



Clinical SAS Programming in India

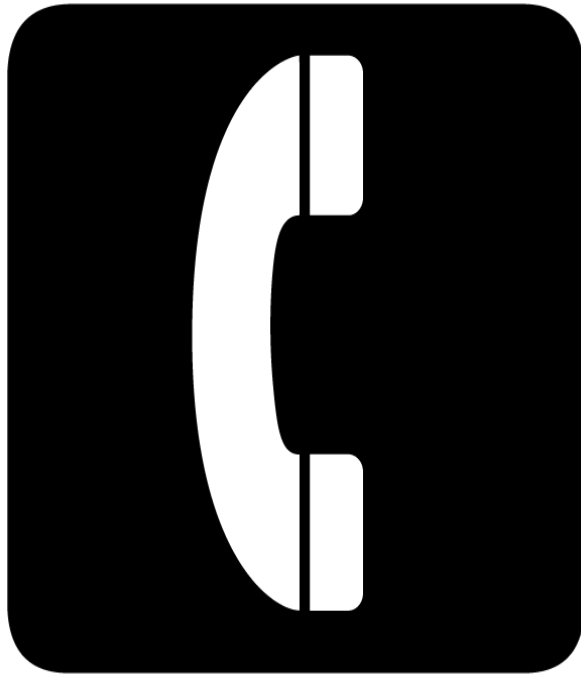
Need vs. Want

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All the views and opinions presented in this topic are solely the views of the author and does not in any way represent the views of his employer

Need vs. Want



Need



Want

Null hypothesis: (H_0)

There is no significant difference between the industry needs and programmers wants

$$H_0 : \mu_0 = \mu_1$$

Alternative hypothesis: (H_1)

There is a difference between industry needs and programmers wants

$$H_1 : \mu_0 < \mu_1 \text{ or } \mu_0 > \mu_1 (\text{one-sided})$$

Managers Survey (Industry Needs)

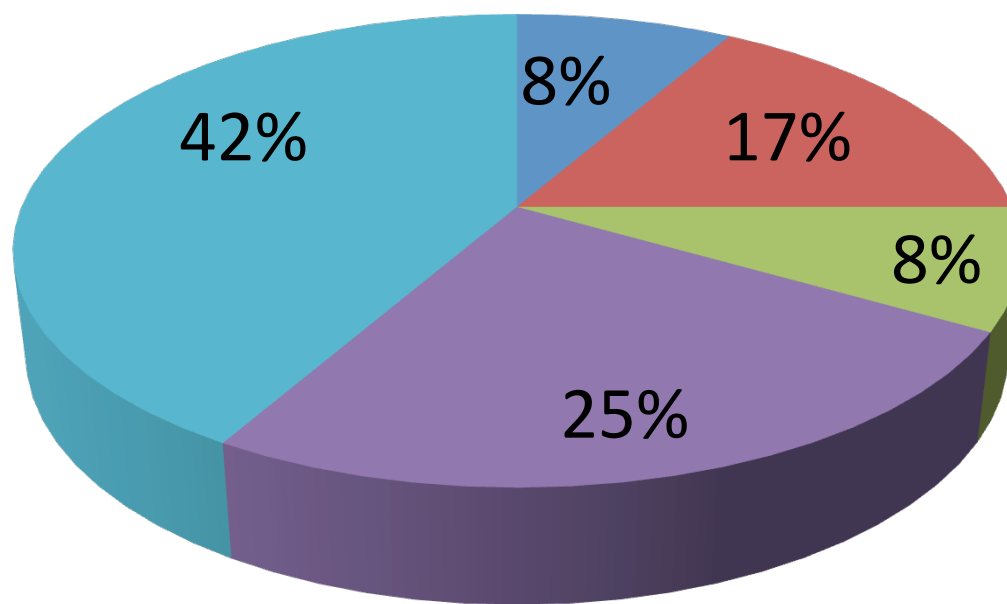
[https://www.surveymonkey.com/s/
SAS_India_Managment_NeedvsWant_Survey](https://www.surveymonkey.com/s/SAS_India_Managment_NeedvsWant_Survey)

Programmers Survey (Programmers Wants)

[https://www.surveymonkey.com/s/
SAS_India_Programmer_NeedvsWant_Survey](https://www.surveymonkey.com/s/SAS_India_Programmer_NeedvsWant_Survey)

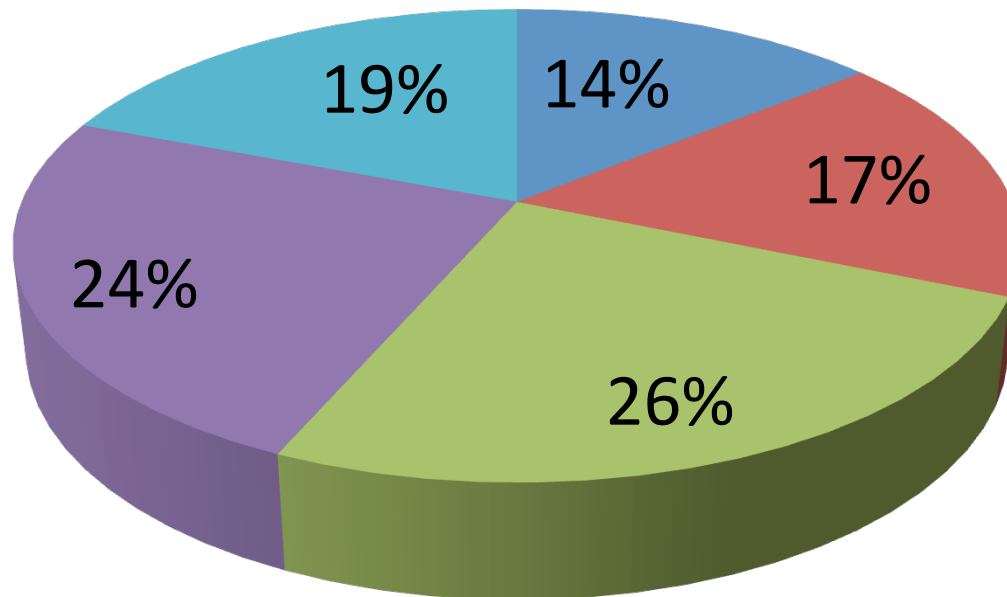
Managers Surveyed - Experience level (n=13)

