

# **Information Systems Research: Are We Making a Contribution?**

**Some Data, Thoughts, Directions & Ideals**

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# FRAMING CONTRIBUTION

**We make a contribution if.....**

**We believe in ourselves**



**Others listen to what we say**

**We create unique knowledge**

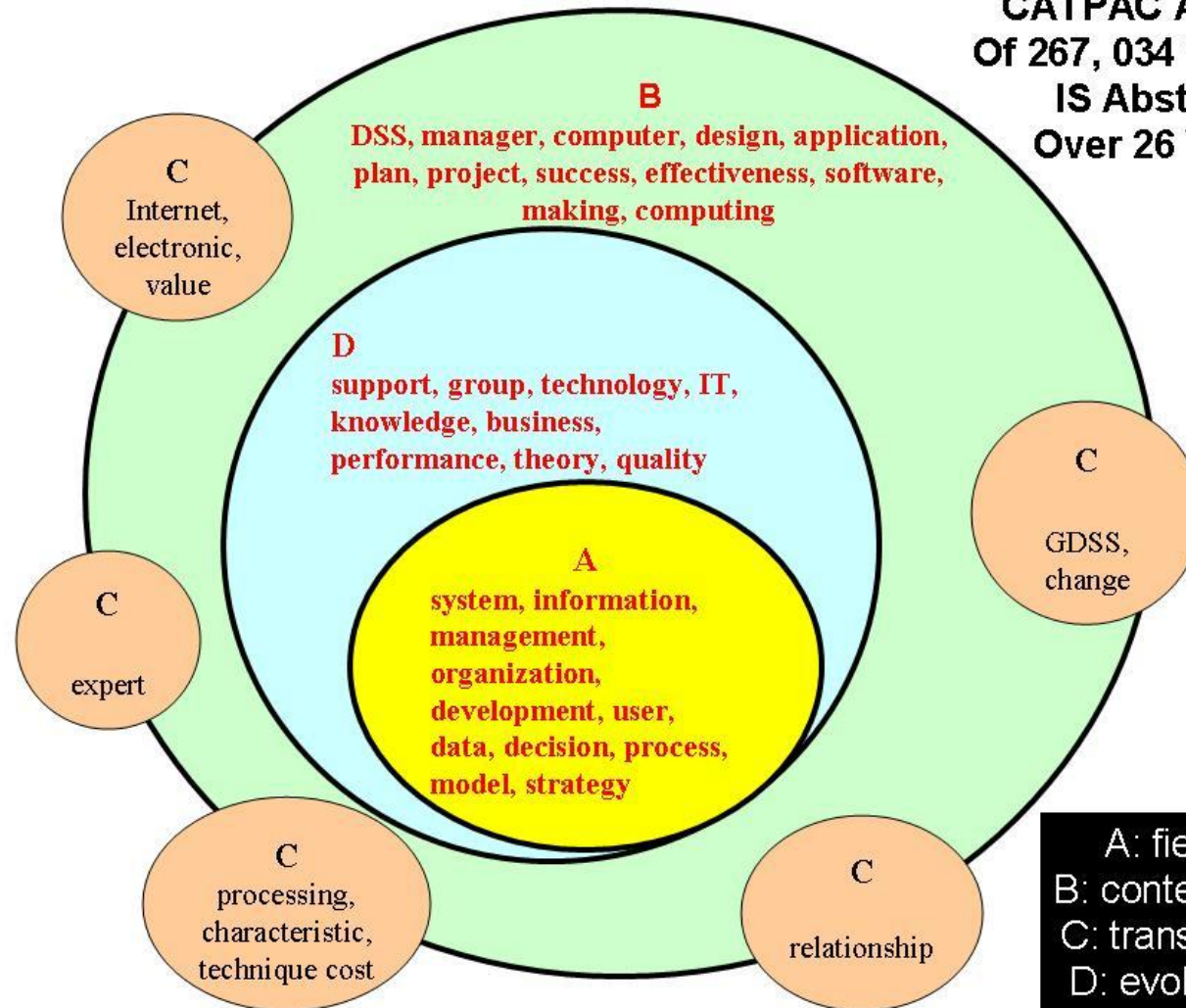
**Our knowledge is useful**

# Do We Believe in Ourselves?

CATPAC Analysis  
Of 267, 034 Words in  
IS Abstracts  
