



FUNCTIONAL MEASUREMENT IN ITALY: A GLIMPSE INTO THE PAST WITH LUIGI BUGLIONE

By: Luigi Buglione and Joe Schofield

Introduction: As one surveys the Mediterranean Sea's north boundary, the peninsula nation of Italy rests virtually in its middle. Situated near Italy's vertical center is its capital Rome, a city that dates at least 3,000 years, though some would argue closer to 12,000. Rome is Europe's third largest city with nearly three million residents. A rich source of western civilization's history, Italy can be recognized as also contributing richly to IFPUG and software functional measurement.

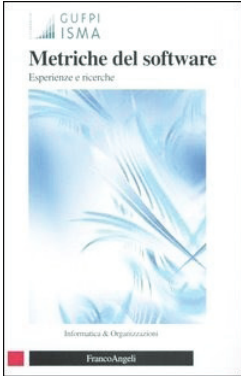
The establishment of IFPUG in 1987 included a vision of international participation that went beyond the mere boundaries of North America. In the last *MetricViews* issue, Brazil's prominent role in the international growth and use of Functional Point Analysis (FPA) in Brazil, in particular, was evidenced. In this issue, we explore the impact of functional size measures on a third continent, Europe, and specifically, Italy. Italy hosted the first non-North-American IFPUG conference in 1996 and its citizens have maintained an active role in the evolution and maturity of software sizing.



Italians currently occupy three seats on the IFPUG Board of Directors with Luigi Buglione as the Director of Non-Functional Sizing Standards & Industry Standards, Cinzia Ferrero as the Director of Certification and Roberto Meli as the Director of Functional Sizing Standards, leading the introduction of Simple Function Points (SFP), a simple approximation of IFPUG Function Points.¹ Filippo De Carli served too on the board recently as the Director of Conferences and Education before and for a brief

period as the Director of Certification. In addition, Francesco Gasparro serves as a member of the Certification Committee; Marcello Sgamma, Daniele Zottarel, and Domenico Geluardi are all members of the Functional Sizing Standards Committee (FSSC); Fabrizio Di Cola serves as Chair and Nicolantonio Auciello and Marcello Sgamma as members of the Non-Functional Sizing Standards Committee (NFSSC); and Paola Billia is the Italian Country Representative within the International Membership Committee (IMC).

Abridged History: As early as 1990, Loredana Mancini and Domenico Natale established GUFPI² (Gruppo Utenti Function Point Italia, the Italian Function Point Users Group) to proliferate the usage of Function Points in Italy. About 10 years later, the then-nonprofit organization added Italian Software Metrics Association (ISMA) to its name to encompass software measurement. The book “Metriche del software” (Software Metrics) was published in 2006³ to advance the understanding and to further proliferate software measurement efforts.



As interest in non-functional measurement grew, the Software Non-functional Assessment Process (SNAP) project was triggered within IFPUG. Loredana Frallicciardi, Italy's first representative on the IFPUG Board of Directors, was the Director of the team that initiated the SNAP effort. Eventually, SNAP's development was not only sponsored

by IFPUG but was also approved by international standards organizations.^{4,5} Many current and former IFPUG members played key roles during SNAP's development.

In 2008, GUFPI-ISMA elected Luca Santillo as President. Shortly thereafter in 2012, GUFPI's members elected Luigi Buglione as its next President. By 2013, GUFPI-ISMA moved exclusively to individual memberships and was sponsoring three conferences annually. The co-sponsorship for ISMA12, Europe's first ISMA conference, by GUFPI-ISMA was a logical next step in the growth of both organizations. IFPUG's ISMA12 was the first ISMA conference held in Europe, in Rome in 2016 with 325 software measurement enthusiasts in attendance. The widely attended ISMA15 returned to Rome in 2018, this time drawing 328 attendees.



The COVID-19 pandemic impacted Italy significantly as it did so many nations. The “EventoMetrico” (Metrics Event) was offered online

beginning in 2018 and had more than 300 online attendees this past May 2022. Mr. Buglione who was re-elected in successive elections is serving his third consecutive term as GUFPI-ISMA's President while concurrently serving on the IFPUG Board of Directors to advance function points globally.