■ Less than 2 years ■ 2-4 years ■ 4-6 years
■ 6-8 years ■ Above 8 years



Programmers Surveyed - Experience level (n=102)

■ Less than 1 year ■ 1-2 years ■ 2-4 years
■ 4-6 years ■ 6-8 years

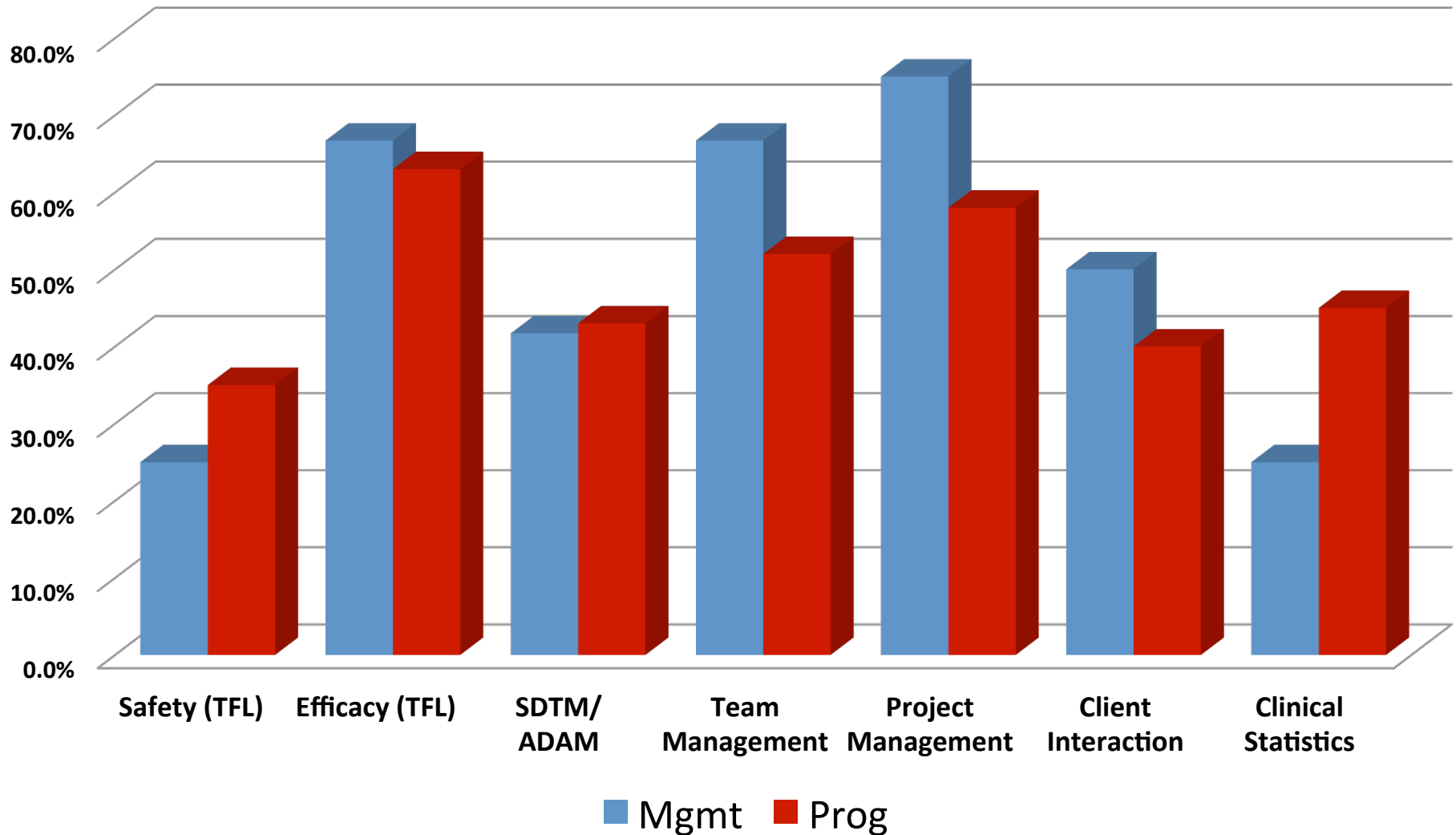


Themes Assessed

Topics	Programmer View	Management View
Skills to be developed	Perceived	Assessed
Duration	Attrition	Retention
Career Move Factors	Influenced	Perceived
Pay Structure	Receiving End	Giving End
Industry Trend	Anticipation	Forecast

