

Elicitação

Modelagem

Análise

Requisitos – Aula 04

Professores: Milene Serrano e Maurício Serrano



Pré-Rastreabilidade

RichPicture

RichPicture

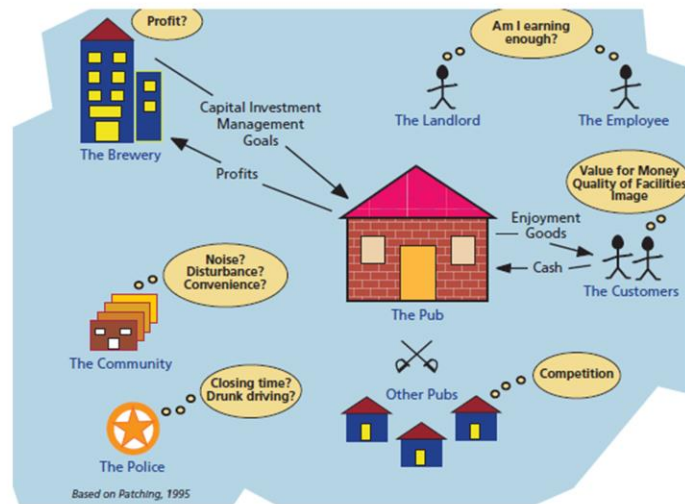
Trata-se de uma modelagem cuja notação permite analisar problemas e expressar ideias.

É um modelo informal, bem fácil de entender, e que pode ser construído colaborativamente com o cliente.

Pode auxiliar na identificação: de processos de negócio e seus requisitos; de atores envolvidos nos processos de negócio e suas responsabilidades; dos relacionamentos entre processos e atores, e de potenciais problemas e conflitos.

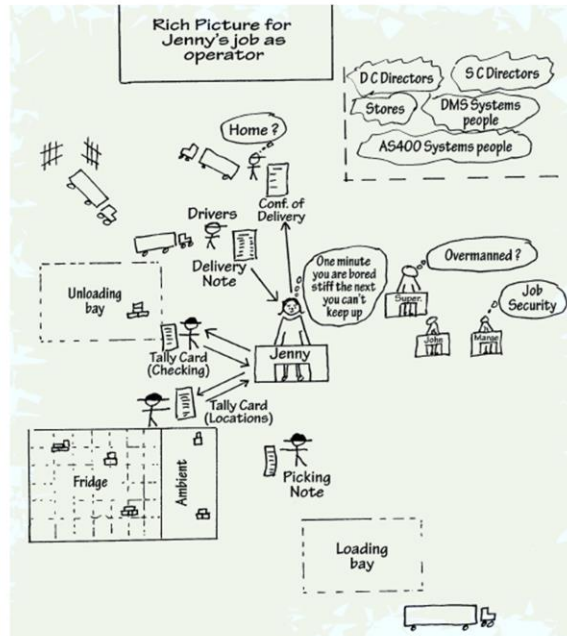
Para desenhar, basta começar com um problema central, bem no centro de uma página em branco, e acrescentar tópicos relacionados no entorno dessa problemática.