Over 26 Years

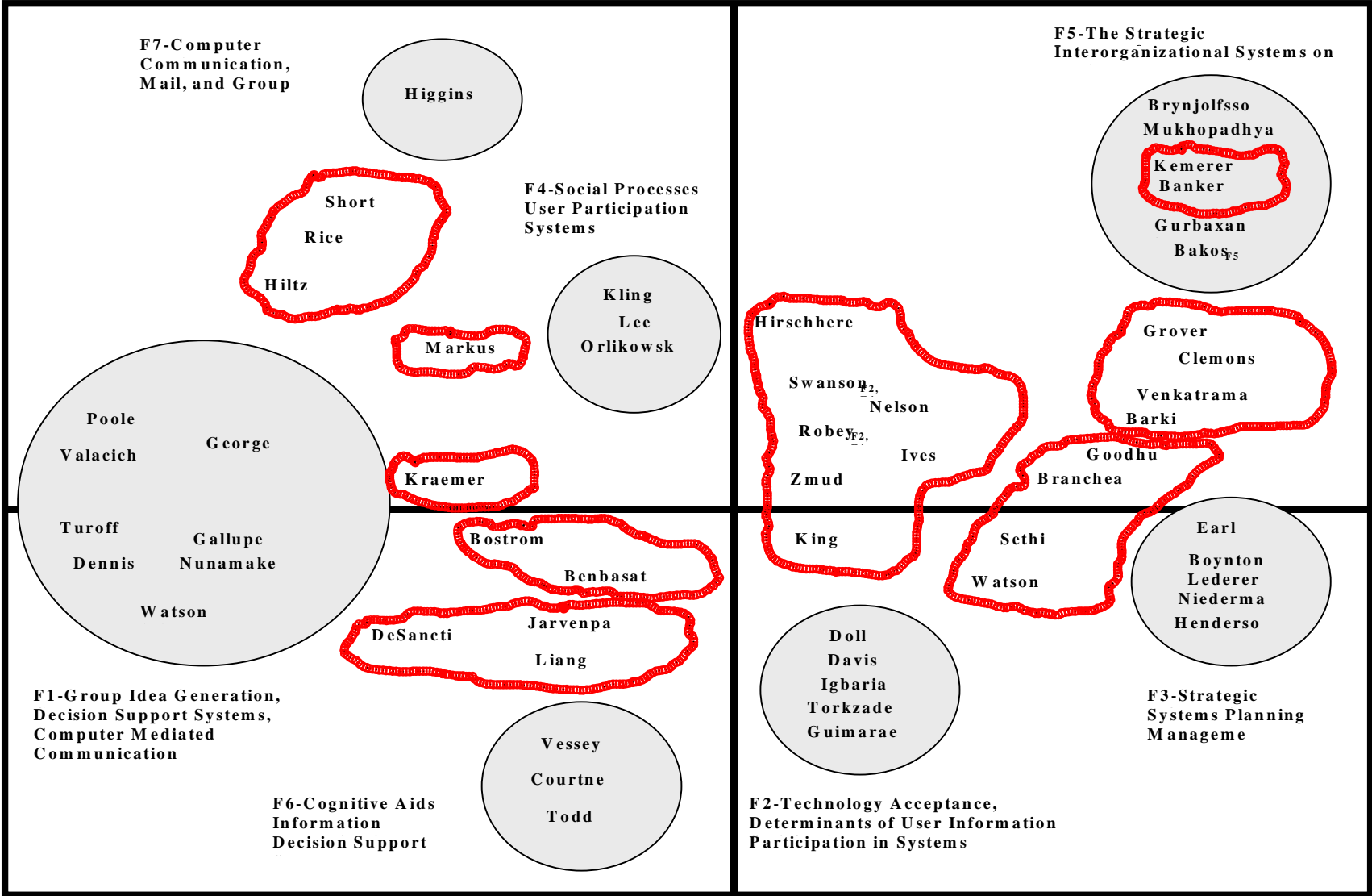
*Research and pedagogy in Information Systems is primarily concerned with the understanding and advancement of “knowledge in the development, management and use of information technology to improve organizational performance”*

*(Mission of the AIS).*



***data and information systems, their development (modeling), management and strategy and how they are related to organizations, processes, decisions and users***

