Case Study

Agile Consulting

OpCord

Optimizing with Coordination

Executive Summary

OpCord

A mobile applications company partnered with us to improve delivery and operational efficiency and effectiveness

After careful study of their existing processes and discussions with key stakeholders, OpCord advised them to follow agile practices

OpCord listed some objectives which were key for the organizations and came up with measurement strategy

During the 10 weeks assignment, OpCord took multiple sessions, formed logical teams, participated in meetings and they shared information with each other

Trust was built among employees and all objectives were addressed using agile way of working

An employee perception survey was conducted at the end of assignment and employee found improvement in their way of working, overall product and processes

Customer (or Partner) Profile

Working in the areas of mobile applications

Offices are at two locations in different states in India

Agile practices deployed in 5 teams involving more than 30 employees

Challenges to be taken care

To reduce bugs found by internal testing team in the product

To improve commitment to schedules / deadlines by improving estimation capability of involved stakeholders

To define clear roles and responsibilities to improve accountability among employees

To utilize expertise of employees by equally loading them all the time

To enable managers as mentors by reducing time spent on tracking subordinates

To improve quality of code further to reuse same code base in multiple products

To strengthen reviews process to improve overall product quality

To deploy unit testing for all components

To deploy test driven development approach to improve test cases and product quality

To improve build and release process

Adopted Optimization Model

We used below optimization model to consult organizations on objectives based improvements:

Innovations, Improvements, Results

Demonstrating value

Institutionalizing improvements

Catalyzing Improvements

Improvement Plan Preparation

Initial Analysis & Report

Discussions with CXO, Managers

Time

Our Approach

OpCord

Discussions with CXO, Managers

Discussed with CXO, Managers, Senior developers, testers to understand pain points, challenges, issues and wish lists
Discussion on appraisal system with HR

Initial Analysis & Report

Analyzed, segregated and prioritized improvement areas and defined SMART objectives for involved stakeholders:

1. To Improve Estimation capability
2. To improve Planning skills
3. Involved stakeholders feel more accountable towards their work
4. Involved stakeholders perceive that requirements are detailed and better understood
5. To improve the quality of code and they shall continue to improve it in future.
6. To make them conduct better reviews and shall push back for reviews.
7. To improve productivity considering the complete product life cycle.
8. To reduce defects found in testing
9. To reduce significant time for planning and tracking for involved managers

Our Approach

Improvement Plan Preparation

To achieve all objectives, it was concluded to coach / consult customer (or partner) on Agile practices with some more value adding practices

