entelect
everything is possible

THE ENTELECT WAY

AGILE PLANNING AND DEVELOPMENT

SOFTWARE ENGINEERING QUALITY PRACTICES

INDIVIDUAL GROWTH

TEAM ENGAGEMENT

FIRST-CLASS SERVICE DELIVERY

VALUE-ADDING ACTIVITIES

RELATIONSHIPS

The Entelect Way embodies a core set of principles that describe our approach to software development projects. It relates to three main areas: the client, the team and delivery.

The principles are supported by a flexible set of guidelines that are continuously added to and improved upon, to ensure the best possible outcome of every engagement for the client and team.

AGILE PLANNING AND DEVELOPMENT

Select and commit to an effective methodology
First make it work
Planning is vital, the plans are not
Planning is a collaborative activity
Promote a sustainable pace of delivery

SOFTWARE ENGINEERING QUALITY PRACTICES

Quality is everyone's concern
Bake quality practices into the delivery lifecycle
Make it visible
Automate repetitive processes
Continuously adapt and improve

FIRST-CLASS SERVICE DELIVERY

Act in our client's interests
Show a sense of urgency
Be objective
Be reliable
Communicate frequently

INDIVIDUAL GROWTH

Strive to continually improve
Empower others to get the job done
Give honest feedback
Be courageous

VALUE-ADDING ACTIVITIES

Know and understand the client's business and people
Identify opportunities to make things better
Leverage Entelect's IP at every opportunity
Go the extra mile

TEAM ENGAGEMENT

Build a strong team identity
Provide a sense of purpose to the team
Share knowledge
Take responsibility

RELATIONSHIPS

Relationships are important
Grow and maintain your network of relationships

DELIVERY

CLIENT

TEAM

AGILE PLANNING AND DEVELOPMENT

" Prioritise what's important to the client and deliver value adding software at the earliest opportunity. "

AGILE PLANNING AND DEVELOPMENT

SELECT AND COMMIT TO AN EFFECTIVE METHODOLOGY

Choose an appropriate methodology based on experience, size and constraints of the team and project.

We are not predisposed to any single approach, but we do appreciate the value gained from a common understanding of why and how certain practices are adopted. This common understanding shared between team and client, coupled with the discipline to follow a methodology correctly, helps manage expectations across the project. It also helps prevent erratic delivery often associated with an unstructured approach to software development.

FIRST MAKE IT WORK

Prioritise what's important to the client and deliver value adding software at the earliest opportunity. This keeps the feedback cycle as short as possible and eliminates wasteful activities from the delivery lifecycle. In the context of the client's goals, ask whether the task you're currently busy with is more important than the next and refrain from adding unnecessary bells and whistles.

PLANNING IS VITAL, THE PLANS ARE NOT

A project with any reasonable level of complexity requires sufficient planning. There are typically six levels of planning that should be considered: Strategy, Portfolio, Product, Release, Iteration and Daily planning.

Software teams at Entelect are directly involved with Product, Release, Iteration and Daily planning activities, and these should occur on an ongoing basis to re-evaluate and adjust for changes. Teams that have visibility of plans at the Portfolio and Strategic level will be better equipped to make decisions at the lower levels.

Iterative planning implies that plans may change. Plans should be flexible and both team and client must accept that various factors may impact direction at different levels based on user feedback, market conditions or financial constraints. Do not plan for every detail for the entire project up-front. Do just enough planning at the relevant level to get through the next two or three iterations or, to provide the answers necessary to move forward and then communicate these effectively.

However, once a team has made a commitment during Iteration planning, every effort should be made to keep the Iteration backlog stable - the team needs a certain amount of stability to deliver working software and it's the time-boxed Iteration and commitment of the team that provides this stability.

PLANNING IS A COLLABORATIVE ACTIVITY

Planning as a collaborative team activity (a responsibility shared by the client and those doing the work) typically results in more accurate plans that have the buy-in from the team and, a higher level of commitment from those actually doing the work.

The process must also include the right stakeholders. The Product Owner has the authority to prioritise work and, as such, is critical to the planning process. Also consider various Subject Matter Experts (SMEs) that may be required at different points in the project, such as security or UX experts. Involve them too.

PROMOTE A SUSTAINABLE PACE OF DELIVERY

To encourage a productive work environment and healthy work/life balance, the rate of delivery of the team should be sustainable over long periods of time. The well-known Death March is usually the result of poor planning or poor management of expectations and unrealistic fixed plans.

The development team is just as responsible for ensuring a sustainable pace of delivery by not over-committing, and by doing everything within their power to ensure that reasonable commitments are met (hence the importance of having those doing the work also doing the planning of the work).

SOFTWARE ENGINEERING QUALITY PRACTICES

"Developers at Entelect take pride in delivering bug-free code. Quality is not the same as testing – it is about prevention, not detection."

> PRINCIPLES

SOFTWARE ENGINEERING QUALITY PRACTICES

QUALITY IS EVERYONE'S CONCERN

Quality starts at the beginning of the project lifecycle, not during the testing phase to be shouldered by a team of testers. Developers are as responsible for ensuring quality as testers, analysts and clients, whether by testing or other means.