# Co-Citation Analysis of 70 authors and Clusters in their Research

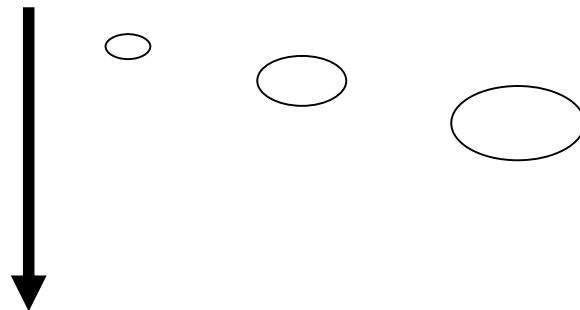


## The Good

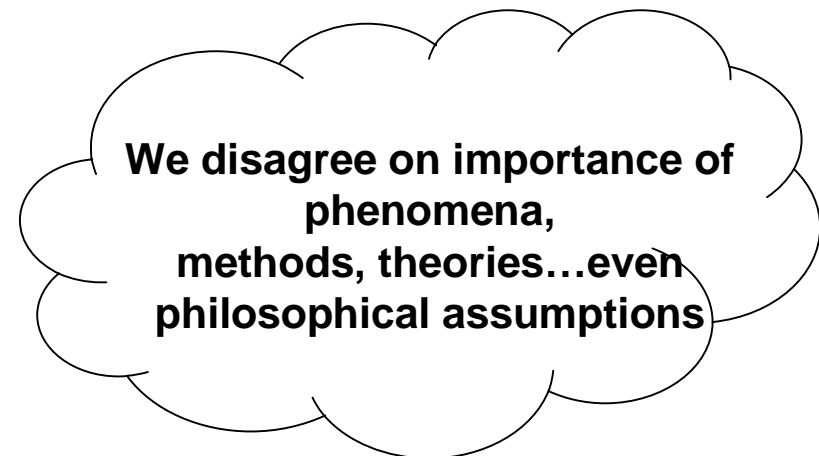
- There is consistency between what we say we are and what we do
- IT as the catalyst – does change the issues we research – but our innate core remains the same
- We are a fragmented adhocracy – working within our definitional boundaries with integrators at work

## The Bad

- IS is a weak paradigm field



**Adverse Consequences**



**We Make a Contribution if.....**  
**We Believe in Ourselves**

## Possible Directions

• **Multi-theoretical Perspectives (think Supra-additive)**

• **Positive Affective Tone  
(negativity breeds negativity)**

• **Celebrate Success**

(Institutional Responsibility)

• **Provide Solutions**

(Community Responsibility)

• **Act as a Steward**

(Individual Responsibility)

## Do Others Listen to What We Say?

Does IS Listen?

Year	# of IS references	%	# of Total references
1990	269.00	10.07	2672
1991	255.00	8.18	3119
1992	414.00	11.99	3452
1993	301.00	9.88	3048
1994	335.00	9.27	3613
1995	391.00	10.75	3637
1996	482.00	10.92	4413
1997	364.00	10.16	3584
1998	413.00	10.10	4090
1999	453.00	10.93	4146
2000	666.00	14.22	4683
2001	521.00	11.65	4473
2002	713.00	15.23	4681
2003	798.00	15.68	5089