Theme – Skills to be developed

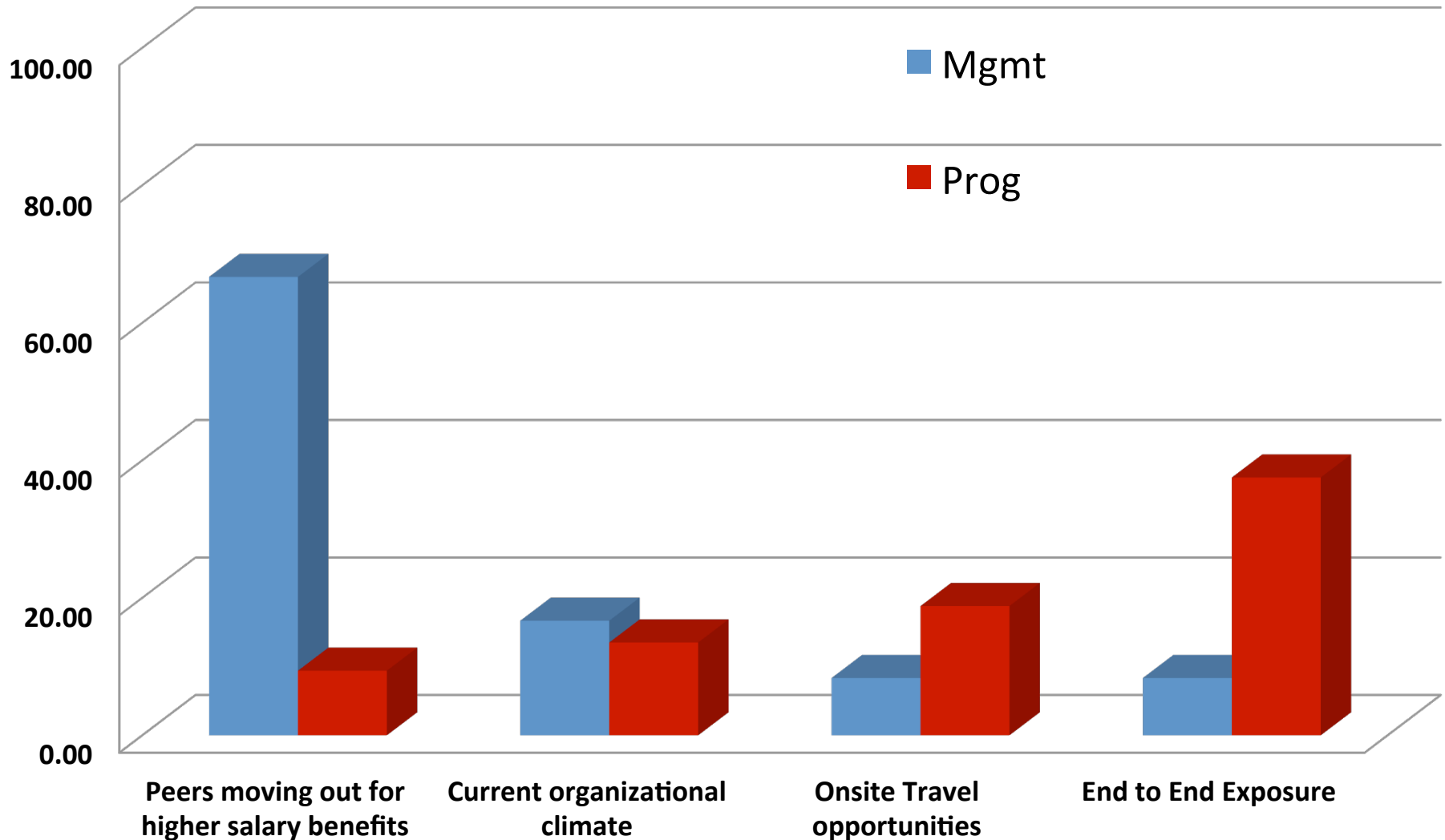
Clinical Research



Theme – Attrition vs. Retention

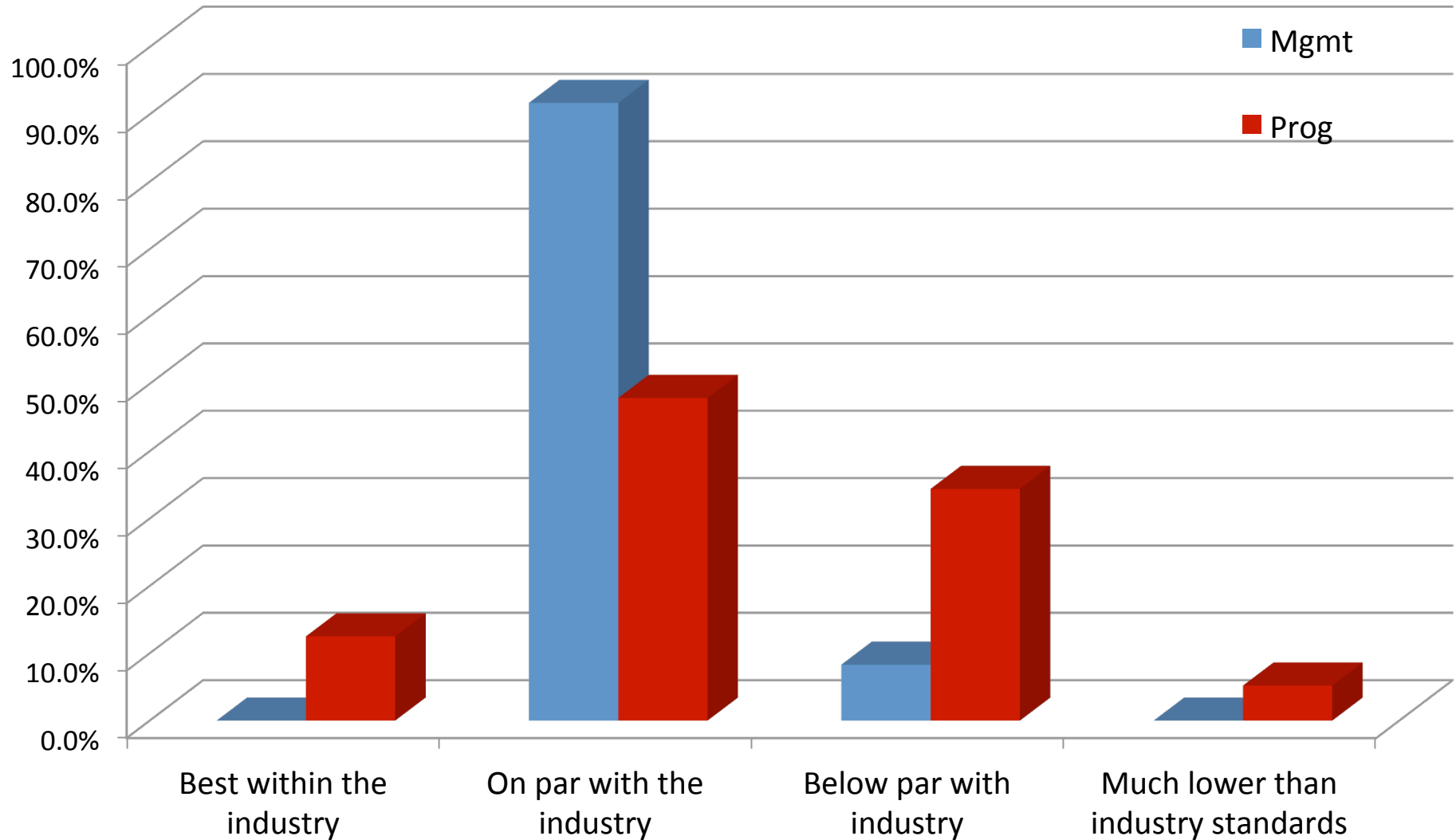