Period for attainment of these objectives : 10 weeks started in Aug'09

Measurement strategy for the objectives:
- Conduct Employee Perception Survey (EPS) mid-term and at the end of assignment
- Objectives are achieved if we get a >3.5 rating on 1 – 5 scale in the EPS where 5 means strongly agree and 1 means strongly disagree
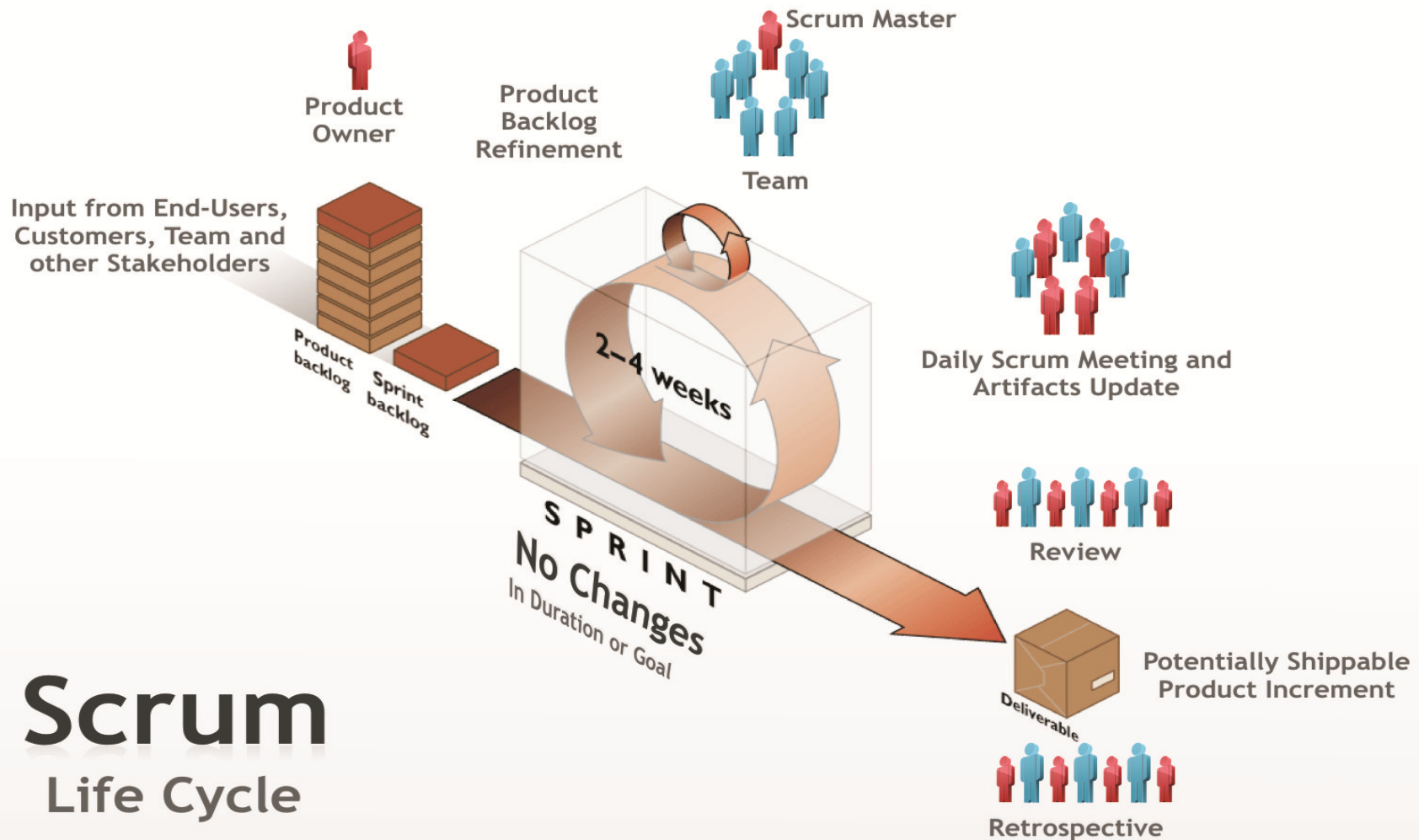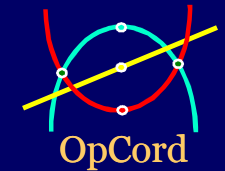
Cost/Effort: Base payment + Variable payment based on achievement of objectives

Detailed schedule preparation and agreement from involved stakeholders
- Each team has a release cycle (sprint of 10 days to start with)

Use Skype or audio / video conferencing for remote location

Agile way of working - XP

We followed agile processes to deliver efficient & effective solutions:

User Stories

Release Planning

Iteration Planning

On Site Customer

Refactoring

Continuous Integration

Collective Ownership

XP Practices — Whole Team, Collective Ownership, Coding Standard, Test-Driven Development, Customer Tests, Pair Programming, Refactoring, Planning Game, Simple Design, Continuous Integration, Sustainable Pace, Metaphor, Small Releases — www.XProgramming.com

Our Approach

Catalyzing Improvements

Defined product development life cycle:

Product Roadmap definition -> Requirements & Architecture -> Test Scenarios & Test Cases Definition -> Implementation & Verification -> Validation -> Maintenance & Support -> Product Retirement

