# Giuseppe Nicolò

Accounting & Business Studies

# The rise of intellectual capital disclosure from private to public sector

The case of Italian Public Universities

**FrancoAngeli** 



# Informazioni per il lettore

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# **INDEX**

A	bbreviations	p.	9
Li	ist of tables	<b>»</b>	13
Li	ist of figures	<b>&gt;&gt;</b>	13
In	atroduction	<b>»</b>	15
1.	The rise of Intellectual Capital	<b>»</b>	21
	1.1. Intellectual Capital and theoretical background	<b>&gt;&gt;</b>	21
	1.2. Main definitions and key components of Intellectual		
	Capital	<b>»</b>	25
	1.3. The biggest Intellectual Capital hindrance: the account-		
	ing treatment	<b>»</b>	29
	1.4. From Intellectual Capital reporting to Intellectual Capi-		
	tal disclosure	<b>»</b>	40
2.	Intellectual Capital in the public sector	<b>»</b>	53
	2.1. Setting the context for Intellectual Capital in the public		
	sector	<b>»</b>	53
	2.2. The concept of accountability	<b>»</b>	57
	2.3. The wave of New Public Management: new paths to-		
	ward accountability	<b>»</b>	63
	2.4. New Public Management and Intellectual Capital	<b>»</b>	67
	2.5. Identifying and reporting Intellectual Capital compo-		
	nents in the public sector: some attempts	<b>»</b>	72
•			
5.	Intellectual capital in universities: the evolution of higher education systems and the relevance of intellectual capital		
	disclosure		80
	uisciusui c	>>	90

ntellectual Capital in higher education institutions:		
ackground and the need for Intellectual Capital disclo-		
ure	p.	80
The evolution of higher education institutions' roles: the		
mergence of third mission	<b>&gt;&gt;</b>	84
.2.1. The Bologna Process and the Lisbon Strategy	<b>&gt;&gt;</b>	88
The New Public Management reform process in higher		
ducation systems	<b>&gt;&gt;</b>	95
.3.1. The Influences of NPM and the Bologna Process		
in the Italian higher education system	<b>&gt;&gt;</b>	103
ntellectual Capital reporting in universities: European		
xperiences	<b>&gt;&gt;</b>	112
.4.1. The Austrian experience: The Wissensbilanz	<b>&gt;&gt;</b>	113
.4.2. The Observatory of the European University		
(OEU)	<b>&gt;&gt;</b>	116
.4.3. The RICARDIS project	<b>&gt;&gt;</b>	118
.4.4. INGENIO and HERO projects	<b>&gt;&gt;</b>	120
<u> </u>		
empirical evidence from performance report inves-		
<u>-</u>		
on	<b>»</b>	121
on ntroduction	» »	121 121
on ntroduction diterature review: theoretical background and prior re-		
on ntroduction		
on antroduction diterature review: theoretical background and prior research on Intellectual Capital disclosure in universities and 2.1. Theoretical background	<b>»</b>	121
on introduction diterature review: theoretical background and prior research on Intellectual Capital disclosure in universities and 2.2.1. Theoretical background disclosure in 1.2.2. Prior research on Intellectual Capital disclosure in 1.2.2.	» »	121 126 126
on antroduction diterature review: theoretical background and prior research on Intellectual Capital disclosure in universities and 2.1. Theoretical background	» »	121 126
on introduction diterature review: theoretical background and prior research on Intellectual Capital disclosure in universities and 2.2.1. Theoretical background disclosure in 1.2.2. Prior research on Intellectual Capital disclosure in 1.2.2.	» » »	121 126 126
ntroduction iterature review: theoretical background and prior re- earch on Intellectual Capital disclosure in universities .2.1. Theoretical background .2.2. Prior research on Intellectual Capital disclosure in universities	» » »	121 126 126
ntroduction iterature review: theoretical background and prior re- earch on Intellectual Capital disclosure in universities .2.1. Theoretical background .2.2. Prior research on Intellectual Capital disclosure in universities desearch methodology	»  »  »  »	121 126 126 132 139
on introduction diterature review: theoretical background and prior research on Intellectual Capital disclosure in universities and 2.2. Prior research on Intellectual Capital disclosure in universities desearch methodology and source of data	»  »  »  »  »	121 126 126 132 139
on introduction iterature review: theoretical background and prior re- earch on Intellectual Capital disclosure in universities i.2.1. Theoretical background i.2.2. Prior research on Intellectual Capital disclosure in universities itesearch methodology i.3.1. Sampling process and source of data i.3.2. Content analysis and framework development	»  »  »  »  »  »	121 126 126 132 139 139
	ackground and the need for Intellectual Capital disclo- ure The evolution of higher education institutions' roles: the mergence of third mission  2.1. The Bologna Process and the Lisbon Strategy The New Public Management reform process in higher ducation systems  3.1. The Influences of NPM and the Bologna Process in the Italian higher education system ntellectual Capital reporting in universities: European experiences  4.1. The Austrian experience: The Wissensbilanz  4.2. The Observatory of the European University (OEU)  4.3. The RICARDIS project  4.4. INGENIO and HERO projects  ectual capital disclosure in Italian public universi-	ackground and the need for Intellectual Capital discloure  The evolution of higher education institutions' roles: the mergence of third mission  The New Public Management reform process in higher ducation systems  The Influences of NPM and the Bologna Process in the Italian higher education system  The Austrian experience: The Wissensbilanz  The Austrian experience: The Wissensbilanz  The Observatory of the European University (OEU)  The Austrian experience:  The Wissensbilanz  The Austrian experience:  The Wissensbilanz