Theme – Career Move Factors



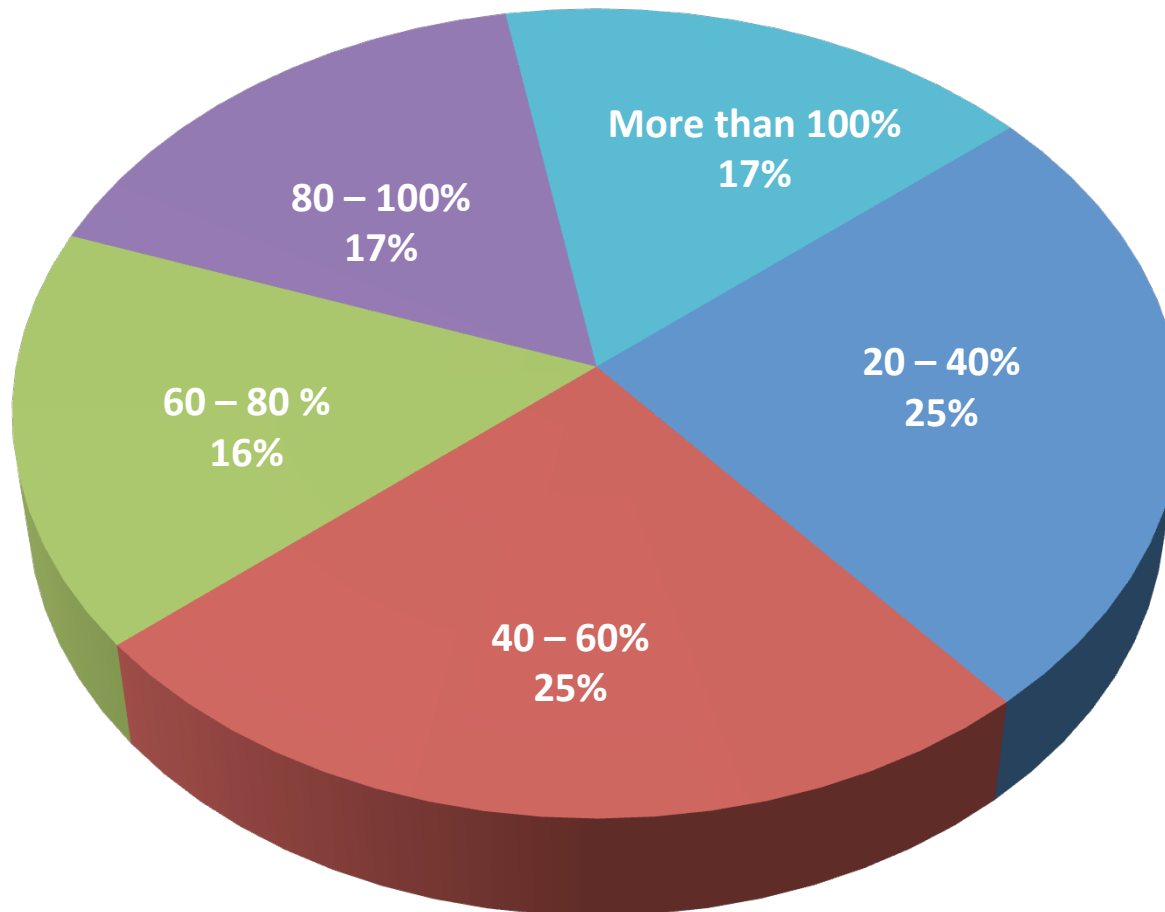
Theme – Pay Structure

Clinical Research

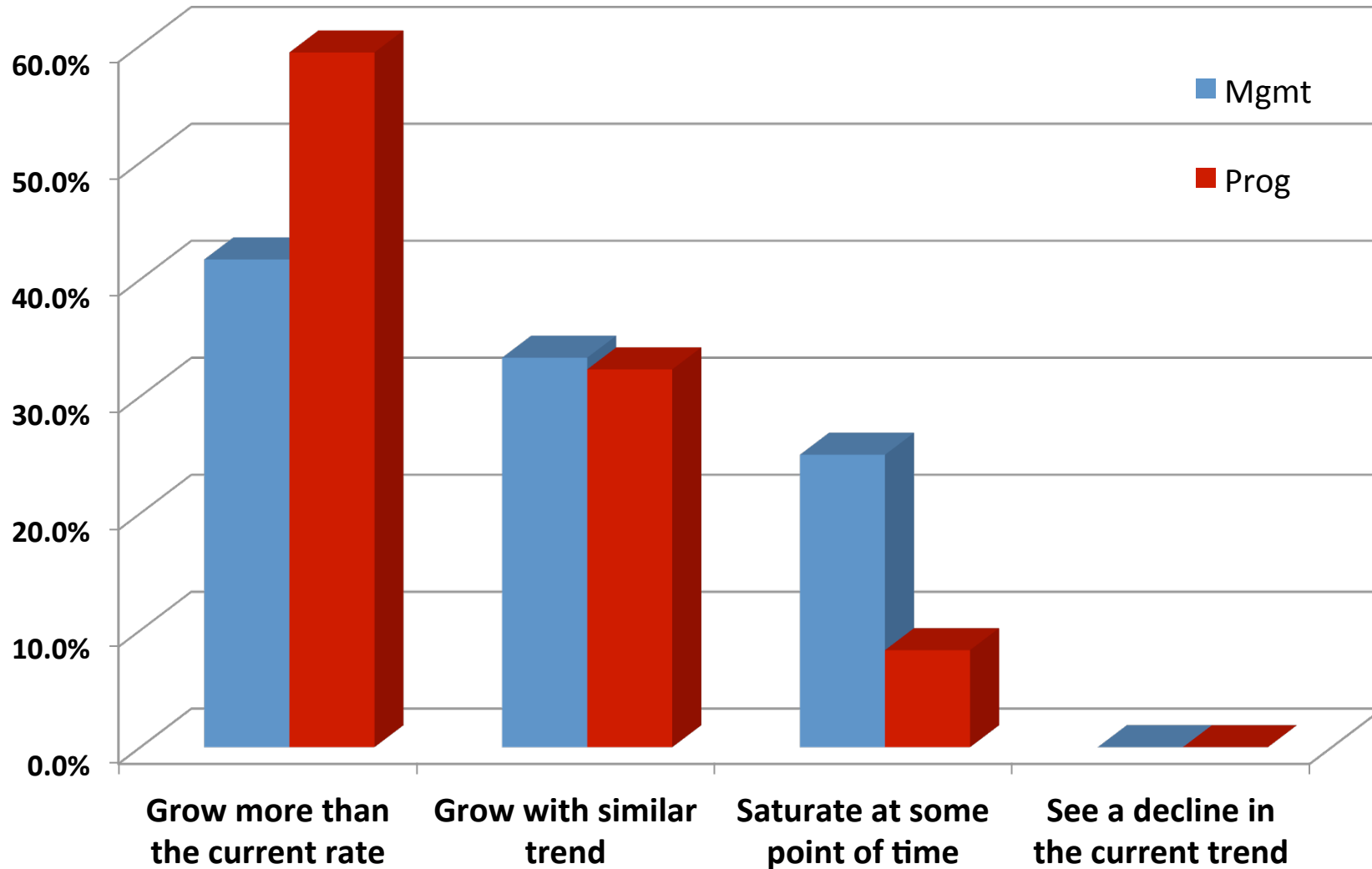