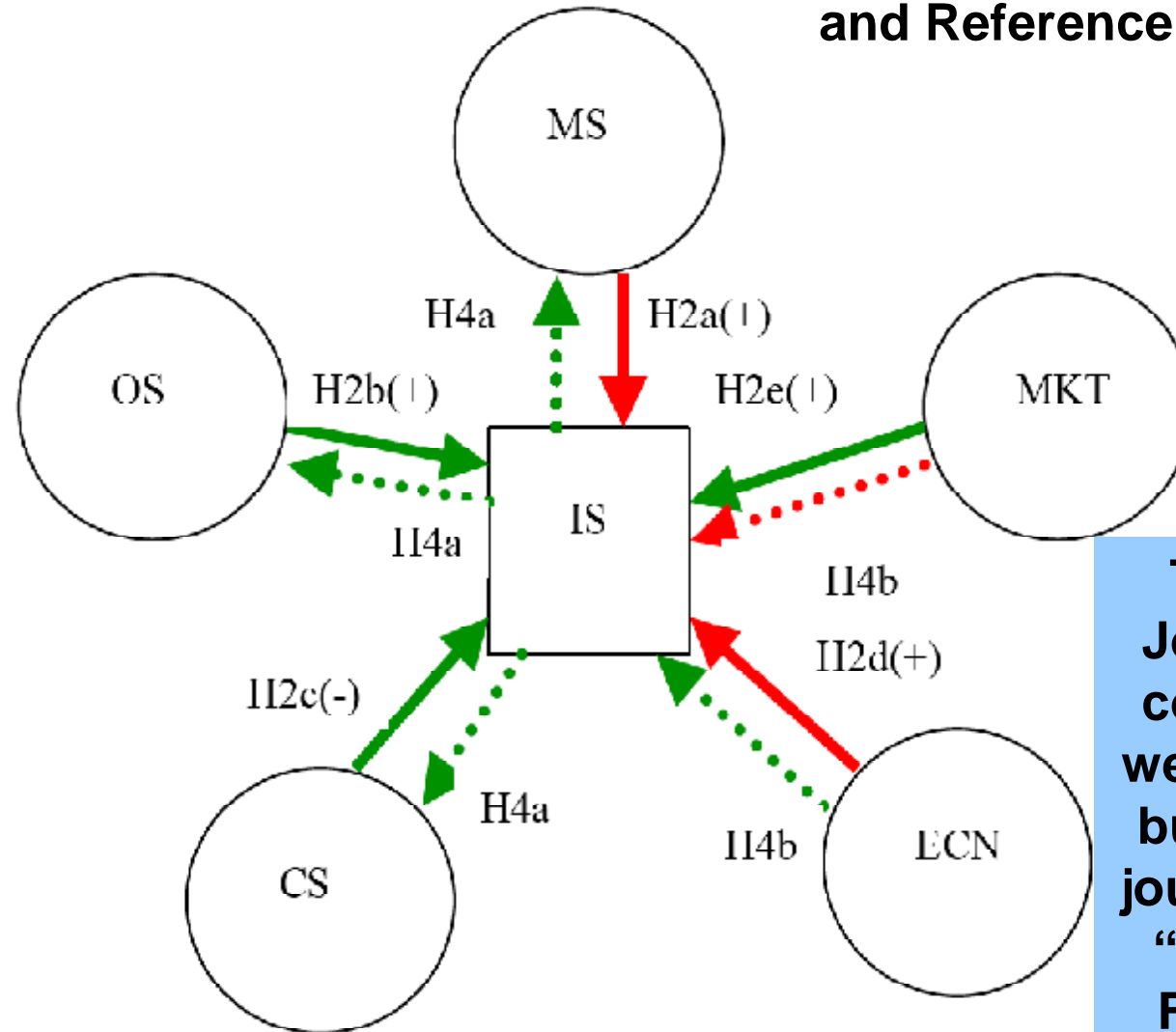
Trend:  $p < 0.05$

**Citations in  
IS Journals**

## Do Others Listen?

## Sociometric Analysis Of Work Points and Reference Points

*quantitative analysis of over 72,600 citations spread across 1406 IS articles in 16 journals over the period 1990-2004*



**Top IS Journals compare well to top business journals in "Impact Factor" Ratings**

— Supported  
— Not Supported

→ Reflects trend over time  
- - - → Reflects relative dependence between fields (on average)

## **The Good**

- **IS is beginning to contribute back to Disciplines (OS, MS, CS)**
- **Impact Factor Compares Well**
- **IS research is expanding – building its cumulative tradition**

## **The Bad**

- **IS has a long way to go for more established disciplines like MKG and ECN**
- **IS still lacks the clout of established disciplines in institutional structures**

**We Make a Contribution if.....  
Others Listen to What We Say**

## Possible Directions

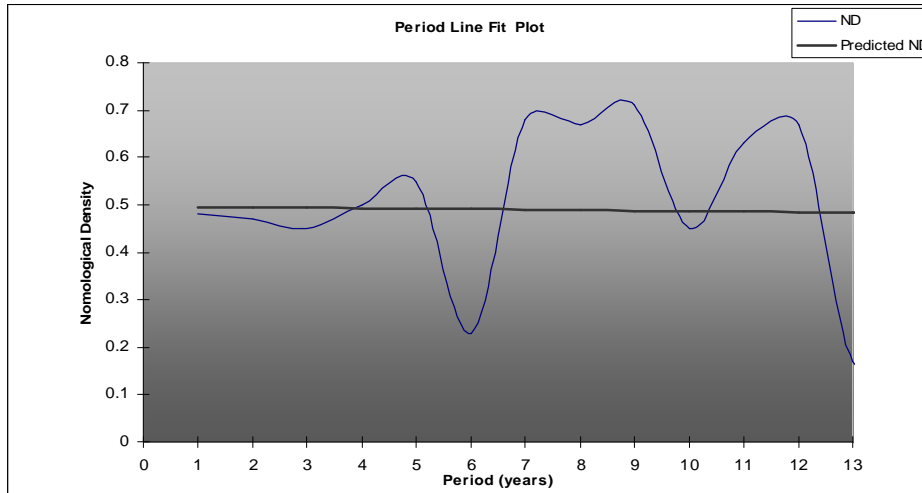
### **•Cross Disciplinary Journal Alliances**