### **ABBREVIATIONS**

American Institute of Certified Public Accountants (AICPA)

Association for Investment Management and Research (AIMR)

Assessment of Research Quality (VQR)

Canadian Institute of Chartered Accountants (CICA)

Chartered Institute of Management Accountants (CIMA)

Committee for Research Evaluation (CIVR)

Corporate Social Responsibility (CSR)

Danish Agency for Trade and Industry (DATI)

Danish Ministry for Science, Technology, and Innovation (DMSTI)

Department of Education and Employment (DEE)

Direct Intellectual Capital Methods (DIC)

European Association of Research Manager and Administrators (EARMA)

European Area of Higher Education (EHEA)

European Center for the Strategic Management of Universities (ESMU)

European Commission (EC)

European Union (UE)

European University Association (EUA)

European Association for Institutions of Higher Education (EURASHE)

European Students' Union (ESU)

Financial Accounting Standards Board (FASB)

Gross Domestic Product (GDP)

Higher Education Funding Council for England (HEFCE)

Higher Education Institutions and Research Organizations (HERO)

Human Capital (HC)

Human Capital Disclosure (HCD)

Human Capital Disclosure Index (HCDI)

Innovation and Knowledge Management Institute (INGENIO)

Institute of Chartered Accountants in England and Wales (ICAEW)

Integrated Reporting (IR)

Intellectual Capital (IC)

Intellectual Capital Disclosure (ICD)

International Accounting Standard (IAS)

International Accounting Standard Board (IASB)

Internal Evaluation Unit (OIV)

International Federation of Accountants (IFAC)

International Financial Reporting Standard (IFRS)

International Integrated Reporting Council (IIRC)

International Integrated Reporting Framework <IRF>

International Public Sector Accounting Standards (IPSAS)

International Public Sector Accounting Standards Board (IPSASB)

Market Capitalisation Methods (MCM)

Market to Book (MtB)

MEasuRing Intangibles To Understand and Improve Innovation Management (MERITUM)

National Agency for Quality Assessment and Accreditation (ANECA)

National Agency for Evaluation of the University System and Research (ANVUR)

National Committee for the Evaluation of Universities (CNVSU)

National Unions of Students in Europe (ESIB)

New Public Management (NPM)

Observatory of European University (OEU)

Observatory for the Evaluation of the University System (OVSU)

Open Method of Coordination (OMC)

Ordinary Financing Fund (FFO)

Organization for Economic Cooperation and Development (OECD)

Performance Measurement System (PMS),

Progressive Public Administration (PPA)

Presidency of the Council of Ministers (PDC)

Quality Assurance in Higher Education (ENQA)

Public Sector Committee (PSC)

Public Sector Organisation (PSO)

Relational Capital (RC)

Relational Capital Disclosure (RCD)

Relational Capital Disclosure Index (RCDI)

Reporting Intellectual Capital to Augment Research, Development and Innovation in Small and Medium Enterprise (RICARDIS)