Team growth over last 3 years (Management view)

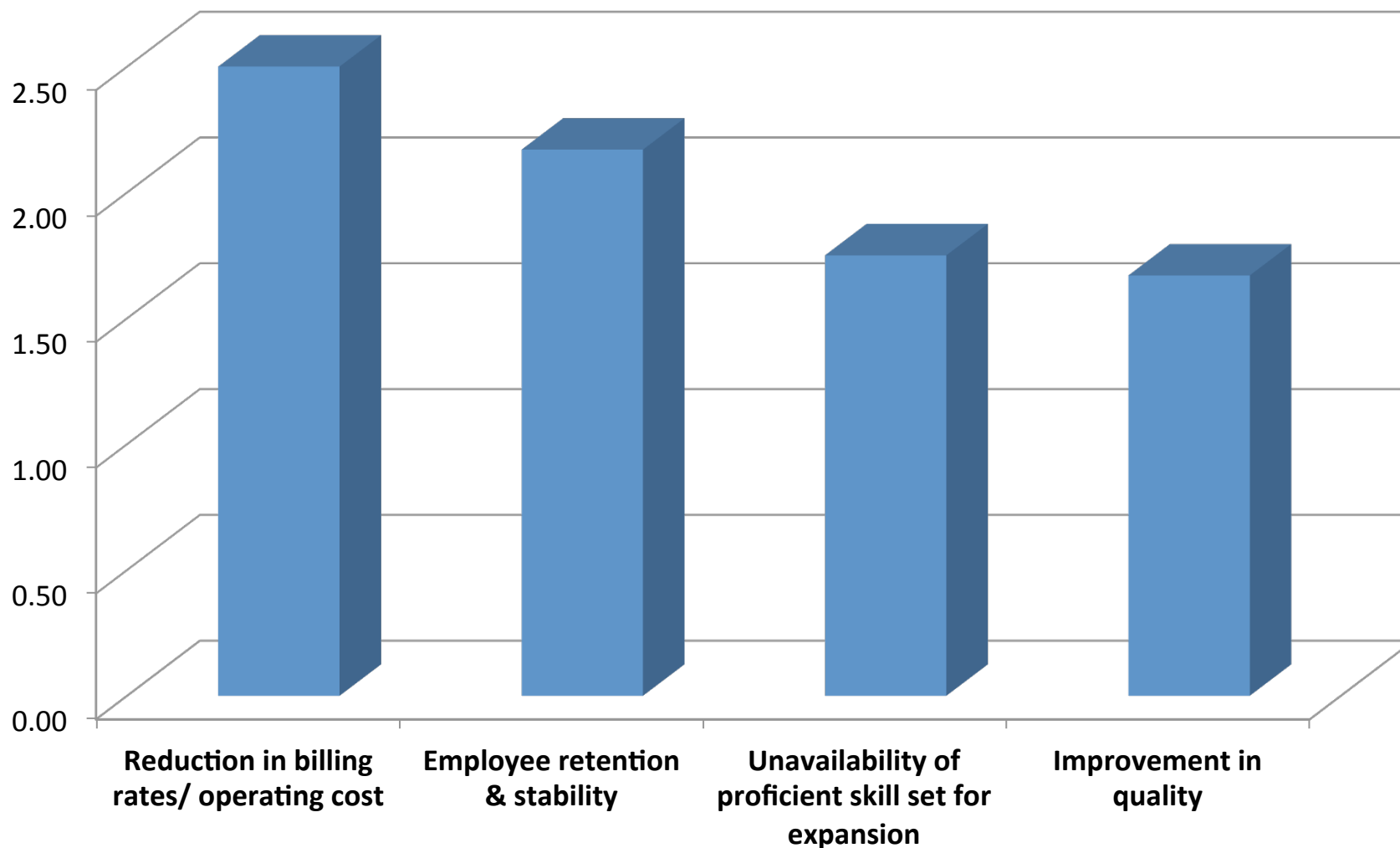
Clinical SAS Industry Current Growth Trend