Developers at Entelect take pride in delivering bug-free code. Quality is not the same as testing - it is about prevention, not detection.

BAKE QUALITY PRACTICES INTO THE DELIVERY LIFECYCLE

Adopt software engineering practices that promote quality and minimise risk throughout the delivery lifecycle such as code reviews, continuous integration, unit testing and automation. The earlier a defect is detected, the cheaper it is to fix.

MAKE IT VISIBLE

Visibility results in awareness, which drives action. Make all aspects of the delivery lifecycle visible through Scrum boards, build monitors, code analysis reports and the like.

AUTOMATE REPETITIVE PROCESSES

Repetitive processes such as builds, test runs and deployments, should be automated as far as possible and practical. This removes manual dependencies, minimises the risk of human error and allows quality practices to be applied on a continual basis with less disruption to value creating activities, such as writing code.

CONTINUOUSLY ADAPT AND IMPROVE

Reflect on processes and practices adopted by the team on a regular basis and adjust accordingly. If it doesn't add value, ditch it.

INDIVIDUAL GROWTH

" Regular feedback that is considered, open and honest promotes personal development of both giver and receiver"

> PRINCIPLES

INDIVIDUAL GROWTH

STRIVE TO CONTINUALLY IMPROVE

At Entelect we believe there is always room for improvement, at both team and individual level. We hire curious individuals who like solving complex and unique problems. This requires us to continuously challenge the status quo, focus on improving our understanding and knowledge of the world around us, and pushing our limits and preconceived notions of what's possible.

Each individual is responsible for their own development, as well as for growing others. Entelect provides the framework necessary for training, mentorship and support at all levels and across all roles.

EMPOWER OTHERS TO GET THE JOB DONE

Growing individuals requires team members that are empowered to get the job done. Empowerment is granted by anyone in the team, not only leaders, and depends on three ingredients:

» Means - a team member must have the means to get the job done, including tools, time and pre-requisite information
» Ability - a team member must have the knowledge (or means to obtain the knowledge) of how to get the job done and why it needs doing
» Accountability - a team member makes a willing commitment to get it done and must be held to account for that commitment

Furthermore, empowerment demands trust in the individual and a suitable level of autonomy to make decisions on how the work gets done.

GIVE HONEST FEEDBACK

Regular feedback that is considered, open and honest promotes personal development of both giver and receiver and helps build positive relationships based on trust and the well-being of others.

BE COURAGEOUS

Individual growth comes through challenging our limits, stepping in at the deep end when necessary and putting one's self in situations that may not be immediately familiar. Any scenario that challenges our skills, opinions, beliefs or integrity requires courage - courage to either adapt our own views or, to stand fast when tempted to just 'go with the flow'.

TEAM ENGAGEMENT

" Team members that care about the end goal encourage stronger commitment which leads to actions that go beyond expectations."

TEAM ENGAGEMENT

BUILD A STRONG TEAM IDENTITY

Building a strong identity for a team improves the cohesiveness of the team which, in turn, increases the likelihood that team members will want to be part of the team. It also increases their willingness to coordinate efforts to achieve common goals.

Some prerequisites for a strong team identity include:

» Respect for each individual - respect is earned, but can also be shown through active listening, being punctual and appreciating the value of others' time
» Integration with the team - welcome new-comers to the team in the way you would want to be welcomed
» Shared responsibility for decision-making - this increases shared accountability

Following on from these, simple activities and rituals unique to the team can promote a strong identity, such as, regular lunches or team building as a group, team names or themes, mascots, build hats and setting monthly goals as a team.

PROVIDE A SENSE OF PURPOSE TO THE TEAM

Time spent on things that matter is a key motivator for every individual at Entelect. Having team members that care about the end goal encourages stronger commitment which leads to actions that go beyond expectations, especially in challenging situations.

SHARE KNOWLEDGE

Team members equipped with sufficient knowledge about the team, project, design and technology choices are more likely to be engaged during decision making activities and can offer more constructive input in team discussions. Shared knowledge also minimises key-person dependencies and unnecessary assumptions during development.

Establish simple communication mechanisms in the team that promote easy sharing of knowledge between team members, especially for new members joining the team. New team members should be able to contribute constructively to a project from day one.

This also applies in a broader context where there are a number of delivery teams for a single client: have an awareness of what's happening across teams to avoid duplicating efforts and to promote effective knowledge sharing to the benefit of the client.

TAKE RESPONSIBILITY

At Entelect, we take responsibility for delivery as individuals and as a team. Each team member is accountable to his or her team mates, and the team is there to support the actions and responsibilities of each individual.

FIRST-CLASS SERVICE DELIVERY

" At Entelect we identify and invest in the client's end goal as though it were our own. "

> PRINCIPLES

FIRST-CLASS SERVICE DELIVERY

ACT IN OUR CLIENT'S INTERESTS

Having a true understanding of what our client is trying to achieve allows us to prioritise their interests above our own. We make design and technology choices that are the best fit for the problem we are trying to solve, rather than limiting our view to past experience, selection based on personal preference or, taking advantage of a potential opportunity that may introduce unnecessary risk.

