Challenges Faced by Divergent ICT Schools Regarding Branding and Establishing of Research Foci

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ABSTRACT
The audience will be informed about the process of establishing a new research niche area in a School of Information Technology situated on the Vaal Triangle Campus (VTC) of the North-West University (NWU). The School covers all aspects of IT as well as Operational Research. Since the topics of postgraduate studies and other research endeavours are very divergent it is a challenge to form a cohesive group with a central research focus. The panel will be enriched by the sharing of experiences of colleagues from UCT and the Marmara University in Turkey. The audience may learn from this group's experiences and will also be asked to give inputs that may be used to fine-tune the research focus and to suggest relevant research topics and directive, overarching themes. Mutual sharing of experiences and ideas should benefit both the panel members and audience. The target audience is all Information Systems and Computing specialists interested in a holistic view of the field encompassing information, knowledge and systems and/or in the leadership of research groups.

Categories and Subject Descriptors
H.0 [**Information Systems**]: General

General Terms
Theory

Keywords
Research entity; inter-disciplinary; trans-disciplinary; postgraduate programmes; branding; computing curricula

1. OUTCOMES
- Sharing national and international experiences of establishing research foci in divergent ICT schools
- Learning lessons from each other regarding branding of ICT schools' research
- Asking and answering why, when and how type of questions regarding research foci and branding
- Disseminating knowledge gained by submitting a research article for publication (post-conference)
- Building a network of South African scholars interested in building a research culture in ICT schools

2. STRUCTURE OF THE PANEL
The panel will be structured as follows: Jan Kroeze will chair the panel, while other members will each give a five-minute introduction to highlight various perspectives of the issue at stake.

3. INVOLVEMENT OF THE AUDIENCE
The audience will be encouraged to ask questions, give criticisms and suggest ideas that may be used to advance research on the theme. This will also support the group's application to establish this research area at their institution since it will give an indication that the central theme and

the bundling together of sub-disciplines are relevant and resonate in the wider IS community.

4. SHORT INTRODUCTION

By way of introduction, Jan Kroeze will refer to various aspects from the VTC group's endeavour to establish a niche area on their campus.

The proposed research entity, provisionally called "Enterprise Knowledge and Systems (EKaS)", will enhance and extend existing research opportunities in the School of Information Technology (VTC), including new frontiers like Enterprise Architecture and Formal Ontologies, which could also attract more master's and doctoral students. This will satisfy the institution's and government's wishes to grow the number of postgraduate students, nurture and increase research endeavours and promote the study of ICT.

Since Information Systems is regarded as a social science, business and social aspects, including project management, will be covered by the central theme. Research could also be conducted on the progress and results of the ICT foundation programmes currently running at NWU (VTC). EKaS will also be interested in exploring philosophical topics, e.g. the postmodern change that took place in the study of formal and IS ontologies, and similar types of humanistic issues. The research entity will have an interdisciplinary approach and will focus more specifically on:

- Operational research and industrial statistics
- Business intelligence (BI)
- Data and text warehousing
- Data and text mining
- Enterprise architecture
- Information systems ontologies and the semantic web
- Decision support systems
- Project management
- Educational issues in ICT
- Human-computer interaction
- Green computing

The creation of this niche area will provide impetus to research endeavours by the staff of the School since it will string together existing research and study activities by providing a single focus. Since the School's research motto is "research thrives through interaction" (Prof Dewald Roode), cooperation with each other and with external partners in industry and research institutions like the CSIR will create an environment where staff and students' accomplishments are nurtured. The School has already appointed three extraordinary professors (Proff Aurona Gerber, Alta van der Merwe and Paula Kotze, Meraka,

CSIR) to help with supervision and to accommodate NWU students in Meraka courses on Enterprise Architecture and Formal Ontologies. A postdoctoral fellow has joined the School in 2010 – and two more are on their way, not only to grow the number of research outputs, but also to help build the research capacity and to act as mentors for less experienced colleagues.

The other members of the panel will highlight aspects from a management, lecturer or researcher point of view:

Philip Pretorius will give a school director's view. The School of IT (NWU, VTC) teaches the following subjects: Information Technology, Computer Science, Information Systems, Operational Research, Mathematics, Statistics and Actuarial Science. The challenge for the director of the School of IT is to get subject matter experts to have a holistic view (not a narrow view) so as to be able to work together with research. The alignment of the NWU's three campuses, namely Vanderbijlpark, Potchefstroom and Mafikeng, is another issue. On the Mafikeng campus Information Systems is hosted in the same school as Economics and Statistics, with Decision Sciences, while Mathematics and Applied Mathematics are in a separate school with Physics. The Potchefstroom Campus has a School of Computer Science, Mathematics and Statistics and a Centre for BMI (Business Mathematics and Informatics). The panel member will also reflect on and stimulate debate on issues such as: What is outdated IT, current IT and the IT of the future? Which spectrum of ICTs is meaningful?

Sonja Gilliland will explore the trans-disciplinary factors of research at the School of IT (NWU VTC). The main focus of a university is on education and research. For many years universities have been organized and have been operating in disciplinary units. Sonja discusses the concepts of disciplinarity, inter-disciplinarity, multi-disciplinarity and trans-disciplinarity and pleads for an integration of disciplines. It is against this background that post-graduate students of the School of IT at the Vaal Triangle Campus of the NWU engage in research. Presently research of students in the master's- and doctorate program is in diverse topics. The challenge in the School of IT is to create a trans-disciplinary research environment and focus area where students and supervisors are motivated to share information and experience in order to eventually become a national and international research unit of excellence.

Lisa Seymour will share the experiences of the Department of Information Systems at UCT. She will talk about CITANDA (Centre for IT and National Development in Africa), the departmental research unit, its branding of the Masters and PhD programmes, and its influence on

departmental research themes since 1998. Experiences of how CITANDA attracted post-graduate conveners, research mentors (such as Professor Dewald Roode) and students, in line with its research strategy, will be shared. The process of slow convergence of divergent research interests will be highlighted. Experiences with the process of CITANDA's formal UCT accreditation as a Research Group in 2007 will be shared, as well as the power of visible branding associated with a research strategy.

Melih Kirlidog will add an international flavour to the discussions. The ACM has distinguished five areas of computing curricula for each of which curriculum recommendations have been developed. The areas are Computer Science, Computer Engineering, Information Systems, Information Technology and Software Engineering. Although the areas of computing research are comparatively blurred there are also distinctions among them in terms of traditions and research outlets. For example, Information Systems journals would not be interested in a Computer Science article where the most prestigious research outlets of the discipline are conferences. As a result, a research group should determine where it belongs in the above distinction and have a research focus. However, this is not to say that all members of the group should have the same research interests. On the contrary, divergent interests can provide much needed synergy and can lead to inter-disciplinary or trans-disciplinary research in computing and other areas. Computing research and teaching in Turkey have resemblances to South Africa in some areas and have differences in some others. Comparison of the two countries in this respect can be valuable for developing more effective teaching and research environments in computing.