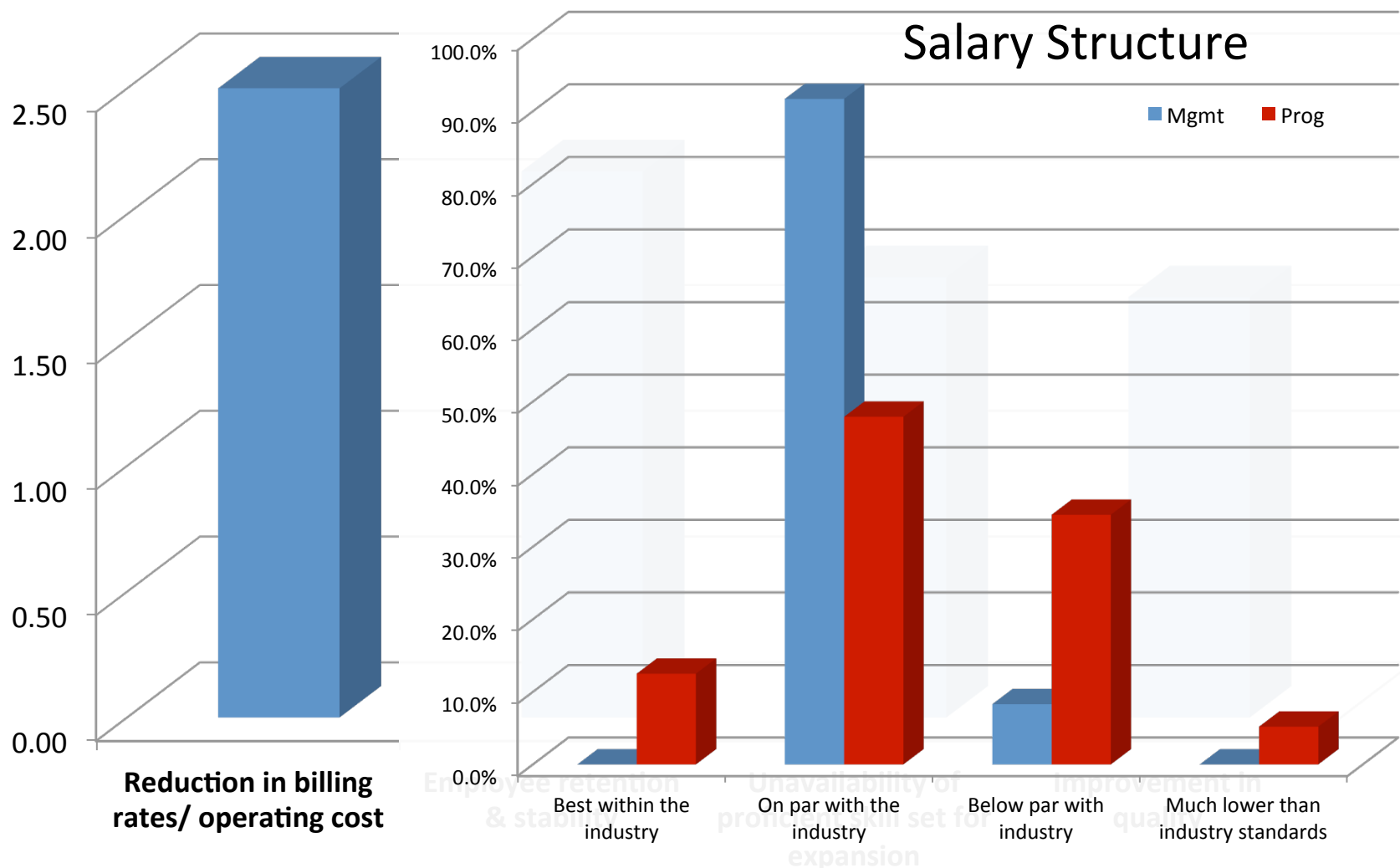
Theme – Industry Trend



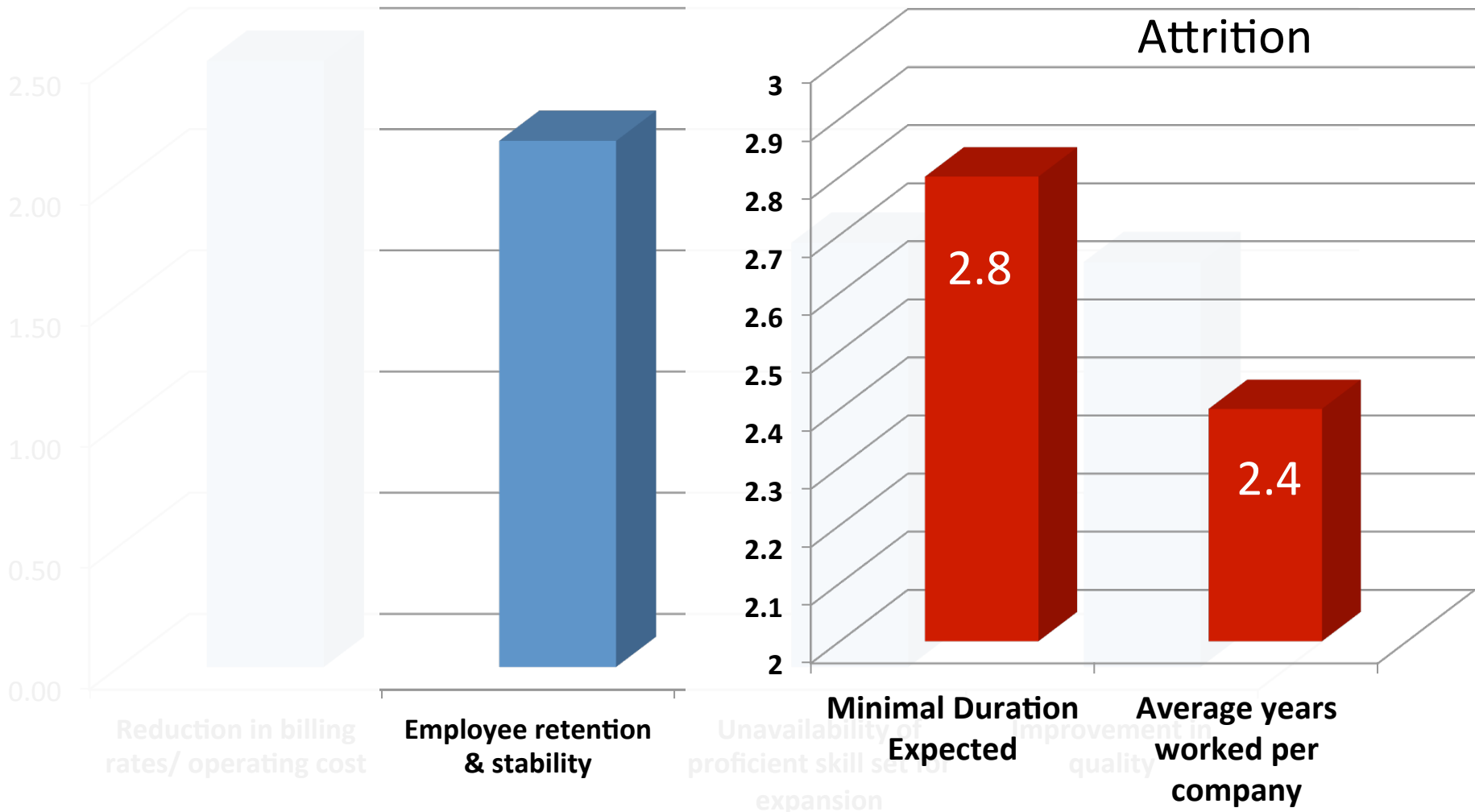
Challenges faced by Management



Summary

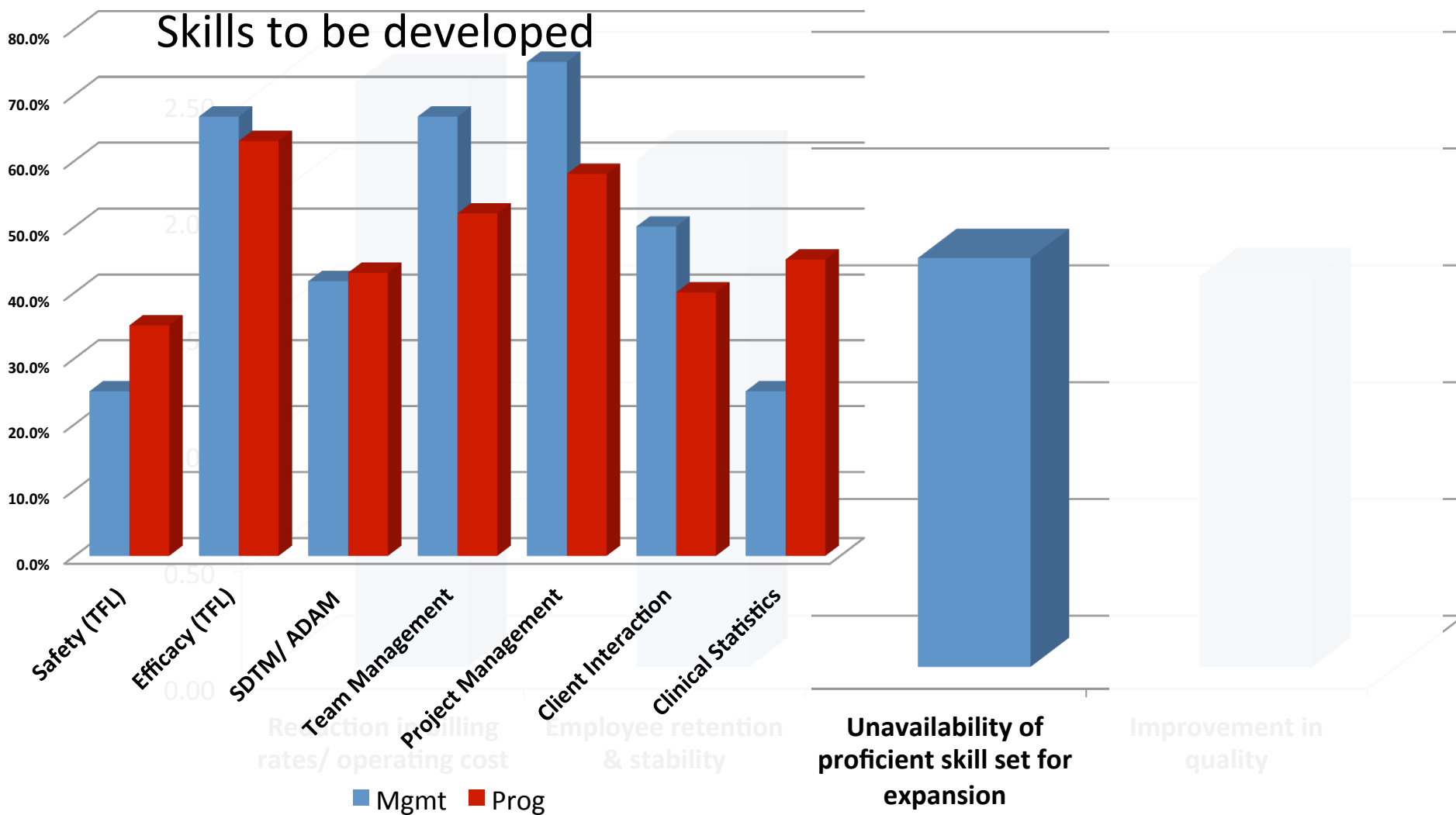


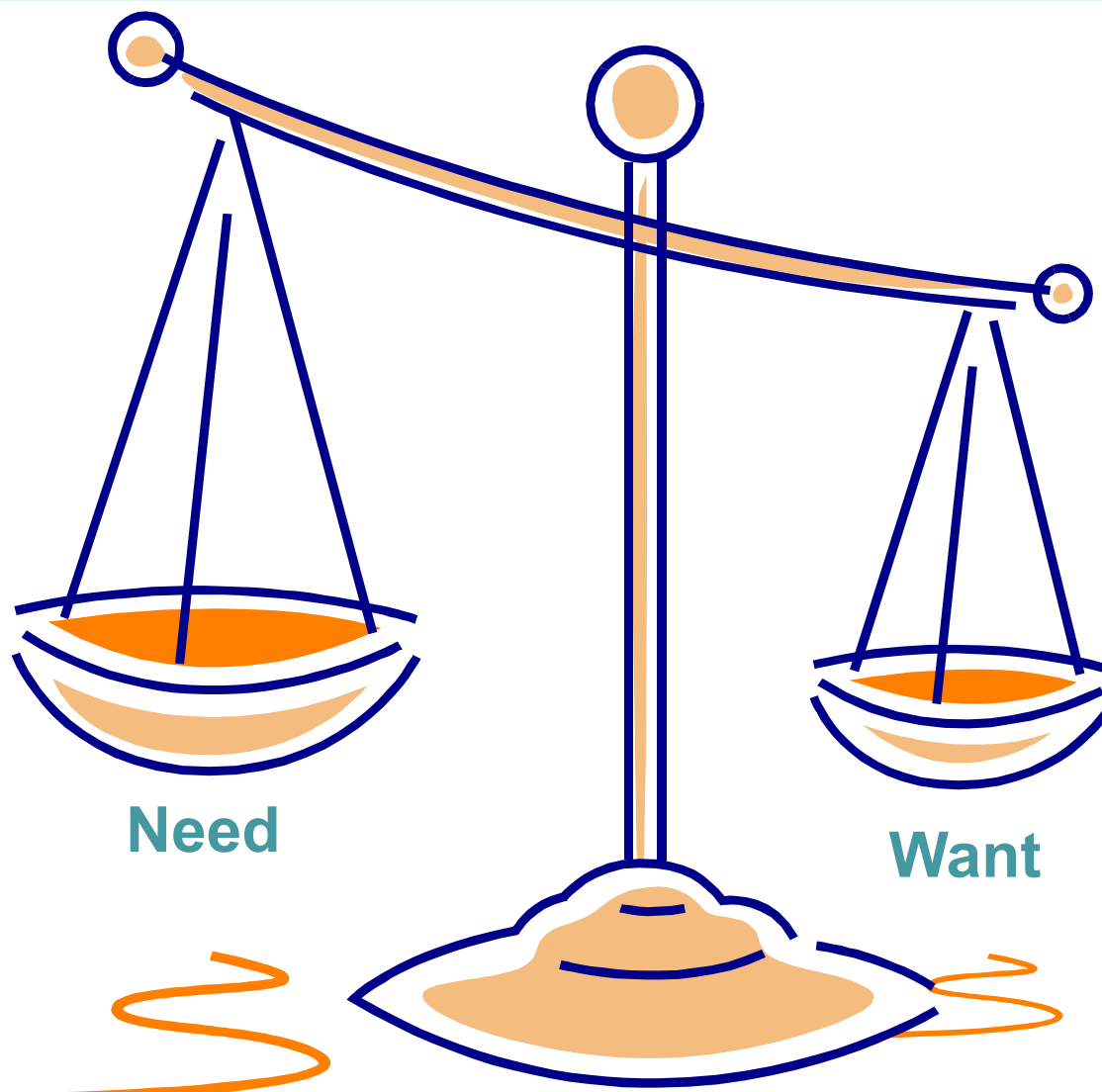
Summary



Summary

Skills to be developed





- ## Value Creation

- Understand your immediate customer need and work towards a bigger objective of getting better and safe drugs to market in timely manner
- Sas programmers are of little use if they do not understand clinical data

- ## Learning

- Focus on the basics
- Continuous improvement in skillset
- Explore fully the capabilities of SAS by its full utilization
- Try to keep updated with new advancements, learn other tools
- Try to learn in-depth rather than having very high level overview

- ## Commitment

- Stability in an Organization and acquiring / honing the skill sets rather than switching organizations for monetary benefit
- Treat it as a long term career rather than doing frequent job shifts

Questions?

Thank you