RichPicture



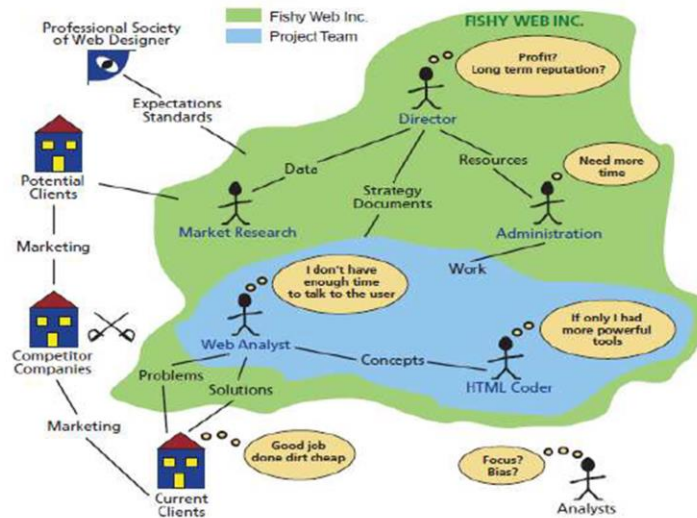
Exemplo I

RichPicture



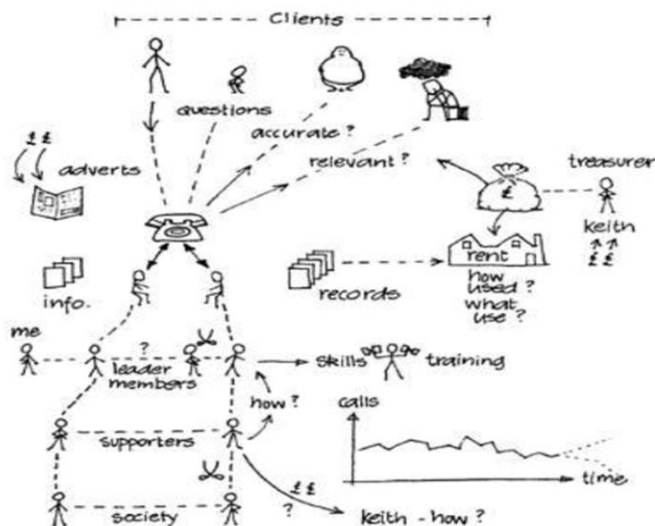
Exemplo II

RichPicture



Exemplo IV

RichPicture










Nem todo RichPicture é bem feito. Muitas vezes, parecem incompletos, pois não são plenamente compreendidos.

Exemplo V – Ruim - Incompleto

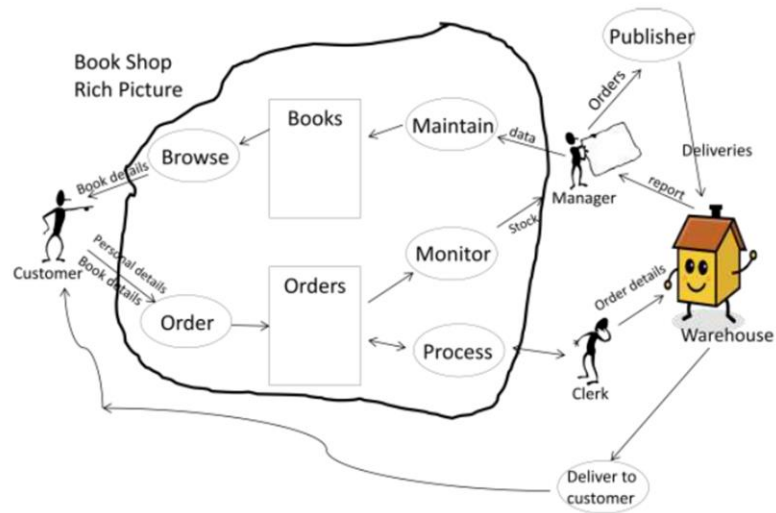
RichPicture



Alguns componentes, para começar...

Rich Picture Components	Comments
Actors (with descriptive labels)  Manager  Clerk	Actors are the users of your system. An actor may also represent a group of users; e.g., one manager plus five data clerks will still show two actors. An actor may carry out any number of operations. Represented graphically as matchstick people.
Operations (also known as processes or functions) 	Operations specify what the system does. Each operation is executed either by an actor or another operation. Represented graphically as circles or ovals, with a descriptive label inside.
Data stores (also known as tables) 	Data stores are essentially the tables in your database or files in the system. It is also necessary to show the type of data they contain. Only operations may read from or write to data stores. Represented graphically as rectangles.
Arrows  User details  Confirmation	Arrows show the direction of data (or information) flow amongst actors, data stores and operations. Arrows may cross the system boundary (see below). Represented graphically as single-headed arrows. Descriptive labels indicate the nature of the data or information flowing.
System boundary (usually a solid line But may also be dashed) 	The system boundary identifies those operations that you are responsible for (i.e., your area of responsibility), which means that your system must carry out everything that is inside the system boundary. You can ignore what is outside. Represented graphically as a circular line. Normally, this is the last thing you should add to your rich picture.

RichPicture



Exemplo III

RichPicture

Frequentemente utilizado em tempo de reunião, e juntamente com as técnicas:

- **Brainstorming**, desenhando RichPictures "on the fly"
- **Storyboarding**, desenhando os fluxos de atividades dos usuários para que sejam revistos, avaliados e refinados.
- **Paper-based Prototyping**, para representar early design no desenvolvimento de produtos de software.



