

# PREVENTATIVE PARADIGM

## WHAT SRES CAN LEARN FROM MOMS

**Rayappa Mayakunthala**  
**@mrayappa**

Good Morning All.

I am here to tell you all a diversity story. (smile)

If we look back and reflect, we would realize how moms nurtured us into happy kids with Preventative paradigm.

How Moms long practised the preventative paradigm for nurturing happy kids has some important lessons for SREs as we build, scale and run the distributed systems.

# ABOUT ME



Director of Software Engineering

Hyderabad, India

All opinions expressed are solely my own and do not express the views or opinions of Salesforce.

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I am an Engineering Director at Salesforce based out of our Hyderabad office in India.

Standard disclaimers apply. Opinions are mine. (smile)



## ABOUT TOPIC

How Moms nurture happy kids the Preventative way has some important lessons for the SREs.

We can build, scale and run healthy distributed systems by leveraging the same principles.

How Moms long practised the preventative paradigm for nurturing happy kids has some important lessons for SREs as we build, scale and run the distributed systems.

Moms nurture kids from food to play to their health has Preventative paradigm as the underlying theme.

## PREVENTATIVE BY DESIGN - NURTURING HAPPY KIDS



<https://www.eatright.org/homefoodsafety/four-steps/cook/teaching-kids-to-cook>

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## RELIABILITY

- EFFECTIVE MONITORING
- BEING ON-CALL
- TRACKING OUTAGES

<https://www.budsies.com/blog/education/long-term-benefits-make-believe/>

Reliability is an important aspect of the nurturing kids.

Effective Monitoring - Moms monitor the kids proactively before they get into trouble with their general well being and reactively when they fall sick like monitoring their basic parameters constantly until they recover fully.

Being on-call - Moms usually take the front line responsibility to react to situations.  
<smile>

Tracking outages or Learning from failures - Moms keep track of issues kids have gone through, medical history, any allergies, etc. to make sure they don't get into same trouble.



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## SECURITY

- EMBRACE RISK
- ADDRESS CASCADING FAILURES
- INTEGRITY

<https://cdn.firstcrycdn.com/2018/05/150311462-H.jpg>

Moms play an important role in safeguarding the kids by keeping them safe with all the food, medicines, health, play, etc.

Embracing risk - by letting the kids go out and play or letting them go into new environments, or schools, moms are embracing the risk associated with it while nurturing the kids grow.

When the kids fall sick or one or more family members fall sick, moms are addressing cascading failures by proactively keeping them in isolation or out of contact with the sick members. If the kids fall sick, then ensuring they recover fast by effective monitoring and preventive care.

Integrity - At all times, keeping them safe and helping them grow in healthy environment with good value system.



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## SCALABILITY

- PIPELINES
- BLAMELESS RCA
- CONFIG MANAGEMENT

<https://pediasure.com.my/watchMeGrow/height-predictor>

Growth of the kids is an extremely important aspect of the nurturing of the kids. Moms do that effectively balancing the healthy schedules, school-play balance, etc.

Moms also engage in healthy conversations in blame free manner if the morale of the kids is low or if they need help with something, helping the kids with the root causing of their shortcomings.

Config Management - how their vaccine schedules and important health details are maintained and tracked for proactive / preventative measures.



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- SLO'S
- MANAGE LOAD
- ELIMINATE TOIL
- LEARN/TEACH/MENTOR

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How moms manage their schedules, time commitments, their schedules during exams vs during non-exam days, sports days, important events/functions. How they help them keep their schedules tidy, room neat, organize themselves for effective schooling and playing. How kids learn and grow and how moms can play an important role in teaching and mentoring



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SRE NEEDS MORE  
WOMEN ENGINEERS

<https://ghc.anitab.org/galleries/gallery-2018/attachment/nikki-ritcher-photography-nikki-ritcher-34/>

How moms inspire important SRE lessons, we need different viewpoints to SRE for SRE to continue to mature as a profession and advance in research.

It is by diverse viewpoints that SRE can benefit as a practice.

SRE needs more women engineers to advance as a profession.