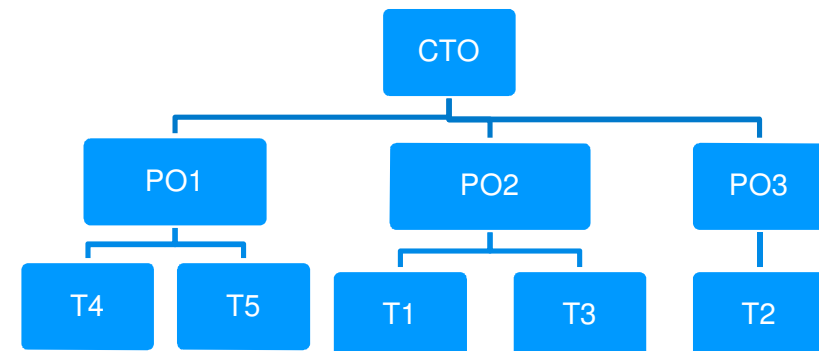Formed cohesive teams for logical sets of modules, where :

Made Managers as product owners to sets the direction for the product or set of modules and do not manage tasks on daily basis

Made a coordinator who ensures team is not facing any issues,

Had teams consisting 5 to 9 persons who estimates, plans, designs, codes, reviews, unit tests, prepare builds, ensures integrity and takes ownership of commitments