In the past, other Italian members have participated in IFPUG committees and roles including Nicoletta Lucchetti, Certification Committee, and Giovanni D'Alessandro, Italy's country representative on the International Membership Committee.

Recently: Today, an estimated 70 to 80 organizations are represented among GUFPI-ISMA's approximately 400 members. GUFPI-ISMA continues as the primary advocate for function and non-functional software measurement with memberships from Europe and Brazil. A non-profit organization, it was historically comprised of three active committees: Counting Practices, Benchmarking and Software Measurement. More recently, working groups were established with one-year terms in an attempt to implement a shorter-term more agile work approach.

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Function points and function point counting organizations constituted some of the early roots of software sizing in Italy. The practical application and ongoing significance of software measurement in Italy are evidenced today in large public bids both within the central government and other local jurisdictions.^{6,7} The inclusion of IFPUG's Function Point Analysis as the primary sizing approach began circa 1990. While only slightly speculative, it is very likely that billions of Euros in contracts have been awarded at least in part, based on the use of IFPUG's FPA. Many of these public, as well as private sector bids, also stipulate SNAP⁸ and other function point variants as part of those evaluations.⁹

Lastly, as approved in April of 2021, GUFPI-ISMA members contributed to the creation of a national standard for a new competence known as the “metric expert.” This designation recognizes the unique capabilities of individuals devising, deploying and governing with new metrics in the Information and Communications Technology sector.¹⁰

The Future Looks Busy: GUFPI-ISMA is looking to the future to accelerate software measurement, which also aligns with IFPUG membership interests. Some of these include:

- Measuring project value and intangible assets. The now active working group's first deliverable—a publication—is expected before the end of 2022.
- Translating the UNI 11621-6:2021 standard into English as well as the creation of a competence-based certification exam early in 2023.

- Encouraging the usage of measures throughout the industry and the public sector with instruments like Balanced Scorecards and Visual Measurement to promote overall market maturity.
- Teaching and coaching students from universities and secondary schools about the need and value of proper measurement to support good decision-making processes.
- Preparing for the next EventoMetrico in Italy. Or as they say in Italy, it's more than a conference, it's an experience.

In Closing: The saying “all roads lead to Rome”¹¹ may reflect the Roman Empire’s engineering of the first “roads” in 300 B.C. Soon thereafter, almost 30 such “paved” military highways emanated from its capital.¹² Today’s “information highways” are much faster and require far less physical labor; of course, moving bits and bytes is not quite the same as moving legends of militia and their equipment. The efforts and contributions of the individuals and organizations in this article continue to pave the way for future software estimation, measurement and development. 🚧

REFERENCES AND FURTHER READING:

- ¹ <https://ifpug.org/ifpug-standards/sfp>
- ² <https://www.gufpi-isma.org/?lang=en>; retrieved 7/13/2022
- ³ https://www.agid.gov.it/sites/default/files/repository_files/guida_tecnica_metriche_software.pdf; retrieved 7/13/2022
- ⁴ IEEE 2430-2019 “Trial-Use Standard for Software Non-Functional Sizing Measurements”
- ⁵ ISO standard 32430:2021 “Software Engineering—Trial Use Standard for Software Non-Functional Sizing Measurements”
- ⁶ <https://tinyurl.com/jajfvnph>; retrieved 7/22/2022
- ⁷ CONSIP is the name of the Public Entity owned by the Ministry of Economy (<https://www.consip.it/azienda/chi-siamo>)
- ⁸ Software Non-Functional Sizing Standard (SNAP); IEEE 2430-2019 - IEEE Trial-Use Standard for Software Non-Functional Sizing Measurements,” and the ISO standard “Software Engineering—Trial Use Standard for Software Non-Functional Sizing Measurements
- ⁹ Gartner’s Fast Function Point Analysis (FFPA), as an example
- ¹⁰ UNI 11621-6:2021; https://store.uni.com/p/UNI11606040/uni-11621-62021-309047/UNI11606040_EIT
- ¹¹ <https://www.livescience.com/do-roads-lead-to-rome>
- ¹² https://en.wikipedia.org/wiki/Roman_roads

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