**•(What makes an article at the IS  
Workpoint be Cited at other  
Workpoints)**

**Value Created in IS =**

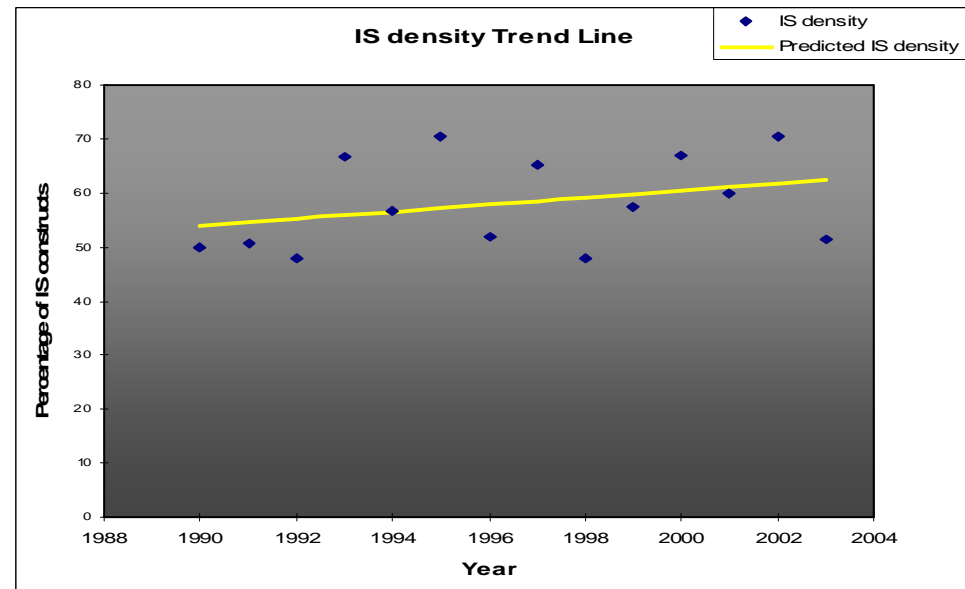
**f (extent of relevance X  
extent of theory reconstitution X  
cumulative tradition within a  
nomological network)**

# Do We Create Unique Knowledge?



Nomological Density:  
Ratio of IS-IS relationships to  
Total No of Relationships

IS Density:  
Ratio of IS Constructs to  
Total No of Constructs



## **The Good**

- IS is gaining some uniqueness in its constructs

## **The Bad**

- No real indigenous theory in IS
- Theory on a pedestal (difficult to define)

**We Make a Contribution if.....**  
**We Create Unique Knowledge**

**Nurture More Innovative Theory Building**  
**•Open Sea Theorizing (rather than only closed loop from reference disciplines or theoretical games)**

**Value Without Theory**  
**•Theory as a Means Not an End**  
**(Results Can Precede Theory; We need theorists and empiricists)**

# **Is Our Knowledge is Useful?**

## **Relevance:**

**Comparison of topics in academic research to comparison of topics found in practitioner literature**

**Results: Very few significant correlations between practitioner ranking of topics in a year with academic ranking of research incidence  
– even after accounting for lag effects.**



## **OVERALL SUMMARY: We make a contribution if.....**

### **We believe in ourselves**

**We have good consistency, an innate core & integrators at work  
BUT weak paradigm  
NEED supra-additive theories and positive affective tone**

### **Others listen to what we say**

**We are establishing a cumulative tradition, contributing back to some disciplines, and having an impact factor  
BUT we only take from other disciplines and we lack institutional clout  
NEED cross disciplinary journal alliances and a clear research value proposition**

### **We create unique knowledge**

**We are increasing uniqueness of our constructs  
BUT we don't have our own theories and we practice closed theoretical loops  
NEED more innovative theory & openness to strong results**

### **Our knowledge is useful**

**We do not seem to contribute toward practice yet despite the emphasis on researching practical issues  
NEED to bridge both the relevance AND rigor gap**

## Concluding Thoughts

**IS is a growing and exciting area of inquiry – with tremendous opportunities  
For research at all levels (individual, organizational, inter-organizational,  
national, global, etc.) using a diversity of methods and theories.**

**For the IS discipline to make a contribution  
we need to believe in who we are and what we do;  
leverage our diversity – by searching for ways to appreciate the  
richness of our phenomena from diverse perspectives;  
be open to fresh, unfettered theorizing without empirics  
and strong empirics without theory;  
appreciate that our usefulness also lies in communicating the  
value of our rigor;  
and recognize that our  
challenges are no greater than other field – if we can handle  
them constructively and with optimism**

*“We never reach our ideals, but the thought of them shows us our deficiencies,  
and spurs us on to higher and better things”*

*An famous man (unknown)*

**Let's Try.....**

**Thank You!**