Had primary owner for each module and 3 to 4 more members to support same module

High bonding among team members including both locations

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                    CTO
         ┌───────────┼───────────┐
        PO1         PO2         PO3
       ┌──┴──┐    ┌──┴──┐         │
       T4   T5   T1   T3         T2
```

Our Approach

Institutionalizing improvements

Conducted half day Orientation session for teams implementing agile

Had many sessions with Product Owners to help them prepare product backlog

Held session on review process, static code analysis (Source Monitor tool), build and release process, Test Driven Development (TDD), Unit testing (CUnit tool)

Participated in few sprint planning meeting to help team prepare sprint backlog

Participated in initial few 2-3 daily stand up meetings to ensure that teams are owning the features

Participation in a few review meetings

Participated in a few initial demos and retrospection meetings

Influenced appraisal system to drive team behavior

Our Approach

Demonstrating value

Survey was launched with all the Product Owners (Managers), Scrum Masters and team members

Received all responses within a week's time for all participants

- All participants agreed that there is significant improvement as compared to start of this assignment
- Some of the participants mentioned that they would need another 1 or 2 sprints to improve on some of the objectives

Employee Perception Survey Results		
Consulting on: Agile (Scrum) Deployment		
Coach: Hariprakash Agrawal from OpCord Consultancy Services Pvt Ltd		
Rate each question below on a scale of 1 to 5, where 1 is 'Strongly Disagree' and 5 is 'Strongly Agree'		
#	Question	Avg
1	My estimation capability has improved during this assignment	3.58
2	My planning skills has improved during this exercise	3.79
3	I feel more accountable towards my work now	3.88
4	Requirements are more detailed and better understood	4.08
5	The quality of Code has improved and I will continue to improve it in future	3.88
6	We have understood the importance of reviews and will push back for reviews	4.29