Research and Development – R & D

Scorecard Methods (SCM)

Small and Medium Enterprise (SME)

Society of Management Accountants of Canada (SMAC)

Spanish Research Council (CSIC)

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG)

Stanford Research Institute (SRI)

Structural Capital (SC)

Structural Capital Disclosure (SCD)

Structural Capital Disclosure Index (SCDI)

Union of Industrial and Employers' Confederations of Europe (UNICE)

United Kingdom Research and Innovation (UKRI)

Value Added Intellectual Capital (VAIC)

## LIST OF TABLES

Table 1	Classification of intangible assets	» 71
Table 2	Intellectual capital categories, components, descrip-	
	tions and references	» 142
Table 3	Content analysis results. Individual descriptive sta-	
	tistics	» 148
Table 4	Content analysis results for IC items	» 152

# LIST OF FIGURES

Figure 1	Invisible balance sheet	» 36
Figure 2	The model of IC reporting in Austrian universities	» 113
Figure 3	The strategic matrix developed within the OEU	
_	project	» 116

### INTRODUCTION

The last few decades have been marked by a progressive transition from an industrial economy to a new knowledge economy in which intangible assets have gradually replaced tangible assets as critical success factors for any type of organisation. Intangible assets are widely recognized as the beating heart of intellectual capital (IC), to the point that they can be deemed synonyms. IC is considered a complex and interrelated system of intangible resources mainly related to knowledge assets, competences, capabilities, skills, technologies, know-how and customer relationships, which – being strategic, rare, and difficult to imitate or acquire on the market – constitute the main strategic drivers of the competitive advantage and economic performance of modern organisations.

Although initially studied in the private sector, IC has progressively gained importance in the public sector as a context characterized by a high degree of intangibility concerning its goals, production processes and outputs. In this context, universities deserve special attention as they are complex organisations whose main inputs and outputs are intangibles inextricably intertwined with the knowledge which is produced and diffused through teaching activities, research and technology transfer. In the last few decades, several social, economic and political changes – for example, new public management (NPM), the Bologna Process and third mission emergence – affecting the university system, pose new accountability and transparency challenges which makes it necessary to adopt new reporting systems that incorporate IC. Accordingly, the debate about the relevance of intellectual capital disclosure (ICD) in the public sector and, particularly in the university context, has increased as evidenced by the growing number of empirical works published in international journals.

The current accounting systems are inadequate at providing useful information about IC. This inadequacy has stimulated a debate among academics and practitioners about the need to find alternative and innovative forms of reporting that can adequately meet the expectations that stakeholders have regarding information on the strategic resources of universities – including those intangible resources that are commonly recognised as IC – and their contribution to the value creation process. Accordingly, the IC topic has gained momentum in the higher education context.

This book aims to contribute to the scientific debate on IC reporting by critically addressing the ICD issues between the private and public sectors, paying particular attention to the university domain where the intangible resources dominate the scene, permeating all the dimensions of value creation.

More specifically, the book intends to enrich the recent international debate arising from the fourth stage of IC research, which calls for more studies that investigate how IC and ICD impact society and the environment while also engaging stakeholders, focusing the attention on Italian universities, as Italy is representative of those countries where the wave of NPM has led to changes in governance, management, performance evaluation and accounting systems.

While research articles or books so far have partially focused on either the private sector or the public sector, this book offers an organic and progressive overview in four chapters, providing the readers with a clear picture of the evolution of the main features and peculiarities of IC in both the private and public sectors and a discussion of its main issues from an accounting and reporting standpoint.

Therefore, the volume follows a progressive and modular zoom lens.

This stepwise approach enables readers to enhance their understanding about the different facets of IC from the private to the public sector and subsequently to comprehend why and how ICD has acquired relevance in the university context. The final purpose of the book is to provide an innovative and empirical contribution to the fourth stage of IC research, investigating an alternative way to convey information about IC and to hold Italian university stakeholders accountable: the performance report. This analysis is pivotal in providing empirical evidence which supports the theoretical considerations and discussions expressed in the book.

The results of the proposed empirical analysis allow the author to contribute to the scientific debate about ICD relevance by drawing critical conclusions and depicting possible paths which can stimulate university governors, policy makers, regulators and standard setters to craft adequate strategies to

develop IC resources and to implement a common project that fosters IC reporting practices in universities.