Our understanding of a client's objectives requires:

» An inquisitive mind, asking questions to clarify uncertainties
» Active listening
» Being present and actively involved in discussions

SHOW A SENSE OF URGENCY

We show our clients' that we take their needs seriously by acting with a sense of urgency. This means:

» Understanding and acknowledge their requests or concerns
» Acting immediately
» Providing regular feedback

At Entelect, we identify and invest in the client's end goal as though it were our own.

BE OBJECTIVE

There are facts and there are interpretations of the facts. As professionals, we do not let emotional biases get in the way of presenting factual information as these tend to lead to poor decision making.

BE RELIABLE

People like to do business with people they trust and reliability is the cornerstone of trust. Building strong relationships based on trust requires us to honour all our commitments, whether made in passing conversation or as part of a larger project plan.

Professionalism dictates that if you can't honour a commitment, then explain the circumstances, provide alternatives and a revised plan of action.

COMMUNICATE FREQUENTLY

When it comes to delivering a quality service, keep all those involved in the loop on a regular and frequent basis even if nothing has changed. This re-iterates a 'sense of urgency' and shows that our clients' requirements are a priority.

VALUE-ADDING ACTIVITIES

"The more we understand the client's business, the better equipped we are at meeting the client's needs."

> PRINCIPLES

VALUE-ADDING ACTIVITIES

KNOW AND UNDERSTAND THE CLIENT'S BUSINESS AND PEOPLE

The more we understand the client's business, the better equipped we are at meeting the client's needs.

There are four key areas that you should get to know, in as much detail as is practical, in order to meet the clients needs as effectively as possible:

» The product and services the client offers and their customer

» The market in which it operates - competitors, suppliers, regulatory constraints and market conditions

» The business domain - processes, rules, constraints and terminology

» The stakeholders, including users, business and IT

Furthermore, get to know the people in the business, or at least those involved directly or indirectly with the project. Understanding who does what and why, and who your work will impact provides a deeper level of appreciation of what the team is trying to accomplish.

IDENTIFY OPPORTUNITIES TO MAKE THINGS BETTER

The difference between a good solution and a great solution is identifying and exploiting opportunities to do things better across processes, technology and the business.

We are well positioned to advise and guide in each of these areas. We can influence positive change through constructive dialog, utilising our significant expertise and leveraging our network of relationships internally and across the industry.

LEVERAGE ENTELECT'S IP AT EVERY OPPORTUNITY

Adding value to our client's business is our top priority and leveraging our existing intellectual property (IP) is one of our primary means of doing so.

Consider the following:

» Be present - you need to be in the right place at the right time to be able to identify value-adding opportunities

» Understand the problem and the context - offering an effective solution requires full understanding of the problem

» Know what we have to offer - know the full extent of Entelect's IP so that you can offer value-adding opportunities to your client

Some examples of value-adding activities include:

» Use established communication channels to tap into our collective experience and wide network of skills

» Call on specialist skills to assist with areas such as user experience design, performance tuning, database optimisation or security profiling

» Arrange on-site knowledge sharing sessions or workshops, such as Dojo's or agile talks

» Bootstrap development teams using our standard sets of tool chains, development processes and code libraries

» Don't re-invent the wheel

Always look for opportunities to increase Entelect's IP knowledge base. Simple actions such as updating a Confluence page, sharing an experience on Yoda or committing re-usable code to a shared code base goes a long way to adding value to clients in the future.

GO THE EXTRA MILE

By exceeding the expectations of our clients, we have added more value to their business.

RELATIONSHIPS

" It's through the strength of our relationships with others we're able to get things done. "

> PRINCIPLES

RELATIONSHIPS

RELATIONSHIPS ARE IMPORTANT

It's through the strength of our relationships with others we're able to get things done - without which we'd be hard-pressed to deliver value to our clients. By treating these relationships as an important asset, we take the necessary time and effort to develop them from casual associations into strong partnerships.

At Entelect, our network of relationships extends further than our clients and fellow colleagues; they include suppliers, the software development community as a whole and, less formal networks established while working on projects.

When looking to strengthen a relationship, consider the following:

» Seek to add value to the relationship first, rather than what you have to gain from it
» Strong relationships are built on mutual trust and respect
» Relationships don't need to be personal, but showing a genuine interest in another's well-being goes a long way
» Integrity is paramount

GROW AND MAINTAIN YOUR NETWORK OF RELATIONSHIPS

Aim to continually extend your network at all levels by getting involved, whether on the project team or events in the development community. Where possible, maintain your relationships by staying in touch through telephone calls, emails or social channels - this can be as simple as a courtesy call, or even referring a project where appropriate.

When rolling off a project, make a point of contacting someone you connected with on that project in 3 or 6 months to follow up and see how things are going.