7	My productivity has improved considering the complete product life cycle	3.54
8	I have observed that defects found in testing has reduced in last one month. I have understood that role of testing team is to do validation, not to find bugs.	3.53
9	For managers: Time for planning and tracking has reduced significantly	4.00

About OpCord
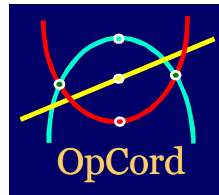
Service Offerings

About OpCord

Mission

We make products (or projects) effective, efficient and easy

> By helping them in realizing their vision
>
> By optimizing their current way of working
>
> By providing inputs on product quality, productivity and project management

Vision

To be recognized as premiere Quality services provider worldwide by 2012
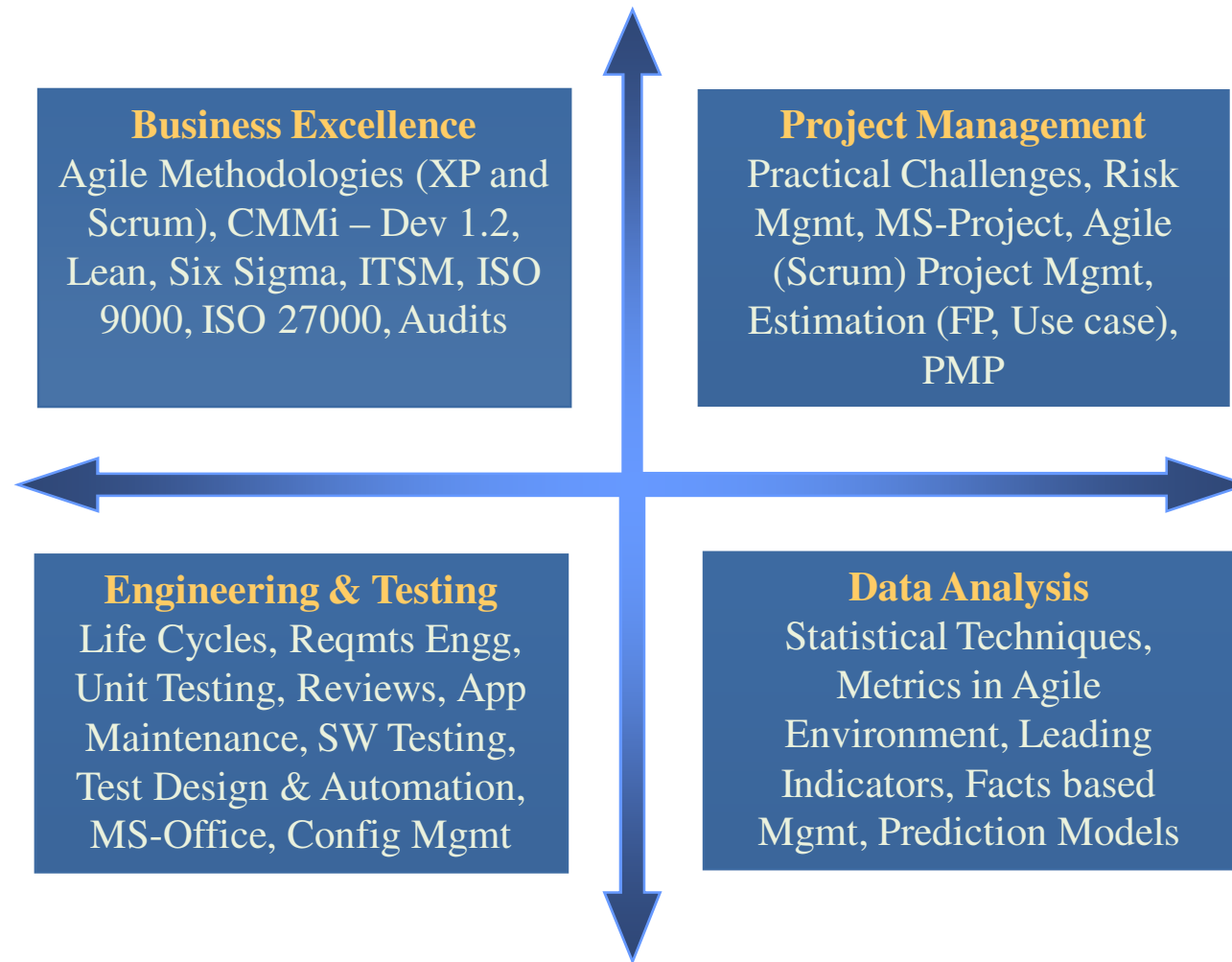To grow more than 100% year on year
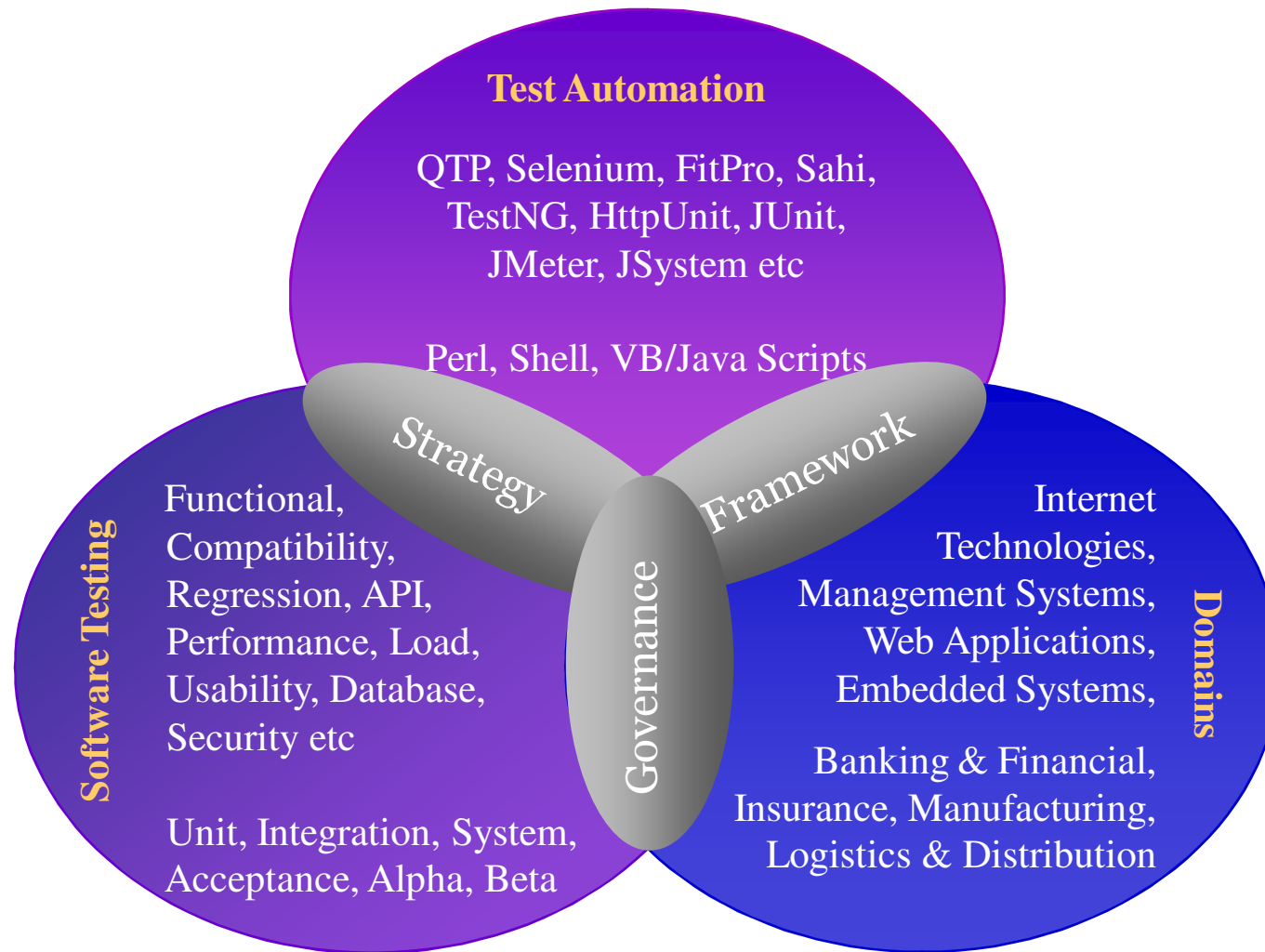
Values

Fairness, Inclusiveness and Trust (FIT) - We believe in being FIT all the time

Social Responsibility - Visit http://www.vicharpravah.com to learn about our initiatives to make common man aware of their powers and responsibilities

Service Offerings – Consulting / Training

OpCord

Business Excellence
Agile Methodologies (XP and Scrum), CMMi – Dev 1.2, Lean, Six Sigma, ITSM, ISO 9000, ISO 27000, Audits

Project Management
Practical Challenges, Risk Mgmt, MS-Project, Agile (Scrum) Project Mgmt, Estimation (FP, Use case), PMP

Engineering & Testing
Life Cycles, Reqmts Engg, Unit Testing, Reviews, App Maintenance, SW Testing, Test Design & Automation, MS-Office, Config Mgmt

Data Analysis
Statistical Techniques, Metrics in Agile Environment, Leading Indicators, Facts based Mgmt, Prediction Models

Service Offerings - Testing Services

Test Automation

QTP, Selenium, FitPro, Sahi, TestNG, HttpUnit, JUnit, JMeter, JSystem etc

Perl, Shell, VB/Java Scripts

Strategy

Framework

Software Testing

Functional, Compatibility, Regression, API, Performance, Load, Usability, Database, Security etc

Unit, Integration, System, Acceptance, Alpha, Beta

Governance

Domains

Internet Technologies, Management Systems, Web Applications, Embedded Systems,

Banking & Financial, Insurance, Manufacturing, Logistics & Distribution