Thus, the book has four objectives, one per chapter, that range from theory to practice.

The first objective, explored in the first chapter, is to both offer a detailed overview of the paths that led to the emergence of IC in the private sector and describe how IC is a critical factor for successfully creating value and achieving a competitive advantage. The chapter also provides a comprehensive illustration of the main IC definitions and key components, which contributes to a discussion of the drawbacks that arise from accounting for IC with traditional financial reports and highlights the need for providing adequate ICD with innovative tools.

The second objective, outlined in the second chapter, is to provide insight about the relevance of IC in the public sector and to disentangle the links between IC, accountability and NPM. Accordingly, this chapter provides an extended overview of how the concept of accountability evolved, including the main features of NPM, one of the primary theoretical foundations of IC in the public sector.

The third objective, pursued in the third chapter, is to shed light on the relevance of IC to the higher education system, evidencing the need to extend information provided through the current accounting systems to include relevant information for stakeholders about IC resources. This chapter examines the social, economic and political changes affecting universities' structure, culture, governance and accounting systems, especially in the context of the Italian university. An overall picture of the European experience with IC reporting in universities concludes the third section.

The final objective, in the fourth and last chapter, is to provide an empirical analysis that contributes to the international research agenda for ICD. A content analysis, grounded on a well-established theoretical framework adapted to the peculiarities of the tool and context examined and enriched by new items focused on the third mission, is conducted. The development of this framework represents an important element of novelty which characterizes this study. In particular, the author considers all the frameworks developed in the main ICD studies conducted in the university context to derive a comprehensive list which allows observers to better appreciate how universities disclose information about IC, taking into account the existing links between university IC, its performance and the three missions. Being that this study is contextualised within the fourth stage of IC research, and considering that previous studies have mostly focused on IC items related to the first and second missions, the author pays particular attention to the external

dimension of universities. In doing so, the author adds several items to the framework in the relational capital category to emphasize the relevance of the disclosure of those aspects evidencing university engagement within the ecosystem.

The analysis was conducted on a sample of 59 Italian public universities, with the aim of detecting the level of ICD provided by the performance report for the year 2017. The performance report was introduced by D. Lgs. n. 150/2009, which states that it is an accountability tool, which public administration can use to report both the results obtained during a specific period and any deviations from the planned objectives to all internal and external stakeholders. Considering that the performance and results of universities are fundamentally linked to IC, the performance report can function as a suitable tool that detects information about IC.

From the results, critical conclusions are drawn about how the promotion of IC reporting at universities might develop in the future. In particular, the analysis in the fourth chapter demonstrates that the performance report can represent a valid – though not exhaustive – alternative tool which enhances the level of accountability and transparency, which universities can adopt when communicating about their IC resources to their wide array of stakeholders. The performance report places greater emphasis on human capital and relational capital and devotes less attention to structural capital.

Therefore, the book offers new expertise regarding ICD in higher education institutions, which can serve as a sound basis for future research and raise awareness among Italian public universities about IC reporting and the latest developments in IC. Accordingly, it presents significant implications for different actors and depicts useful strands for future research.

In particular, the book could be useful for academics involved in the ongoing debate on ICD in universities. The book could also serve as both a benchmark for the current state of ICD research and a source of ideas and insights for future research. Moreover, the present work provides empirical evidence that may help Italian public sector practitioners increase their understanding of how Italian public universities disclose information about IC through performance reports. It may also help board members to consider developing strategies to foster the development of IC resources and to promote a higher level of ICD. The book may support policy makers and regulators as they consider the usefulness of performance reports in providing an adequate level of information about IC to stakeholders, reflecting on how performance reports reveal the links between universities' IC resources and performance levels achieved by universities. Moreover, discarding the conviction that mandatory IC reporting could be the best solution for boosting

the dissemination of IC information, the results of this study could be a valid reference for policy makers, regulators and standard setters as they work together to develop specific frameworks and guidelines for reporting IC to diverse university stakeholders. Finally, the book may function as a guide for PhD students who would like to approach the problem of IC by providing them with the necessary information they need to understand the evolution of this phenomenon – which began in the private sector and extended into the public sector – and to perform future research.