RichPicture



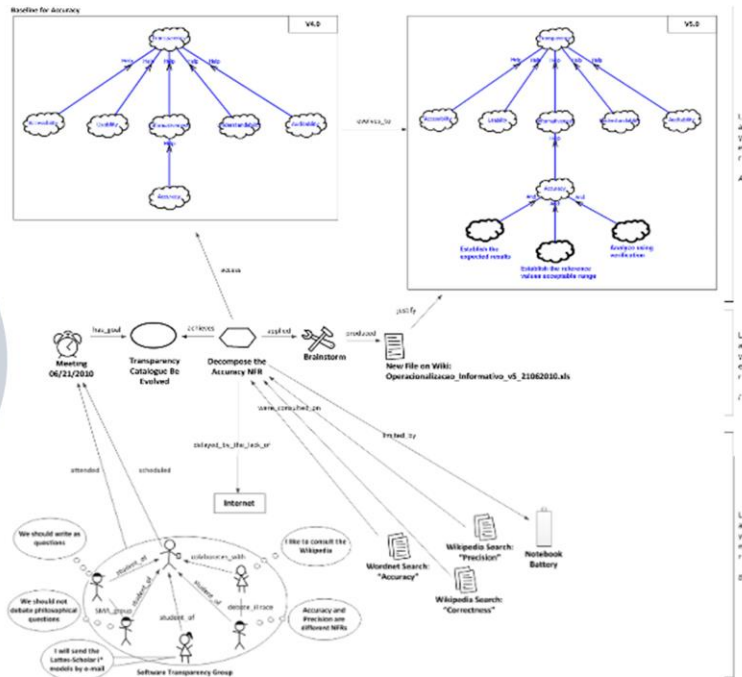
Elementos para um RichPicture efetivo

Table 1. Elements of an Effective Rich Picture	
Element	Comment
1. Include <i>structure</i>	Include only enough structure to allow you to record the process and concerns. The latter requires that all the people who will use or could conceivably be affected by the introduction of the new system be included.
2. Include <i>process</i>	Do not attempt to record all the intricacies of process; a broad brush approach is usually all that is needed
3. Include <i>concerns</i>	Caricature the concern in a thought bubble (see Figures 1-3 for examples). A fuller explanation may be provided in a supplementary document
4. Use the language of the people depicted in it	This will make the rich picture comprehensible to your informants
5. Use any pictorial or textual device that suits your purpose	There is no correct way of drawing a rich picture. There are as many styles as analysts and the same analyst will find different styles useful in different situations

Apesar do slide conferir algumas diretrizes ou sugestões, é interessante não engessar a forma de construção de um RichPicture. Trata-se de um desenho a mão livre.

RichPicture

It trace rastreando
o Requisito Não
Funcional
Accuracy,
decomposto em
outros Requisitos
Não Funcionais



ITrace

Similares ao RichPicture

5W2H. Consultem:

<https://sites.google.com/site/planejajaweb/5w2h>

Mapa Mental. Consultem:

<https://cepein.femane.com.br/BDigital/arqPIBIC/1011321081B451.pdf>

<http://periodicos.unesc.net/sulcomp/article/download/1035/979>

Referências

Referências

Bibliografia Básica

1. [Ebrary] Young, Ralph. **Requirements Engineering Handbook**. Norwood, US: Artech House Books, 2003.

2. [Open Access] Leite, Julio Cesar Sampaio do Prado. **Livro Vivo - Engenharia de Requisitos**. <http://livrodeengenhariaderequisitos.blogspot.com.br/> (último acesso: 2017)

3. [Ebrary] Chemuturi, Murali. **Mastering Software Quality Assurance : Best Practices, Tools and Technique for Software Developers**. Ft. Lauderdale, US: J. Ross Publishing Inc., 2010.

4. **Software & Systems Requirements Engineering: In Practice** - Brian Berenbach, Daniel Paulish, Juergen Kazmeier, Arnold Rudorfer (Livro bem completo mas, não tem exemplar físico na biblioteca, nem mesmo consta na Ebrary)

5. **Requirements Engineering and Management for Software Development Projects** - Murali Chemuturi (Livro bem completo mas, não tem exemplar físico na biblioteca, nem mesmo consta na Ebrary)

Referências

Bibliografia Complementar

1. [BIBLIOTECA – 15 exemplares] Pfleeger, Shari Lawrence. Engenharia de Software: Teoria e Prática. 2ª. Edição. São Paulo: Prentice Hall, c2004. xix, 535 p. ISBN 978858791831

2. [BIBLIOTECA – 3 exemplares] Withall, Stephen. Software Requirement Patterns. Redmond: Microsoft Press, c2007. xvi, 366 p. ISBN 978735623989.

3. [BIBLIOTECA - vários exemplares] Leffingwell, 2011, Agile Software Requirements, <http://www.scaledagileframework.com/> (último acesso: 2017)

4. [Ebrary] Evans, Isabel. Achieving Software Quality Through Teamwork. Norwood, US: Artech House Books, 2004.

5. [Ebrary] Yu, Eric, Giorgini, Paolo, and Maiden, Neil, eds. Cooperative Information Systems: Social Modeling for Requirements Engineering. Cambridge, US: MIT Press, 2010.

6. [Open Access] Slides disponíveis em: <https://www.wou.edu/~eltonm/Marketing/PP%20Slides/> (último acesso: 2017)



Dúvidas?

Orientações?

Sugestões?

FIM

mileneserrano@unb.br ou mileneserrano@gmail.com
serrano@unb.br ou serr.mau@gmail.com