio Ruiz, Soberón Mainero, among others). The testing of the development of the digital communication model in Latin America was a favourable circumstance. Numerous experiences from the RIIAL computer network communication stage in the vast territory of South and Central America were creatively used in the next stage - Internet communication - first in the Vatican and then in the whole Church. The example of Sala Stampa, the first fully computerised office in the Holy See⁴¹ and the role played by the Vatican spokesperson, Navarro-Valls, in this regard, were also significant.

Among the weaknesses, we should mention the multitude of entities in the Holy See which were practically independent of each other. Individual dicasteries are headed by presidents who are responsible only to the Pope. The lack of an efficient flow of information between them at the turn of the century, and their independence, made it even more difficult to coordinate efforts with regard to digital communication and to set standards (including technical standards) for it. The age of the individuals at the head of the various entities and the lack of skills in using computer equipment at that time ("I often taught cardinals how to use a mouse") did not help either. Office computerisation was met with the resistance of the staff ("this can also be written by hand or on a typewriter"), which also involved job cuts ("one person can now do the work of 4–5 others"). ⁴² In terms of content published through digital communication, the Vatican

⁴¹ S. Mora, *Navarro-Valls Was Able to Manage the Internet Revolution in the Vatican*, https://zenit.org/2017/07/06/navarro-valls-was-able-to-manage-the-internet-revolution-in-the-vatican-says-greg-burke (26.08.2020).

The last three quotes in brackets are from the analysis of F-X. de Vaujany, *Between eternity and actualization. The co-evolution of the fields of communication in the Vatican*, "Communications of the Association for Information Systems" 18 (2006), p. 365.

media under Pope John Paul II first came under the Press Office and then, for diplomatic reasons, under the Secretariat of State.⁴³

Since the times of John Paul II the weakest and most criticised element of Vatican digital communication is the bidirectionality, or, to be more precise, the lack thereof. While in the 1990s, the Web 1.0 version of the Internet lacked a practical possibility to comment on and discuss in real time⁴⁴, at the turn of the century such opportunities appeared on the websites. Although online dialogue with Internet users was discussed among Vatican employees, the Vatican website did not have such facilities built in. What is more, there was no decision on two-way communication in the digital space, and the only answer was silence.⁴⁵

The internal weakness of the Vatican in launching the digital communication model was also some internal tensions – many personalities questioned the legitimacy of the Holy See's presence on the Internet because of the "content on the Web which is not in line with the commandments." ⁴⁶ Of significance was also the Vatican's limited financial capacity to purchase significant amounts of hardware and software. ⁴⁷

Digital communication – whether online or network-based – offers great opportunities, but is also exposed to various risks. External risks in the case of computer networks were the loss of connection between computer units to a greater or lesser extent. Although Internet-based communication is much less labile⁴⁸, there are other dangers – hacking into data servers, replacing data (e.g. substituting some part of a text and thus undermining the integrity of papal teaching), stealing data or disabling the website, or a simple blackout. However, these technical dangers are usually quickly removed and security copies allow

Now, after the reform initiated by François, all media entities are forming a separate dicastery with the President – Dicastery for Communication, cf. L. Gęsiak, *Reform of the Vatican media*, a difficult search for a new path, "The Person and the Challenges" 7 (2017) 2, pp. 5–22.

⁴⁴ The only exceptions were specialist discussion forums.

Zoebelein draws attention to this by quoting a question from her superiors about who is to respond to internauts' queries and dialogue with them – cf. J. Zoebelein, *The Vatican*, op. cit., p. 144. Even today, the Vatican's social media profiles lack dialogue with internet users.

These discussions were quickly cut short by Pope John Paul II, who unequivocally supported the creation of the Vatican website and allowed papal teaching to be placed on the Internet – cf. J. Zoebelein, *The Vatican*, op. cit.

J. Zoebelein, *The Vatican*, op. cit.

 $^{^{\}rm 48}$ The structure of the Internet, which resembles a spider web, allows one to bypass the damaged part of the Network and reach certain information indirectly.

for the recovery of data in the eventuality of a hacking attack or any other type of interference.

The combination of John Paul II's 1990 assumptions, in testing a model of Church communication in Latin America, and building a new style of communication within the Vatican, as well as the Holy See with the world, resulted in a new digital model of communication in the Vatican. The involvement of John P. Foley, Judith Zoebelein and the collaborators from RIIAL has allowed for the efficient use of the Internet in place of computer networks in the Vatican. It is surprising that despite Pope Wojtyla's teaching, to this day the possibilities of two-way digital communication of Web 2.0 have not been used to the full extent in dialogue with the modern world. Although the Vatican social media (Twitter, Facebook, Instagram) allow comments to be added, no one from the staff of the Holy See is engaging in dialogue. On the Vatican's YouTube profile, comments are disabled. As for the Holy See profiles, the two-way model of social media communication is not fully utilised.

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