Quality over time

Mentors than Managers

Innovation over compliance

Team spirit than individual excellence

Leading Indicators over lagging indicators

Lean documentation over comprehensiveness

Measure goodness of creations than defects

Face to face interactions than emails

Coordination over competition

Automation than Manual

Facts than intuitions

Customers Speak…

At Infinite, we were looking to increase the capability of our Project Management Team and inspire them to take up certifications in Project Management and Agile/Scrum. OpCord worked with us from concept to implementation in creating the training modules, tuning them and scheduling them as per our requirements. The first program of 8 modules of 11 days was spread over 04 months. We received good feedback by project managers and business unit heads. The success was evident that we launched the second round of training on project management.

- Pankaj Kumar, Head – Corporate PMO, Infinite Computer Solutions

OpCord's agile consulting has added great value to Mango. It has helped the managers align the teams. Tracking the deliverables of individuals and teams is now easier and efficient. Also the teams are taking greater ownership of the deliverables.

- Lekh Joshi, Co-Founder & CTO, Mango Technologies

OpCord has provided us good testing resources in very short time and they really specialize in automation testing. They scaled up in very short time for many automation tools, like, QTP, Selenium, AutoIT and some of our development projects on Java and .Net. We are very satisfied with their customer centric approach and their competence on test automation. I am sure that OpCord team has a great future if they carry same rigor, focus and dedication.

- Megha Gupta, CEO, EquiliBrise Technologies

Opcord's Quality Assurance and Testing Services Team is Energetic, Flexible and Dedicated in meeting our business requirements and its a pleasure to work with them.

- Lalit Mangal, Founder & CTO, maxHeap Technologies (CommonFloor portal)

Let's Opcord
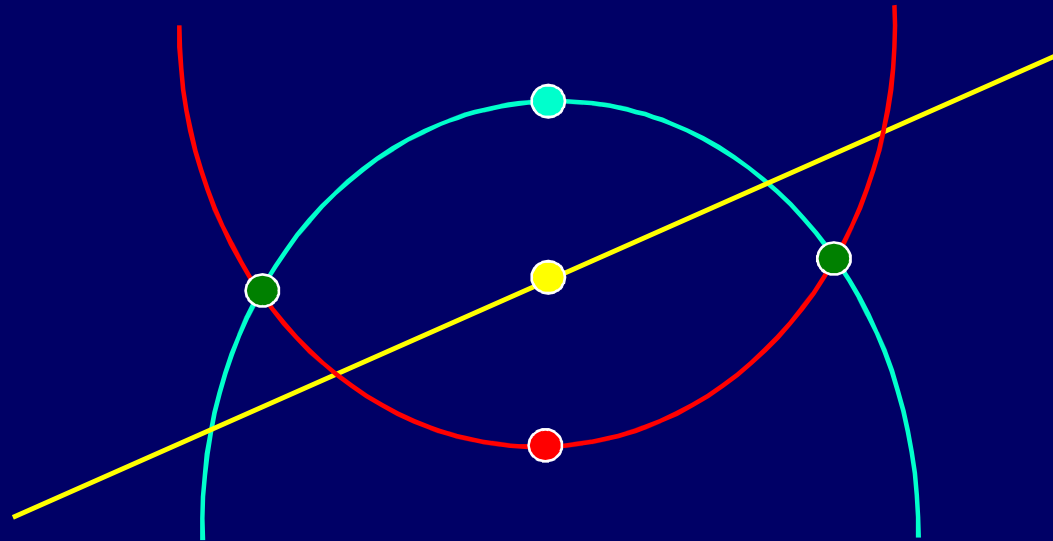
Let's optimize with coordination